

&lt;400&gt; 39741

Asp Leu Ser Pro Phe Pro Trp Ala Glu Thr Ile Pro His Pro Ser Thr  
 1 5 10 15  
 Gly Ser Pro His Ile Asn Pro Gln Asp Phe Ser Ala Pro Ser Ser Lys  
 20 25 30  
 Pro Ala Ser Thr Phe Ala Thr Asp Pro Lys Ala Asp Thr Val Lys Arg  
 35 40 45  
 Gln Arg Asp Leu Gln Lys Asn Arg Val Ala Ala Thr Lys Cys Arg Ser  
 50 55 60  
 Lys Lys Lys Leu Tyr Ile Gln Gln Leu Gln Ser Arg Phe Glu Asp Leu  
 65 70 75 80  
 Ser Leu Ala Lys Arg Glu Leu Gln Cys Gln Val Gln Met Leu Arg Asn  
 85 90 95  
 Gly Leu Ile Ser Leu Lys Glu Glu Leu Val Arg His Ala Arg Cys Gly  
 100 105 110  
 Asp Glu Pro Ile Thr Ser Tyr Ile Glu Lys Arg Arg Ala Arg Cys Thr  
 115 120 125

&lt;210&gt; 39742

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39742

His Ile Ala Arg Val Thr Asp Pro Ile Leu Arg Arg Met Gln Asp Leu  
 1 5 10 15  
 Glu Gln Arg Leu Lys Glu Phe Tyr Arg Leu Leu Arg Arg Ile Glu Pro  
 20 25 30  
 Arg Ala Asp Ala Lys Asp Gln Pro Leu Ile Ala Lys Ala Leu Glu Lys  
 35 40 45  
 Ala Ser Pro Val Glu Val Leu Glu Thr Pro Tyr Leu Phe Gly Leu Thr  
 50 55 60  
 Ile Pro  
 65

&lt;210&gt; 39743

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39743

Glu Thr Pro Pro Ala Ser Leu Ser Pro Ser Ser Asp Leu Ser Val Asp  
 1 5 10 15  
 Ala Ile Thr Arg Leu Val Thr Pro Thr Thr Asp Pro Ile Glu Glu Asp  
 20 25 30  
 Phe Asn Lys Asn Lys Ile Ser Gln Ala Thr Gly Phe Ile Gly Ala His  
 35 40 45  
 Ser Gly Arg Ser Trp Leu His Gln Leu Lys Arg Lys Gly Leu Gln Leu  
 50 55 60  
 Asp Ala Ser Trp Leu Gly Pro Glu Thr Gln Asp Asp Phe Phe Pro Asp  
 65 70 75 80  
 Ser Ile Ser Ser Val Asn Tyr Phe Leu Asp Gly Glu Glu Leu Ser Val  
 85 90 95  
 Asp Pro Ser Val Gln Pro Phe Thr Ile Pro Pro Gln Asp Val Ala Asp  
 100 105 110

## 17262

Glu Leu Leu Asp Thr Tyr Phe Asn Met Val His Pro Gly Phe Pro Val  
           115                          120                          125  
 Val Gly Lys Thr Val Phe Leu His Gln Tyr Arg Arg Leu Tyr Ser Glu  
           130                          135                          140  
 Pro Gln Ser Lys Pro Pro Lys Lys Trp Leu Ala Ile Phe Asn Leu Ile  
 145                          150                          155                          160  
 Leu Ala Ile Ala Ala His Gln Leu Ser Leu Thr Cys Ser Gly Glu Ala  
                           165                          170                          175  
 Asp Glu Trp His Asp Thr Leu Ile Tyr Phe Ser Arg Gly Ser Lys Leu  
                           180                          185                          190  
 Gly Leu Ala Glu Ile Pro Leu Ile Pro His Pro Asp Ile Gln Gln Ala  
                           195                          200                          205  
 Gln Ile Glu Gly Leu Ala Ala Phe Tyr Leu Leu Ile Ile Gly Gln Val  
           210                          215                          220  
 Asn Arg  
 225

&lt;210&gt; 39744

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39744

Arg Trp Lys Phe Ser Arg Asn Leu Leu Pro Leu Leu Asp Leu His Pro  
 1                          5                          10                          15  
 Thr Pro Gly Val Ser His Ser Ser Ser Ile Leu His Gln Lys Ile Thr  
                           20                          25                          30  
 Met Gly Val Thr Lys Glu Leu Lys Ser Pro Gly Asn Gly Val Asp Phe  
           35                          40                          45  
 Pro Lys Lys Gly Asp Phe Val Thr Ile His Tyr Thr Gly Arg Leu Thr  
           50                          55                          60  
 Asp Gly Ser Lys  
 65

&lt;210&gt; 39745

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39745

Ile Ala Leu Ser Asn Asn Leu Ser Tyr Phe Leu Ser Ser Phe Phe Asn  
 1                          5                          10                          15  
 Ile Pro Arg Tyr Glu Gln Pro Val Ile Met Ser Gly Leu Met His Lys  
                           20                          25                          30  
 Val Lys Asp Ala Val Thr Gly His His His Asp Ser Thr His Thr Ser  
           35                          40                          45  
 Asn Thr Thr Gly Thr His His Gly Thr His Gln Thr Thr Ala Asp Thr  
           50                          55                          60  
 Thr Thr Thr Asn His Gly Pro His His Ser Lys Leu Ala Asn Lys Leu  
 65                          70                          75                          80  
 Asp Pro Arg Val Asp Ser Asp Gly Gly Met Leu Tyr Leu His Leu Asn  
                           85                          90                          95  
 Leu Phe Cys Lys Cys  
                           100

&lt;210&gt; 39746



<211> 132  
 <212> PRT  
 <213> A.fumigatus

<400> 39746

Ser	Asp	Thr	Val	Val	Asp	Arg	Ala	Trp	Arg	Met	Ser	Gly	Thr	Ala	Thr
1				5					10					15	
Arg	Ser	Ala	Ile	Ala	Met	Gly	Leu	His	Leu	Arg	Ser	Val	Ser	Lys	Glu
		20					25					30			
Tyr	Leu	Asp	Ile	Ser	Lys	Glu	Thr	Arg	Cys	Arg	Val	Trp	Trp	Ser	Ile
	35					40					45				
Leu	Val	Leu	Glu	Thr	Thr	Leu	Ser	Val	Met	Thr	Gly	Arg	Pro	Tyr	Ser
	50					55					60				
Val	Ala	Asn	Gln	Phe	Cys	Thr	Ala	Pro	Leu	Pro	Leu	Pro	Phe	Asp	Glu
65					70				75					80	
Asp	Gln	Phe	Gly	Asp	Ala	Phe	Val	Ala	Arg	Leu	Leu	Ala	Asp	Ala	Asn
			85						90				95		
Ala	Arg	Arg	Ala	Leu	Phe	Gln	Val	Pro	Ala	Val	Val	Ile	Gly	Ser	Gly
			100					105					110		
Cys	Arg	Asn	Leu	Ser	Ser	Arg	Arg	Gln	Ala	Val	Cys	Val	Ala	Leu	Leu
		115				120						125			
Ser	Val	His	Arg												
		130													

<210> 39747

<211> 72

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (45), (47)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 39747

Ile	Phe	Pro	Asn	Phe	Pro	Pro	Ile	Gln	His	Ile	Phe	Pro	Pro	Glu	Val
1				5					10					15	
Ser	Lys	Asn	Leu	Thr	Gly	His	Lys	His	Leu	Thr	Ala	Val	Pro	Thr	Glu
		20					25					30			
Val	Tyr	Thr	Lys	Arg	Glu	His	Pro	Leu	Ser	Thr	Leu	Xaa	Leu	Xaa	Leu
	35					40					45				
Lys	Pro	Phe	Pro	Leu	Gly	Arg	Asp	Asn	Ser	Ala	Pro	Gln	His	Arg	Leu
	50					55					60				
Ser	Ala	Tyr	Lys	Pro	Pro	Arg	Phe								
65						70									

<210> 39748

<211> 106

<212> PRT

<213> A.fumigatus

<400> 39748

Leu	Leu	Phe	Ala	Val	Tyr	Leu	Phe	Pro	Met	Asp	Pro	Arg	Ser	Gln	Ala
1				5					10					15	
Ser	Gln	Ile	Arg	Lys	Arg	Gln	Arg	Glu	Gly	Ser	Pro	Gly	Gly	Ile	Gln
		20						25					30		

<210> 39749

<211> 289

&lt;212&gt; PRT

<213> A.fumigatus

 $\langle 220 \rangle$ 

<221> UNSURE

<222> (256)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 39749

Glu 1	Glu 1	Leu 1	Thr 1	Gly 5	Ile 1	Ile 1	Pro 1	Met 1	Thr 10	Leu 1	Leu 1	Thr 1	Leu 15	Ser 1	Ser 1
Asp	Asn	Arg	Ala 20	His	Thr	Gly	Ala	Gly 25	Ala	Thr	Thr	Thr	Gly 30	Ala	Tyr
Ala	Ser	Gly 35	Ala	His	Asn	Thr	Tyr	Gly 40	Thr	Thr	Phe	Thr	Asn	Ala	Gly
Pro	His	Asn	Ser	Asn	Met	Leu	Asn	Lys	Val	Asp	Pro	Arg	Ile	Asp	Ser
Asp 65	Met	Asp	Asn	Arg	Ala	Arg	His	Glu	Thr	Met	Gly	Gly	Ala	His	Gly 80
Pro	His	Gly	Ser	Ser	Ile	Ala	Asn	Lys	Met	Asp	Pro	Arg	Val	Asp	Ser
Asp	Met	Asp	Asn	Arg	Gly	Ala	Tyr	Gly	Thr	Thr	Thr	Thr	His	Gly	Thr
Gly	Ala	Gly	Asn	Thr	Phe	Gly	Thr	His	Thr	Ser	Ser	Asn	Ala	Gly	Pro
His	Asn	Ser	Ser	Met	Met	Asn	Lys	Val	Asp	Pro	Arg	Val	Asp	Ser	Asp
Met 145	Asp	Asn	Arg	Ala	Arg	His	Gln	Ala	Leu	Gly	Gly	Ala	Gln	Gly	Pro
His	Ser	Ser	Asn	Leu	Ala	Asn	Lys	Ile	Asp	Pro	Arg	Val	Asp	Ser	Asp
Met	Asp	Asn	Arg	Gly	Thr	Thr	His	Gly	Thr	Thr	Gly	His	Ala	Tyr	Gly
Ser	Gly	Ala	Gly	Met	Asn	Thr	Ser	Met	Gly	Thr	Gly	Met	Gly	Thr	His
Thr	Ser	Thr	Asn	Ala	Gly	Pro	His	Asn	Ser	Asn	Leu	Met	Asn	Lys	Val
Asp 225	Pro	Arg	Val	Asp	Ser	Asn	Arg	Asp	Asn	Arg	Ala	Arg	His	Glu	Thr
Leu	Ala	Ser	Asn	Ser	Tyr	Asn	Thr	Pro	Gly	Ala	Thr	Thr	His	Thr	Xaa
Gly	Pro	His	Asn	Ser	Asn	Leu	Met	Asn	Lys	Ile	Asp	Pro	Pro	Val	Asp

17265

Ser Asp Leu Asp Asn Arg Gly Thr His Thr Leu Gly Thr Gln Arg Gly  
 275 280 285  
 Ile

<210> 39750  
 <211> 192  
 <212> PRT  
 <213> A.fumigatus

<400> 39750  
 Pro Glu Ser Arg Ile Leu Ala Gly Ile Ser Ser Glu Thr Ser Ala Leu  
 1 5 10 15  
 Tyr Leu Ala Ser Lys Ser Asn Tyr Gln His Ile Leu Asp Gly Thr Leu  
 20 25 30  
 Leu Pro Gly Val Ser Tyr Pro Glu Thr Leu Ala Glu Asn Leu Ser Ser  
 35 40 45  
 Lys Arg Thr Asn His Lys Leu Ala Glu Gln Gly Arg Arg Asn Arg Ile  
 50 55 60  
 Asn Asn Ala Leu Lys Glu Ile Glu Ser Leu Ile Pro Ser Ala Phe Ile  
 65 70 75 80  
 Gln Met Lys Gln Thr Lys Glu Asn Val Ala Ser His Val Lys Gly Asp  
 85 90 95  
 Lys Glu Lys Glu Lys Glu Lys Ala Gly Ala Pro Thr Ile Ser Lys Ala  
 100 105 110  
 Ser Thr Val Glu Leu Ala Ile Asp Tyr Ile Lys Ala Leu Lys Gln Glu  
 115 120 125  
 Leu Glu Glu Thr Lys Gly Lys Leu Ala Ala Ala Glu Ala Arg Ile Gly  
 130 135 140  
 Glu Asn Gly Ala Ala Lys Asp Glu Asp Cys Lys Ala Ala Thr Val Ser  
 145 150 155 160  
 Ser Pro Gly Asp Glu Lys Ser Lys Ser Ser Asn Gly Thr Gln Asp Ser  
 165 170 175  
 Ser Thr Ala Glu Gly Ala Val Ser Ser Thr Glu Ala Thr Gly Ser Ser  
 180 185 190

<210> 39751  
 <211> 321  
 <212> PRT  
 <213> A.fumigatus

<400> 39751  
 Pro His Arg Pro Tyr Ser Ala Val Ser Asn Ile Glu Glu Lys Glu Val  
 1 5 10 15  
 Glu Leu Leu Lys Arg Leu Glu Ser Glu Gly Asn Arg Ile Arg Ser Arg  
 20 25 30  
 Ser Ile Leu Leu Arg Pro Pro Ala Arg Thr Lys Val Ile Met Asp Gln  
 35 40 45  
 Asp Asn Ser Met Ala Trp Pro Gly Ser Leu Gln Glu Gln Ser Leu Met  
 50 55 60  
 Ala Ala Ser Gly Glu Asp Glu Phe Thr Asn Phe Leu Glu Phe Gly Met  
 65 70 75 80  
 His Phe Pro Asp Leu Glu Gly His Gly Pro Gly Glu Arg Gln Leu Gln  
 85 90 95  
 Pro Pro Arg Ser Leu Pro Ala Ser Ala Ser Met Met Pro Thr Thr Thr  
 100 105 110

## 17266

Ala Glu Gln Glu Gln Leu Ile Arg Met Asp Thr Asp Ser Leu Pro Asn  
115 120 125  
Ala His Ser Ser Ser Ser Tyr Ser Asn Arg Ile Met Gly Asp Phe Pro  
130 135 140  
Phe Asp Leu Ser Asn His Asn Gln Gln Ser Gln Pro Gln Gly Gln Ile  
145 150 155 160  
Pro Ser Ser Tyr Thr Ser Ala Pro Val Thr Pro Ala Phe Tyr Asn Gln  
165 170 175  
Lys Leu Ala Gln Pro Gln Ile Tyr His His Pro Gln Gln Pro Pro Gln  
180 185 190  
Lys Gln Gln Gln Gln Gln Gln Ser His His Gly Leu Pro Thr Thr Ser  
195 200 205  
Gln Pro Tyr Ile Pro His Gly Gln Ala Ile Ile Pro Pro Thr Pro Asn  
210 215 220  
Ser Ile Glu Leu Gln Gly Asn Ala Ala Arg Tyr Pro Ala Gln Val Asp  
225 230 235 240  
Glu Asn His Glu Leu Tyr Asp Arg Tyr Pro His Met Asn Glu Glu Gln  
245 250 255  
Val Arg Leu Asn Pro Pro Gly Ala Ser Phe Ala His Cys Asp Gly Ser  
260 265 270  
Ala Gln Ala Asn Ala Cys Ala Arg Ile Asp Thr Gly Thr Leu His Thr  
275 280 285  
Ser Arg Leu Ser Arg His Asp Thr Val Arg Asn Ser Ile Ser Thr Ala  
290 295 300  
Arg Val His Asn Ser Arg Gly Val Phe Tyr Pro Pro His Ile Ser Ser  
305 310 315 320  
Ser

&lt;210&gt; 39752

&lt;211&gt; 382

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39752

Ile Leu Pro Gly Arg Pro Ser Leu Ile Ala Thr Glu Ala His Arg Leu  
1 5 10 15  
Met His Ala Pro Ala Leu Thr Gln Ala Leu Tyr Thr Pro Leu Val Ser  
20 25 30  
Pro Ala Met Thr Pro Leu Glu Thr Gln Phe Arg Leu Pro Glu Tyr Thr  
35 40 45  
Ile Pro Gly Glu Tyr Phe Thr Pro Leu Thr Ser Pro Ala Leu Glu Ala  
50 55 60  
Gln Asn Ser Asn Gly Asn Gly Tyr Pro Phe Gln Ser Val Ser Glu Val  
65 70 75 80  
Gly Phe Leu His Ser Pro Ala Asp Ala Ile Pro Ala Ser Ser Ala Pro  
85 90 95  
Ser Ser Pro Gly Leu Met Arg Lys His Arg Arg Arg Pro Ser Ala Thr  
100 105 110  
Lys Ser Phe Ser Ser Arg Ala Lys Lys Gln Gln Ser Pro Ser Val Arg  
115 120 125  
Pro Gln Thr Arg Lys Lys Ser Met Leu Asn Leu Asn Ser Asp Glu Val  
130 135 140  
Leu Asn Gly Leu Ser Gln Asp Gln Gly Val Ser Lys Ile Leu Pro His  
145 150 155 160  
Gly Val Ser Gly Leu Arg Gln Ser Ser Asn Glu Ser Ser Asp Gln Asp

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<210> 39753
<211> 341
<212> PRT
<213> A.fumigatus
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<400>	39753														
Ser	Cys	Asp	Thr	Gln	Ser	Gly	Leu	Val	Val	Arg	Val	Asn	Tyr	Asn	Lys
1				5					10					15	
Leu	Asp	Val	Ala	Leu	Arg	Asn	Arg	Arg	Phe	Val	Glu	Leu	Ala	Glu	Gln
			20					25					30		
Gly	Val	Ser	Pro	Ala	Thr	Ala	Lys	Val	Tyr	Glu	Cys	Leu	Leu	Arg	Arg
			35				40					45			
Ile	Glu	Tyr	Gln	Thr	His	Gln	Cys	Arg	Asp	Thr	Ala	Glu	Ile	Pro	Arg
	50					55					60				
Glu	Gly	Glu	Glu	Gly	Glu	Gln	Tyr	Ser	Val	Pro	Ile	Ala	Leu	Ser	Ala
65					70					75					80
Leu	Ala	Glu	Asp	Val	Asn	Pro	Gln	Leu	Asp	Leu	Ser	Ser	Ser	Thr	Gly
				85					90					95	
Pro	Met	Asp	Ser	Ser	Gln	Pro	Asp	Gly	Arg	Arg	Gly	Lys	Arg	Pro	Trp
			100					105					110		
Asp	Gly	Asp	Val	Glu	Gly	Thr	Asn	His	Glu	Glu	Ala	Asn	Gly	Leu	Ser
			115				120					125			
Ser	Gly	Gly	Asn	Arg	Thr	Phe	Glu	Ile	Asp	Gln	His	Leu	Ser	Leu	Leu
	130					135					140				
Ala	Gln	Pro	Pro	His	Asn	Leu	Thr	Ser	Lys	Arg	Met	Val	Ser	Gly	Leu
145					150					155					160
Ile	Thr	Trp	Thr	Val	Glu	Phe	Arg	His	Leu	Ala	Arg	Lys	Leu	Arg	His
				165					170					175	

## 17268

Leu Glu Leu Glu Arg Met Ile Glu Ala Arg Tyr Gly Asp Val Ala Leu  
 180 185 190  
 Arg Val Val Arg Val Leu His Ala Lys Gly Lys Leu Asp Glu Lys Arg  
 195 200 205  
 Leu Gln Glu Ile Ser Leu Leu Pro Phe Lys Asp Leu Arg Gln Val Leu  
 210 215 220  
 Ala Ser Met Gln Ala Gly Gly Phe Val Asp Leu Gln Glu Val Pro Arg  
 225 230 235 240  
 Asp Ala Gln Arg Gln Pro Ser Arg Thr Ile Tyr Leu Trp Tyr Tyr Asp  
 245 250 255  
 Pro Asp Arg Ile Cys Asn Ser Val Leu Gln Asp Thr Tyr Lys Ala Met  
 260 265 270  
 Ser Arg Cys Leu Gln Arg Leu Arg Phe Glu Arg Ser Arg Ile Lys Asp  
 275 280 285  
 Phe Leu Glu Lys Thr Glu Arg Ser Asp Val Lys Gly Asn Glu Gln Arg  
 290 295 300  
 Phe Leu Ser Glu Pro Glu Leu Val Leu Leu Glu Gln Trp Arg Ala Lys  
 305 310 315 320  
 Glu Ala Leu Leu Leu Glu Glu Val Ala Arg Leu Asp Glu Met Val Ala  
 325 330 335  
 Val Met Arg Asp Tyr  
 340

<210> 39754  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 39754  
 Gly Arg Leu Ser Ala Ser His Phe Thr Thr Leu Glu Tyr Val Pro Ser  
 1 5 10 15  
 Phe Ala Ile Leu Glu Leu Lys Pro Asn Asn Tyr Ser Gln Ser Asn Met  
 20 25 30  
 Asn Ile Ala Asp Leu Lys Lys Gln Lys Trp Leu Leu Pro Arg Gly Gln  
 35 40 45  
 Glu Leu Ser Gly Glu Ser Arg Ile Arg Ile Arg Met Gly Tyr His Asn  
 50 55 60

<210> 39755  
 <211> 86  
 <212> PRT  
 <213> A.fumigatus

<400> 39755  
 Asn Gly Leu Ser Lys Asp Leu Tyr Ala Asn Ile Ala Leu Phe Gln His  
 1 5 10 15  
 His Leu Asp Ser Cys Asp Lys Glu Phe Gln Ala Leu Gly Phe Phe Gln  
 20 25 30  
 Ala Thr Pro Ile Glu Ser Leu Pro Thr Leu His Ala Val Phe Leu Ala  
 35 40 45  
 Val His Tyr Thr Thr Ala Lys Cys Trp Met Asp Cys Gly Leu Lys Val  
 50 55 60  
 Asp Ala Val Ile Gly His Lys Ala Glu Gln Leu Thr Ala Leu Cys Ile  
 65 70 75 80  
 Ser Gly Tyr Leu Pro Leu  
 85

<210> 39756  
 <211> 552  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (50), (59)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 39756  
 Ala Met Glu Asp Gln Gly His Pro Pro Ser Glu Pro Arg Ala Leu Phe  
 1 5 10 15  
 Asp Arg Arg Asp Asp Thr Asp Ser Thr Asn Asn Ala Phe Asp Glu Thr  
 20 25 30  
 Asp Leu Ser Arg Thr Leu Phe Gln Asp Thr Ser His Thr Pro Lys Ala  
 35 40 45  
 Glu Xaa Trp Ser Leu Met Pro Asp Phe Lys Xaa Gln His Asp Arg Asn  
 50 55 60  
 Val Ala Ser Gly Phe Arg Arg Arg Glu Leu Gly Val Thr Trp Lys Asn  
 65 70 75 80  
 Leu Ser Val Asp Val Val Ser Ala Asp Ala Ala Ile Asn Glu Asn Val  
 85 90 95  
 Leu Ser Gln Phe Asn Ile Pro Gln His Ile Arg Glu Ser Arg Asn Lys  
 100 105 110  
 Ala Pro Leu Arg Thr Ile Leu His Glu Ser His Gly Cys Val Lys Pro  
 115 120 125  
 Gly Glu Met Leu Leu Val Phe Gly Arg Pro Gly Ser Gly Cys Thr Thr  
 130 135 140  
 Leu Leu Arg Met Leu Ser Asn His Arg Leu Gly Tyr Lys Ala Ile Arg  
 145 150 155 160  
 Gly Asp Val Arg Phe Gly Ser Leu Thr Pro Glu Glu Ala Ser Lys Tyr  
 165 170 175  
 Arg Gly Gln Ile Val Met Asn Thr Glu Glu Glu Leu Phe Phe Pro Thr  
 180 185 190  
 Leu Thr Val Ala Gln Thr Leu Asp Phe Ala Thr Arg Leu Lys Val Pro  
 195 200 205  
 Phe Asn Leu Pro Asp Gly Val Thr Ser Pro Glu Ala Phe Arg Gln Glu  
 210 215 220  
 Thr Arg Glu Phe Leu Leu Lys Ser Met Gly Ile Ser His Thr Ser Asp  
 225 230 235 240  
 Thr Lys Val Gly Asn Glu Tyr Val Arg Gly Val Ser Gly Gly Glu Arg  
 245 250 255  
 Lys Arg Val Ser Ile Ile Glu Cys Leu Ala Thr Arg Gly Ser Val Phe  
 260 265 270  
 Cys Trp Asp Asn Ser Thr Arg Gly Leu Asp Ala Ser Thr Ala Leu Glu  
 275 280 285  
 Trp Ala Lys Ala Val Arg Ala Met Thr Asp Val Phe Gly Leu Ser Ser  
 290 295 300  
 Ile Val Thr Leu Tyr Gln Ala Gly Asn Gly Ile Tyr Asp Leu Phe Asp  
 305 310 315 320  
 Lys Val Leu Val Leu Asp Glu Gly Lys Gln Ile Tyr Tyr Gly Pro Met  
 325 330 335  
 Ser Gln Ala Arg Pro Phe Met Glu Glu Gln Gly Phe Val Cys Arg Glu  
 340 345 350

## 17270

Gly Ser Asn Val Ala Asp Phe Leu Thr Gly Val Thr Val Pro Thr Glu  
 355 360 365  
 Arg Lys Ile Arg Pro Gly Tyr Glu Asn Arg Phe Pro Arg Asn Ala Asp  
 370 375 380  
 Glu Leu Leu Ala Ala Tyr Glu Lys Ser Pro Ile Arg Ala Gln Met Ala  
 385 390 395 400  
 Ile Glu Tyr Asp Tyr Pro Asp Thr Glu Ser Thr Arg Glu Arg Thr Glu  
 405 410 415  
 Glu Phe Lys Leu Gly Val Leu Asp Glu Lys Ala Lys Arg Leu Ser Lys  
 420 425 430  
 Asn Ser Pro Phe Thr Val Asp Phe Leu Gln Gln Val Lys Ala Cys Ile  
 435 440 445  
 Ile Arg Gln Tyr Gln Ile Ile Trp Thr Asp Lys Ala Thr Phe Ala Ile  
 450 455 460  
 Lys Gln Ile Ser Thr Val Ile Gln Ala Leu Val Ala Gly Ser Leu Phe  
 465 470 475 480  
 Tyr Asn Ala Pro Asp Asn Ser Gly Gly Leu Phe Ile Lys Ser Gly Ala  
 485 490 495  
 Leu Phe Phe Ser Leu Leu Tyr Asn Ser Leu Leu Ala Met Ser Glu Val  
 500 505 510  
 Thr Asp Ser Phe Ser Gly Arg Pro Val Leu Ile Lys His Lys Tyr Phe  
 515 520 525  
 Ala Phe Phe His Pro Ala Ala Phe Cys Ile Ala Gln Ile Ala Ala Asp  
 530 535 540  
 Ile Phe Thr Ala Gly Leu Glu Gly  
 545 550

&lt;210&gt; 39757

&lt;211&gt; 706

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39757

Val Pro Glu Leu Trp Asn Glu Ser Gly Asp Thr Tyr Val Tyr Leu Phe  
 1 5 10 15  
 Pro Gln Asn Thr Gly Arg Ser Pro Ser Phe Lys Val His Ser Thr Ile  
 20 25 30  
 Phe Ala Glu Ser Pro Ser Leu Thr Phe Leu Ala Arg Gly Thr Asp Pro  
 35 40 45  
 Ser Arg Val Asn Ala Leu Glu Gln Gln Ala Arg Ser Met Ser Leu Asn  
 50 55 60  
 Ser Pro Met Thr Ser Pro Ala Ser Pro Pro Leu Thr Pro Gln Asp Gly  
 65 70 75 80  
 Tyr Pro Asp Asn Asp Asn Asp Ser Thr Asn Ser Arg Arg Met Ala Phe  
 85 90 95  
 Val Asp Asp Glu Gly Leu Asp Asp Phe Gln Glu Leu His Leu Tyr Leu  
 100 105 110  
 Pro Ile Pro Leu Asn Ser Asp Val Ser Ser Pro Asp Ser Arg Ile Ser  
 115 120 125  
 Pro Glu Asp Thr Glu Thr Leu Ile Leu Phe Arg Asn Leu Phe Ala Phe  
 130 135 140  
 Leu Leu Gly Gln Ser Leu Ile Ala Thr Pro Arg Ser Pro Thr Leu Phe  
 145 150 155 160  
 Ser Ile Phe Met Asp Val Ala Ser Leu Leu Ser Arg Phe Glu Phe Ser  
 165 170 175  
 Asn Phe Asp Gly Thr Asn Phe Gly Glu Thr Ala Thr Ser Ser Phe Ser



	180		185		190										
Asn	Tyr	Cys	Asp	Glu	Leu	Gln	Leu	Asp	Asp	Val	Arg	Lys	Ser	Arg	Glu
	195						200					205			
Lys	Thr	Ile	Glu	Ala	Ile	Val	Leu	Gly	Glu	Arg	Leu	Arg	Phe	Phe	Pro
	210					215					220				
Leu	Tyr	Leu	Glu	Gly	Phe	Val	His	Gly	Val	Gly	Lys	Leu	Asp	Glu	Leu
225					230					235				240	
Lys	Gln	Leu	Arg	Ser	Pro	Lys	Phe	Ser	Leu	Ile	Ser	Pro	Val	Thr	Gln
			245						250					255	
Lys	Arg	Met	Glu	Arg	Gly	Phe	Ile	Asp	Leu	Asp	Thr	Arg	Leu	Arg	Val
			260					265					270		
Leu	His	Ser	Lys	Leu	Asn	Glu	Phe	Asp	Phe	Pro	Ser	Val	Phe	Ser	Gly
	275					280						285			
Val	Ala	Asn	Ser	Thr	Thr	Ser	Ala	Glu	Ser	Lys	Ile	Val	Arg	Phe	Lys
	290					295					300				
Leu	Trp	Lys	Ala	Ala	Phe	Met	Glu	Phe	Arg	Arg	Phe	Thr	Val	His	Tyr
305					310					315					320
Tyr	Arg	Gln	Lys	Tyr	Gly	Ser	Trp	Pro	Pro	Lys	Ala	Arg	Ser	Lys	Lys
			325						330					335	
Asn	Gln	Phe	Glu	Glu	Ser	Gly	Leu	Asn	Arg	Gln	Val	Leu	Lys	Asp	Leu
			340					345				350			
Tyr	Asp	Asp	Phe	Ala	Asn	Leu	Tyr	Asp	Met	Leu	Val	Asp	Arg	Thr	Ala
	355						360					365			
Leu	Thr	Thr	Arg	Thr	Val	Asp	Met	Ala	Ala	Leu	Glu	Thr	Val	Glu	Ser
	370					375					380				
Glu	Asp	Thr	Gln	Glu	Val	Met	Ile	Arg	Ala	Leu	Arg	Gln	Val	Leu	Ser
385					390					395				400	
Glu	Tyr	Asp	Arg	Ala	Thr	Pro	Pro	Val	Gln	Pro	Pro	Ile	Pro	Phe	Asp
			405						410					415	
Val	Pro	Gln	Phe	Pro	Ser	Leu	Asp	Ser	Leu	Gln	Leu	Lys	Ala	Val	Asp
			420					425					430		
Pro	Lys	Lys	Glu	Ala	Lys	Arg	Arg	Ala	Lys	Lys	Leu	Lys	Asp	Ser	Asp
	435						440					445			
Ile	Asn	Ala	Val	Leu	Met	Gly	Ser	Tyr	Thr	Arg	Glu	Ser	Met	Arg	Pro
	450					455					460				
Thr	Pro	Phe	Ile	Glu	Ala	Phe	Met	Gln	Phe	Glu	Arg	Arg	Cys	Ala	His
465					470					475					480
Gly	Lys	Asn	Val	Glu	Asp	Leu	Ile	Asp	Leu	Arg	Cys	Gly	Gln	Trp	Ile
			485						490					495	
Phe	Leu	Tyr	Cys	Val	Ile	Gln	Ala	Leu	Pro	Leu	Leu	Val	Val	Asp	Val
			500					505					510		
Gln	Asp	Val	Lys	Tyr	Thr	Asp	Gly	Val	Glu	Tyr	Leu	Leu	Cys	Ile	Ala
	515						520					525			
Pro	Arg	Gly	Gly	Ala	Pro	Trp	Ile	His	Asn	Asp	Gly	Lys	Thr	Ala	Arg
	530					535					540				
Ser	Trp	Phe	Gly	Val	Ala	Gly	Gly	Ala	Gly	Val	Val	Ser	Leu	Pro	Ser
545					550					555					560
Asp	Val	Val	Ile	Asn	Gly	Val	Glu	Gly	Ile	Tyr	Arg	Arg	Ser	His	Cys
			565						570					575	
Trp	Gln	Val	Ala	Glu	Gln	Trp	Ala	Glu	Lys	Asp	Ala	Ile	Leu	Gly	Pro
			580					585					590		
Pro	Thr	Ile	Asp	Asp	Pro	Tyr	Asp	Asn	Glu	Ser	Ser	Leu	Ser	Ser	Pro
	595						600					605			
Tyr	Pro	Gly	Gln	Pro	Ser	Ser	Gly	Gly	Ser	Ser	Thr	Glu	Gln	Pro	Gln
	610					615					620				
Gln	Ser	Ala	Gln	Leu	Leu	Ser	Pro	Asn	Gly	Leu	Thr	Pro	Pro	Pro	Pro

## 17272

625                      630                      635                      640  
 Val Ile Pro Arg Thr Ser Ser Pro Ala Ala Arg Ala Arg Pro Glu His  
                                  645                      650                      655  
 Arg His Ser Ile Tyr Pro Gly Leu Glu Ala Leu Pro Leu Pro Ala Gly  
                                  660                      665                      670  
 Val Ala Pro Val Asp Pro Pro Ala Arg Pro Val Ser Arg Leu Asn Pro  
                                  675                      680                      685  
 Asn Met Ser Phe Asp Asp Ile Leu Lys Gln Val Pro Asn Gln Arg Ala  
                                  690                      695                      700  
 Lys Lys  
 705

<210> 39758  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 39758  
 Ile Cys Ile Thr Thr Cys Leu Ile Pro Ile Ser Pro Cys Pro Val Arg  
 1                      5                      10                      15  
 Ile Pro Pro Ser Phe Thr Ala Phe Val His Phe Trp Leu Ser Leu Tyr  
                                  20                      25                      30  
 Tyr Gly Ser Leu Ile Ile Arg Gly Val His Thr Leu Tyr Lys Asp Gln  
                                  35                      40                      45  
 Lys Asn Gly Ser Ala Gln Tyr Lys Thr Gly Asn Pro Thr Asn Val Glu  
                                  50                      55                      60  
 Ala Asn Phe Ala Gln Glu Glu Glu Ser Leu Ile Ser  
 65                      70                      75

<210> 39759  
 <211> 164  
 <212> PRT  
 <213> A.fumigatus

<400> 39759  
 Tyr Leu Arg Gly Lys Glu Cys Ser Gln Asp Val Ala Asn Glu Ser Pro  
 1                      5                      10                      15  
 Asn Ala Val Asp Gly Lys Asp Ile Gln Gly Val Ile Asn Leu Glu Pro  
                                  20                      25                      30  
 Ile Leu Glu Phe Gly Gly Ile Val Ala Ser Asp Ser Ala Asp Asn Thr  
                                  35                      40                      45  
 Glu Asp Glu Ser Gly Pro Trp Gly His Glu Ala Arg Ser Arg Ser Asn  
                                  50                      55                      60  
 Ser Asp Gln Ala Ser Asp Asp Ser Arg Ala Glu Thr His Ser Arg Pro  
 65                      70                      75                      80  
 Leu Pro Leu Glu Ser Val Ile Gln Lys Thr Pro Ser Asp Thr Thr Asn  
                                  85                      90                      95  
 Arg Ser Gly Glu Val Ser His Lys Cys Cys His Asn Ser Ser His Val  
                                  100                      105                      110  
 Gly Gly Lys Gly Arg Ala Ser Val Glu Ser Glu Pro Ser Asn Pro Glu  
                                  115                      120                      125  
 Lys His Ser Ala Asn Asp Asn Val Gly Asp Val Val Arg Ala Val Val  
                                  130                      135                      140  
 Glu Leu Met Gly Ala Val Thr Thr Ala Phe Pro Glu His Gln Arg Val  
 145                      150                      155                      160  
 Arg Gln Cys Cys

<210> 39760  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 39760  
 Ser Gln Gly Ala Met Gln Arg Ile Ser Pro Trp Leu Ile Ser Phe Arg  
 1 5 10 15  
 Phe Thr Met Asn Asn Gln Tyr Asp Lys Asp Asp Val Gln Gly Asn Arg  
 20 25 30  
 Ser Leu Pro Lys Phe Val Tyr Gln Gly Asn Ser Asn Ser Ala Tyr Leu  
 35 40 45  
 Ser Gly Ser Ser Ser Met Thr Leu His Val Leu Glu Gly Trp Asp Pro  
 50 55 60  
 Ala Gly Glu Ser Arg Ala Arg Met Met Ser Arg Gly Val Arg  
 65 70 75

<210> 39761  
 <211> 1042  
 <212> PRT  
 <213> A.fumigatus

<400> 39761  
 Leu Leu Val Ala Ser Met Asp Pro Gly Met His Arg His Thr Leu Ser  
 1 5 10 15  
 Ser Leu Gly Leu Gly Ala Pro Ala Ser Pro His Ser Pro Ser Asn Trp  
 20 25 30  
 Thr Lys Thr Pro Lys Lys Pro Cys Lys Met Glu Ser Pro Gln Asp Arg  
 35 40 45  
 Lys Phe Arg Val Leu Glu Asn Pro Asp Ile Pro Asn His Asp Ser Asp  
 50 55 60  
 Ser Ser Gly Ser Ser Asp Glu Leu Leu Gln Gln Pro Tyr Ala Met Arg  
 65 70 75 80  
 Ala Asn Ser Thr Phe Pro Glu Ile Phe Glu Gln Ala Pro Pro Ala Thr  
 85 90 95  
 Thr Ile Ala Ser Ser Pro Pro Pro Ser His Ala Thr Gly Leu Pro Ala  
 100 105 110  
 Trp Ala Ser Thr Ser Gly Leu Arg Pro Arg Gly Ser Ser Val Gly Ala  
 115 120 125  
 Gly Ala Ala Leu Asp Lys Val Ser Pro Val Asp Gly Leu Pro Leu Thr  
 130 135 140  
 Asp Arg Asp Leu Arg Pro Gln Arg Pro Ser Gly Pro Ala Arg Thr Pro  
 145 150 155 160  
 Ser Asn Thr Tyr Ala Pro Gln Arg Arg Pro Pro Gln Tyr Ile Ser Leu  
 165 170 175  
 Gln Ser Asp Arg Gln Arg Ser Ser Ser Ala Arg Arg Ser Ser Arg Arg  
 180 185 190  
 Asp Pro Asn Ala Gln Tyr Arg Ala Gln Glu Lys Ala Tyr Val Gln Arg  
 195 200 205  
 Ile Arg Ala Asn Pro Gln Ala Trp Tyr Asn His Phe Asp Asp Ala Gln  
 210 215 220  
 Asn Met Gly Leu Thr Pro Gly Asp Ser Asp Leu Glu Glu Pro Ser Pro  
 225 230 235 240  
 Ser Ser Glu Ala Pro Phe Glu Asp Asp Ala Tyr Asp Pro Asp Ile Gln

					245					250					255
Leu	Phe	Leu	Pro	Asp	Asp	Asn	Gln	Pro	Thr	Leu	Glu	Glu	Leu	Lys	Asn
			260					265					270		
Pro	Lys	Asn	Gln	Glu	Arg	Leu	Glu	Trp	His	Ser	Met	Leu	Ala	Ser	Val
		275					280					285			
Leu	Arg	Gly	Asp	Val	Val	Lys	Gln	Glu	Lys	Gln	Arg	Leu	Leu	Gly	Ser
	290					295					300				
Ala	Glu	Thr	Lys	Arg	Ser	Ala	Ala	Gln	Asn	Asn	Ala	Ile	Trp	Leu	Gly
305					310					315					320
Val	Arg	Ala	Lys	Thr	Cys	Gly	Arg	Ser	Val	Ala	Leu	Gln	Arg	Lys	Leu
				325					330					335	
Ile	Glu	Glu	Ala	Arg	Ala	Gly	Leu	Gly	Pro	Leu	Ile	Glu	Asp	Ile	Ile
			340					345					350		
Asn	Phe	Lys	Ile	Lys	Gly	Glu	Thr	Glu	Ile	Gly	Lys	Ser	Pro	Ile	Lys
		355					360					365			
Gln	Val	Glu	Asp	Ile	Val	Gln	Lys	Ile	Glu	Glu	Cys	Glu	Met	Leu	Tyr
	370					375					380				
Ser	Thr	Leu	Lys	Glu	Phe	Glu	Ala	Ala	Asn	Pro	Arg	Val	Ala	Ser	Glu
385					390					395					400
Glu	Tyr	Cys	Ser	Ser	Arg	Glu	Ala	Val	Phe	Ala	Trp	His	Asn	Thr	Ile
				405					410					415	
Ala	Leu	Ile	Asn	Thr	Glu	Leu	Ala	Ile	Leu	Gln	Lys	Trp	Val	Gly	Asn
			420					425					430		
Asp	Glu	Leu	Asp	Phe	Ser	Lys	Pro	Lys	Val	Lys	Ser	Ala	Asn	Ser	Asp
		435					440					445			
Leu	Ser	Asp	Gly	Ser	Ser	Phe	Leu	Asp	Arg	Ile	Met	Lys	Glu	Asp	Gly
	450					455					460				
Leu	Lys	Thr	Leu	Gln	Gly	Glu	His	Asn	Met	Leu	Asn	Gly	Ile	Gly	Glu
465					470					475					480
Val	Ile	Lys	Lys	Ala	Lys	Thr	Thr	Leu	Ile	Glu	Asn	Ala	Asp	Ser	Phe
				485					490					495	
Ala	Gln	Arg	His	Leu	Pro	Pro	Tyr	Ile	Glu	Glu	Leu	Leu	Thr	Leu	Ile
			500					505					510		
Asn	Phe	Pro	Ser	Arg	Leu	Ile	Gln	Glu	Ile	Ile	Arg	Val	Arg	Leu	Ser
		515					520					525			
Tyr	Ala	Lys	Asn	Met	Lys	Asp	Pro	Ala	Gln	Gln	Ser	Pro	Ile	Leu	Ile
	530					535					540				
Asp	Gln	Met	Ile	Pro	Gln	Phe	Gln	Ile	Leu	Met	Lys	Val	Ala	Val	Asp
545					550					555					560
Ile	Lys	Gln	Arg	Tyr	Val	Asp	Ile	Ser	Arg	Pro	Glu	Pro	Gly	Trp	Asp
				565					570					575	
Leu	Pro	Pro	Cys	Ile	Asp	Glu	Asn	Phe	Asp	Ser	Val	Val	Leu	Asp	Ala
			580					585					590		
Leu	Lys	Tyr	Tyr	Phe	Arg	Leu	Leu	Asn	Trp	Lys	Leu	Asn	Val	Asn	Lys
	</														

## 17275

690		695		700
Gln Arg Glu Ala Ile Ser	Ile Ser Pro Ala Phe	Leu Arg Gln Leu Phe		
705	710	715	720	
Glu Thr Leu Thr Glu Tyr Asn	Ile Ser Ala Asp	Ile Ala Tyr Asp Phe		
	725	730	735	
Phe Glu Ala Leu Leu Ile Ser	Asp His Phe Leu Val Lys	Ser Asn Ala		
	740	745	750	
Ser Ile Gly Gln Lys Gly Val	Tyr Leu Phe Ala His	Arg Glu Leu Trp		
	755	760	765	
Asn Arg Pro Thr Asp Ile Gln	Ala Ile Leu Ala Thr	Ser Phe Arg Glu		
	770	775	780	
Glu Asp Val Pro Lys Asp Ser	Ala His Ala Pro Tyr	Ile Leu Val Ile		
785	790	795	800	
Arg Pro Glu Lys Pro Leu Ser	Trp Ala Gly Lys	Glu Met Gln Val Asp		
	805	810	815	
Phe Leu Glu Gln Pro Thr Asp	Val Arg Leu Gly Lys	Cys Arg Leu Val		
	820	825	830	
Val Glu Gly Thr Gln Gln Arg	Leu Ala Asn Ala Arg	His Glu Leu Val		
	835	840	845	
Gln Leu Thr Gly Met Gln Leu	Asp Met Ala Ile Glu	Gln Arg Ala Asn		
	850	855	860	
Leu Gly Arg Val Asn Val Glu	Leu Asn Lys Ile Lys	Lys Ile Ser Phe		
865	870	875	880	
Lys Leu Ser Met Thr Ile Met	Asp Ser Val Ala Ile	Ile Lys Asp Gln		
	885	890	895	
Leu Lys Ser Arg Gly Ile Glu	Asn Thr Glu Leu Ile	Gln Ser Cys Tyr		
	900	905	910	
Ala Phe Ala Thr Glu Phe Gly	Lys Arg Ser Ser Asn	Tyr Val Asp Pro		
	915	920	925	
Asn Arg Arg Ala Met Asn Ser	Ala Arg Leu Val Glu	Leu Ser Leu Glu		
	930	935	940	
Trp Val Ser Phe Ile Cys Asp	Asp Cys Asp Ala Asp	Arg Lys Thr		
945	950	955	960	
Phe Lys Trp Ala Val Ala Ala	Leu Glu Ser Ala Met	Ala Ile Thr Ser		
	965	970	975	
Ser Arg His Leu Leu Ser Met	Asp Asp Ser Gln Phe	Ser Gln Leu Arg		
	980	985	990	
Ser Lys Val Ala Gly Cys Met	Ser Leu Leu Ile Ser	His Phe Asp Ile		
	995	1000	1005	
Met Gly Ala Arg Ser Ser Leu	Ala Ala Gln Ala Glu	Lys Gln Arg Val		
	1010	1015	1020	
Glu Glu Arg Ala Gly Ala Arg	Lys Phe Gly Ala Gly	Arg Ile Leu Thr		
1025	1030	1035	1040	
Asp Ala				

&lt;210&gt; 39762

&lt;211&gt; 388

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39762

Ala Thr Lys Leu Val Arg Glu	Gln Arg Leu Ala Arg Leu	His Asp Ile
1	5	10
Glu Asp Lys Arg Val Glu Glu	Asp Ala Lys Arg Gln Ala	Leu Gly Arg
20	25	30

Val Leu Glu Gly Ser Asn Glu Ala Asp Arg Ser Leu Ala Val Leu Ser  
 35 40 45  
 Ser Ser Ala Thr Asn Val Thr Leu Arg Trp Gln Gln Gly Gln Tyr Ile  
 50 55 60  
 Gly Gly Gly Thr Phe Gly Ser Val Tyr Ala Ala Ile Asn Leu Asp Ser  
 65 70 75 80  
 Asn Tyr Leu Met Ala Val Lys Glu Ile Arg Leu Gln Asp Pro Gln Leu  
 85 90 95  
 Ile Pro Lys Ile Ala Gln Gln Ile Arg Asp Glu Met Gly Val Leu Glu  
 100 105 110  
 Val Leu Asp His Pro Asn Ile Val Ser Tyr His Gly Ile Glu Val His  
 115 120 125  
 Arg Asp Lys Val Tyr Ile Phe Met Glu Tyr Cys Ser Gly Gly Ser Leu  
 130 135 140  
 Ala Ser Leu Leu Glu His Gly Arg Val Glu Asp Glu Thr Val Ile Met  
 145 150 155 160  
 Val Tyr Ala Leu Gln Leu Leu Glu Gly Leu Ala Tyr Leu His Gln Ala  
 165 170 175  
 Gly Ile Val His Arg Asp Ile Lys Pro Glu Asn Ile Leu Leu Asp His  
 180 185 190  
 Asn Gly Ile Ile Lys Tyr Val Asp Phe Gly Ala Ala Lys Ile Ile Ala  
 195 200 205  
 Arg Gln Gly Lys Thr Val Val Pro Met Asp Ala Phe Thr Gly Pro Asn  
 210 215 220  
 His Lys Asp Ala Ala Leu Val Pro Lys Asp Ser Gln Met Ala His Gln  
 225 230 235 240  
 Arg Gly Lys Asn Gln Lys Thr Met Thr Gly Thr Pro Met Tyr Met Ser  
 245 250 255  
 Pro Glu Val Ile Arg Gly Asp Thr Ser Arg Leu Ile His Arg Gln Gly  
 260 265 270  
 Ala Val Asp Ile Trp Ser Leu Gly Cys Val Ile Leu Glu Met Ala Thr  
 275 280 285  
 Gly Arg Arg Pro Trp Ser Thr Leu Asp Asn Glu Trp Ala Ile Met Tyr  
 290 295 300  
 Asn Ile Ala Gln Gly Asn Gln Pro Gln Leu Pro Ser Thr Asp Gln Leu  
 305 310 315 320  
 Ser Glu Leu Gly Ile Asp Phe Leu Arg Arg Cys Phe Glu Cys Asp Pro  
 325 330 335  
 Met Lys Arg Pro Thr Ala Ala Glu Leu Leu Gln His Glu Trp Ile Val  
 340 345 350  
 Ser Ile Arg Gln Gln Val Val Val Glu Pro Gln Thr Pro Ser Ser Asp  
 355 360 365  
 Gly Gly Ser Ser Ser Ile Ser Ser Ser Asn Ser Cys Ser Arg His Asn  
 370 375 380  
 Ser Thr Tyr Met  
 385

&lt;210&gt; 39763

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39763

Pro Gln Pro Ser Asn Arg Pro Tyr Leu Gln Ile Cys Asp Cys Ala Ala  
 1 5 10 15  
 Gly Gly Phe Thr Met Ala Glu Tyr Pro Val Ala Tyr Asn Gly Thr Ile



Ser Gly Ser Ala Ala Leu Ala Tyr Ser Leu Met Leu Gly Lys Arg Arg  
65 70 75 80  
Gly His Gly Thr His Glu Leu Asn Tyr Arg Pro His Asn Val Thr His  
85 90 95  
Val Val Ile Gly Thr Val Phe Leu Trp Val Gly Trp Phe Gly Phe Asn  
100 105 110  
Ala Gly Ser Ala Leu Ala Ala Asn Met Arg Ala Val Met Ala Ala Phe  
115 120 125  
Val Thr Asn Leu Ala Ala Ser Val Gly Gly Val Thr Trp Cys Leu Leu  
130 135 140  
Asp Tyr Arg Leu Glu Arg Lys Trp Ser Thr Val Gly Phe Cys Ser Gly  
145 150 155 160  
Val Ile Ala Gly Leu Val Ala Ile Thr Pro Gly Ser Gly Phe Val Pro  
165 170 175  
Pro Trp Ala Ala Phe Ile Phe Gly Val Val Gly Ala Ile Ala Cys Asn  
180 185 190  
Tyr Ala Thr Lys Leu Lys Tyr Trp Leu Lys Ile Asp Asp Ala Leu Asp  
195 200 205  
Ile Phe Ala Val His Gly Ile Gly Gly Leu Val Gly Asn Ile Leu Thr  
210 215 220  
Ala Phe Phe Ala Ala  
225

&lt;210&gt; 39767

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39767

Phe Pro Leu Ser Ala Ala Leu Pro Ala Pro Cys Val Lys Thr Asp Arg  
1 5 10 15  
Ile Ile Pro Leu Gln Leu Asn Val Ser Met Asp Leu Asn Glu Thr Val  
20 25 30  
Val Gly Val Ser Gly Gly Phe Ser Arg Ile Leu Ser Phe Gly Asn Glu  
35 40 45  
Ser Ala Phe Asp Val Ser Gly Phe Ala Val Trp Val Pro Ser Arg Lys  
50 55 60  
Asn Trp Leu Gln Asn Leu Asn Ile Ser Gln Ile Ala Tyr Thr Gly Gln  
65 70 75 80  
Leu Ala Ser Tyr Ala Lys Tyr Glu Asn Thr Thr Ile Leu Ala Gly Asn  
85 90 95  
Leu Ala Ser Ser Gly Ile Ala Ala Ala Gly Ala Val Ala Leu Leu Tyr  
100 105 110  
Asn Asp Gly Met Ser Leu Asp Pro Leu Leu Thr Lys Val Gly Gly Thr  
115 120 125  
Asp Thr Ser Ala Gly Thr Phe Thr Gly Thr Tyr Asp Thr Ser Ser Gly  
130 135 140  
Arg Asn Leu Thr Ile Leu Gly Gly His Phe Thr Thr Ile Ala Ser Asp  
145 150 155 160  
Gly Ser Ser Val Gln Asn Leu Ala Ile Leu Asn Gly Ala Asp Asn Thr  
165 170 175  
Ile Arg Gly Ile Ala Ser Gly Leu Asp Ser Asn Ser Thr Phe Leu Ala  
180 185 190  
Leu Ala Val Ser Asp Asp Thr Leu Phe Ala Gly Gly Asn Val Thr Gly  
195 200 205  
Thr Val Gly Asn Ser Met Ile Asn Gly Phe Val Ala Tyr Asn Leu Lys



## 17279

210                      215                      220  
 Asn Glu Ser Phe Val Glu Asn Val Pro Pro Pro Phe Thr Gly Lys Asp  
 225                      230                      235                      240  
 Val Ser Val Asn Ala Ile Ala Phe Arg Pro Gly Thr Thr Glu Ile Tyr  
                     245                      250                      255  
 Phe Gly Gly Asn Phe Gln Thr Ala Gly Ala Leu Pro Trp Pro Arg Arg  
                     260                      265                      270  
 Leu Phe Leu  
                     275

&lt;210&gt; 39768

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39768

Ser Tyr Ile Leu Thr Leu Ala Thr Gly His His His Ser Asn Gly Ile  
 1                      5                      10                      15  
 Val Val Leu Val Ala Phe Cys Cys Ala Leu Gly Cys Val Phe Leu Ile  
                     20                      25                      30  
 Val Ile Ala Gly Val Ile Phe Asn Lys Ile Gln Arg Arg Arg Gln Gly  
                     35                      40                      45  
 Tyr Met Arg Ala Pro Gln Ala Tyr Gly Thr Asp Arg Pro Ser Thr Met  
                     50                      55                      60  
 Arg Arg Val Pro Pro Glu Tyr Leu Phe Asn Thr Leu Lys His Pro Asn  
 65                      70                      75                      80  
 Pro Gly Thr Pro Val Leu  
                     85

&lt;210&gt; 39769

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39769

Pro Ser Ala Pro Glu Pro Pro Lys Ser Ile Leu Gly Ala Thr Ser Lys  
 1                      5                      10                      15  
 Leu Leu Glu His Ser Leu Gly Pro Ala Val Cys Phe Tyr Asp Thr Thr  
                     20                      25                      30  
 Glu Ala Gln Trp Thr Arg Pro Gly Val Thr Leu Tyr Gly Asn Val Leu  
                     35                      40                      45  
 Ala Leu Lys Trp Ile Ser Asn Lys Gln Leu Ile Ala Val Gly Asn Leu  
                     50                      55                      60  
 Thr Val Ser Gly Asn Gln Thr Val Val Ala Thr Tyr Ser Pro Lys Asp  
 65                      70                      75                      80  
 Gln Ser Trp Glu Pro Leu Ala Gly Thr Ser Thr Ala Asp Asn Leu Gly  
                     85                      90                      95  
 Thr Val Thr Ala Phe Thr Pro Ala Asn Thr Asp Val Ser Arg Phe Trp  
                     100                      105                      110  
 Leu Ala Gly Glu Ser Lys Asn Gly Ser Ser Phe Leu Ala Ser Tyr Asp  
                     115                      120                      125  
 Gly Ser Ser Leu His Phe Ala Gly Ser Ile Phe Gly Asp Gly Thr Thr  
                     130                      135                      140  
 Ile Arg Ser Leu Glu Ile Leu Pro Leu Ser Gln Lys His Arg Asp Val  
 145                      150                      155                      160  
 Ser Val Leu Asn Asn Asp Gln Ile Leu Leu Ile Thr Gly Gln Leu Val

## 17280

165 170 175  
 Ile Pro Asp Phe Gly Asn Ala Ser Ala Ala Leu Phe Asn Gly Thr Asp  
 180 185 190  
 Leu Thr Pro Phe Leu Leu Ser Ser Arg Trp Asp Gly Gln Ser Gly Ser  
 195 200 205  
 Met Ser Gln Leu Phe Tyr Glu Asn Lys Asn Pro Tyr Thr Ser Gly Gly  
 210 215 220  
 Gln  
 225

<210> 39770  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 39770  
 Lys Ser Gly Asp Glu Gln Lys Pro Gln Cys Ser Gln Cys Arg Lys Gly  
 1 5 10 15  
 Ser Arg Glu Cys Arg Pro Ser Glu Gly Val Ile Phe Arg His Gln Gln  
 20 25 30  
 Asn Ala Ser Met Asn Lys Ser Leu Glu Asn Ser Ser Asn Gly Arg Gly  
 35 40 45  
 Ser Leu Lys Gly Phe Tyr Ser Tyr Lys Asn Thr Phe Asp Asp Asp Ser  
 50 55 60  
 Val Trp Leu Asp Ile Pro Lys Asp Gly Thr Asp Lys  
 65 70 75

<210> 39771  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 39771  
 Ser Val Leu Phe Phe Ser Pro Arg Tyr Arg Gln Arg Ile Ser Phe Ser  
 1 5 10 15  
 Gly Thr Gly Ser Gln His Thr Phe Gln Tyr Thr Arg Pro Tyr Arg Pro  
 20 25 30  
 Phe Ser Thr Val Trp Ile Phe Asn Lys Cys Thr Ala Tyr Cys Ile Ala  
 35 40 45  
 Pro Ser Ala Ile Ala Ser Asn Ile Asn Phe Phe Phe Leu Gln Ser Gln  
 50 55 60  
 Gln His Asn Thr Asn Gln  
 65 70

<210> 39772  
 <211> 230  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (140)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 39772  
 Tyr His Phe Ile Ala Leu Val Val Phe Val Asp Asn Ser Asp Pro Cys

## 17281

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1           5           10           15
Ala Glu Glu Leu Glu Thr Val Leu Gly Glu Ser Glu Ala Ala Val Leu
           20           25           30
Ala Ser Lys Ala His Gln Lys Gly Leu Gln Thr Pro Ser Ser Ala Asp
           35           40           45
Gly Glu Ile Arg Gly Leu Glu Gln Ser Ser Thr Trp Gly Ser Thr Asn
           50           55           60
Arg Tyr Ser Phe Ser Pro Leu Ala Thr Asp Asn Gly Ser His Ser Leu
65           70           75           80
Ala Leu Asp His Asn Thr Pro Ser Asn Ile Leu Gly Leu Thr Ala Pro
           85           90           95
Ser Val Pro Ser Gly Ser Ser Thr Asn Val Pro His Thr Ala Leu Pro
           100          105          110
Pro Gln Pro Ser Pro Pro Ile Ser Ile Ser Ser Phe Ser Asn Pro Asn
           115          120          125
Ser Thr Thr Arg Thr Asn Asp Ile Lys Phe Ile Xaa Asn Pro Ser Gln
130          135          140
Thr Leu Ser Pro Pro Ile Asp Pro Ser Ala Gln His Thr Ser Glu Gln
145          150          155          160
Met Ile Ser Ser Ile Pro Ser Arg Ser Val Leu Pro Arg Asn Thr Gly
           165          170          175
Asn Thr Glu Gln Glu Ser Glu Gln Pro Val Glu Thr Glu Tyr Glu Val
           180          185          190
Val Phe Leu Leu Arg His Phe Ser Glu Ala Pro Gly Leu Trp Tyr Val
           195          200          205
Phe Leu Asp Pro Arg Gln Asp Ser Val Pro Ser Asn Gly Lys Tyr Ile
210          215          220
Gly Trp Ile Ser Ser Ile
225          230

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<210> 39773  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

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<400> 39773
His Trp Cys Thr Trp Val Arg Met Leu Glu Arg Val Lys Gln Val Phe
1           5           10           15
Trp Arg Asn Pro Ser His Gly Arg Arg Pro Val Ser Ala Ile Cys Leu
           20           25           30
Gly Gly Ala His Ile Ala Leu Ala Ala Pro Leu Asn Leu Ile Glu Asp
           35           40           45
Asn Ser Gly Asp Asp Asn Gln Glu Asp Ala Thr Lys Ser Ala Ala Glu
           50           55           60
Ser Tyr Glu Asn His Asp Ser Val Arg Val Val Met Ala Cys Ser Lys
65           70           75           80
Ser

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<210> 39774  
 <211> 187  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39774
Arg Cys Arg Leu Ile Asp Glu Asn Gly Asp Asn Ile Ser Ala Phe Asp

```

## 17282

```

1           5           10           15
Val Arg Gly Glu Leu Cys Val Arg Gly Pro Thr Ile Thr Pro Gly Tyr
           20           25           30
Phe Arg Asn Asp Ser Ala Asn Ala Glu Ser Phe Asp Ala Glu Gly Trp
           35           40           45
Phe Lys Thr Gly Asp Ile Ala Tyr Cys Glu Gly Arg Thr Arg Lys Trp
           50           55           60
Tyr Ile Val Asp Arg Arg Lys Glu Leu Ile Lys Val Arg Gly Phe Gln
65           70           75           80
Val Ala Pro Ala Glu Leu Glu Ala Val Leu Leu Gly His Pro Leu Ile
           85           90           95
Val Asp Ala Ala Val Ile Gly Val Val Phe Pro Gly Thr Asp Thr Glu
           100          105          110
Tyr Pro Arg Ala Tyr Val Val Arg Gln Pro Gly Arg Glu Gly Glu Ile
           115          120          125
Leu Thr Glu Glu Asp Val Arg Lys Tyr Leu Gly Glu Arg Leu Ala Lys
           130          135          140
Tyr Lys Ala Leu Val Gly Gly Val Lys Phe Val Asp Ala Ile Ala Lys
145          150          155          160
Ser Ala Ser Gly Lys Ile Leu Lys Arg Val Leu Arg Glu Asn Ser Lys
           165          170          175
Lys Asp Ile Glu Ala Gly Leu Arg Pro Lys Leu
           180          185

```

&lt;210&gt; 39775

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39775

```

Ala Gly Ser Ser Leu Pro Val Lys Pro Glu Asn Cys Leu Leu His His
1           5           10           15
Asn Pro Pro Asn Met His Phe Ala Met Leu Leu Phe Pro Gly Phe Glu
           20           25           30
Ala Leu Asp Val Phe Gly Pro Leu Glu Val Leu Asn Val Leu Ser Glu
           35           40           45
Arg Lys Gln Ile Tyr Leu Ser Leu Leu Ala Ser Ser Leu Thr Pro Val
           50           55           60
Ser Thr Gln Ser Pro Asp Pro Ala Ala Arg Arg Ala Gly Ser Ile Cys
65           70           75           80
Ala Gln Glu Val Leu Pro Thr Gly Thr Phe Ala Asp Tyr Leu Gln Asp
           85           90           95
Ala Arg Ala Pro Asp Gly Val Lys Gly Asn Ile Asp Val Leu Val Val
           100          105          110
Pro Gly Gly Ala Gly Thr Arg Tyr Pro His Ala Ile Asp Pro Val Ile
           115          120          125
Glu Phe Val Arg Gly Ile Ala Pro Pro Val Lys Tyr Ile Met Ser Val
           130          135          140
Cys Asn Gly Ala Gly Val Leu Ala Arg Ala Gly Val Leu Asp Gly Arg
145          150          155          160
Arg Ala Thr Thr Asn Lys Met Leu Trp Gly Gln Thr Thr Ala Leu Arg
           165          170          175
Gly Glu Val Arg Trp Val Arg Asp Ala Arg Trp Val Ala Asp Gly Asn
           180          185          190
Val Trp Thr Ser Ser Gly Val Ser Ala Gly Ile Asp Met Met Leu Ala
           195          200          205

```

17283

Phe Val Arg Glu Thr Tyr Gly Glu Asp Leu Ala Ser Gly Ile Ala Gln  
 210 215 220  
 Glu Ile Glu Tyr Val Trp Asp Arg Glu Glu Asp Gly Thr Arg Asp Pro  
 225 230 235 240  
 Phe Ala Thr Ala Ala Leu  
 245

<210> 39776  
 <211> 329  
 <212> PRT  
 <213> A.fumigatus

<400> 39776  
 Ser Leu His His Ser Ser Ala Arg Arg Arg Trp Thr Met Ala Asn Arg  
 1 5 10 15  
 Thr Leu Glu Ser Phe Tyr Lys Pro Ile Arg Lys Pro Gly Lys Pro Arg  
 20 25 30  
 Val Glu Asp Thr Pro Pro Pro Ser Tyr Ser His His Pro Ser Tyr Pro  
 35 40 45  
 Phe Pro Ile Ala Asp Leu Pro Pro Ser Ile Ala Asn Thr Leu Leu Asp  
 50 55 60  
 Leu Pro Ala Thr Pro Pro Arg Ser Ile Thr Asn Gln Pro His Leu Asp  
 65 70 75 80  
 Leu Leu Tyr Tyr Gln Pro Phe Ile Pro Ser Ala Thr Ala Arg Glu Leu  
 85 90 95  
 Phe His Phe Leu Arg Arg Glu Leu Pro Phe Tyr Arg Val Gln Tyr Thr  
 100 105 110  
 Ile Arg Arg Gly Pro Thr Thr Thr Gln Ile Thr Thr Pro Arg Phe Thr  
 115 120 125  
 Thr Val Phe Gly Val Asp Asp Thr Ser Leu Phe Thr His Ser Pro Gly  
 130 135 140  
 Asp Ser Gly Ser Thr Ser Cys Leu Val Asp Ser Glu Ser His Arg Pro  
 145 150 155 160  
 Val Pro Pro Asn Lys Tyr Lys Ser His Pro Arg Pro Ile Pro Pro Cys  
 165 170 175  
 Leu Asp Ala Leu Arg Gln Arg Ile Glu Ala Ala Thr His Gly Ala Val  
 180 185 190  
 Tyr Asn Phe Cys Leu Val Asn Tyr Tyr Ala Ser Gly Asp Asp Ser Ile  
 195 200 205  
 Ala Tyr His Ser Asp Asp Glu Arg Phe Leu Gly Pro Asn Pro Cys Ile  
 210 215 220  
 Ala Ser Leu Ser Leu Gly Ala Lys Arg Asp Phe Leu Met Lys His Lys  
 225 230 235 240  
 Thr Ala Glu Gly Val Ala Ala Ala Pro Val Lys Leu Ala Leu Ala Asp  
 245 250 255  
 Gly Asp Met Val Ile Met Arg Gly Glu Thr Gln Ser Asn Trp Leu His  
 260 265 270  
 Ser Ile Pro Lys Arg Arg Gly Ser Arg Gly Glu Ala Arg Gln Gly Arg  
 275 280 285  
 Ile Asn Ile Thr Phe Arg Arg Ala Val Val Pro Ala Gly Thr Glu Asn  
 290 295 300  
 Tyr Tyr Arg Tyr Asn Val Gly Glu Gly Lys Ala His Arg Trp Arg Glu  
 305 310 315 320  
 Glu Glu Gly Arg Met Val Glu Leu Phe  
 325

<210> 39777  
 <211> 155  
 <212> PRT  
 <213> A.fumigatus

<400> 39777  
 Ser Leu Leu Asp His Ser Ile Thr His Pro Pro Asp Asp Asp Gly Gln  
 1 5 10 15  
 Trp Leu Thr Gly Pro Ser Asn His Ser Thr Asn Pro Ser Ala Asn Arg  
 20 25 30  
 Ala Ser Arg Val Trp Arg Thr Leu Leu His Arg Pro Thr Pro Ile Ile  
 35 40 45  
 Pro Ala Ile Pro Ser Pro Ser Arg Ile Phe Pro Pro Pro Ser Pro Thr  
 50 55 60  
 Arg Cys Trp Ile Ser Gln Pro Pro Pro Leu Ala Leu Pro Thr Ser  
 65 70 75 80  
 Arg Thr Trp Ile Ser Ser Thr Thr Asn Pro Leu Ser Arg Gln Pro Pro  
 85 90 95  
 Pro Ala Ser Ser Ser Thr Ser Ser Ala Ala Asn Ser Leu Ser Thr Val  
 100 105 110  
 Ser Ser Thr Pro Ser Ala Ala Ala Arg Pro Pro Pro Arg Ser Pro Pro  
 115 120 125  
 Arg Ala Ser Pro Pro Ser Leu Ala Ser Thr Ile Pro Pro Ser Ser Pro  
 130 135 140  
 Ile Arg Pro Val Thr Leu Ala Leu Pro Leu Val  
 145 150 155

<210> 39778  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

<400> 39778  
 Gln Leu Leu His Ala Ser Gln Gly Cys Val Gln Gly Pro Thr Arg Trp  
 1 5 10 15  
 Cys Asn Cys Met Val Ser Cys Val Trp Ala Val Pro Arg Gly Lys Asp  
 20 25 30  
 Thr Arg Val Ser Met Asn Ala Pro Leu Arg Leu Thr Glu Asp Leu Cys  
 35 40 45  
 Arg Asp Leu Pro Gly Asp Asp Arg Ala Val Ser Met Ala Ser Ser Arg  
 50 55 60  
 Pro Val Tyr Ser Leu Gln Glu Val Ser Arg His Asn Ile Ala Lys Asp  
 65 70 75 80  
 Leu Trp Ile Val Ile Glu Lys Glu Val Tyr Asp Val Thr Gln Phe Gln  
 85 90 95  
 Ala Glu His Pro Gly Gly Ala Arg Ser Glu Ser Ser Thr Glu Arg Pro  
 100 105 110  
 Arg Lys Gln Ser Asp Glu Thr Val Leu Arg Lys Leu Ala Gly Lys Asp  
 115 120 125  
 Ala Thr Glu Lys Phe Leu Glu Tyr His Asp Thr Ser Ile Leu Thr Arg  
 130 135 140  
 Tyr Arg Glu Arg Leu Gln Val Gly Val Leu Val Glu Gly Pro Glu Pro  
 145 150 155 160  
 Gln Lys Gly Phe Leu Ser Arg Phe Phe Arg Ser  
 165 170

&lt;210&gt; 39779

&lt;211&gt; 442

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39779

```

Asn Leu Ser Ala Val Leu Ser Ser Ser Trp Trp Arg Ser Arg Gly Arg
1          5          10          15
Ser Ala Asp Ser Arg Tyr Gly Thr Ala Arg Trp Ser Ser Lys Pro Arg
          20          25          30
Ser Arg Ala Arg Leu Tyr Pro Pro Ser Thr Met Gly Ser Ser Arg Thr
          35          40          45
Ser Leu Asp Asp Gln Ser Ser Leu Trp Ser Pro Ser Ala Ser Ser Thr
          50          55          60
Trp Ser Lys Tyr Ser Leu Gly Lys Leu Thr Ser Ala Ser Val Asp Ser
65          70          75          80
Phe Gly Ser Asp Tyr Pro Arg Gly Asp Tyr Gln Gln Ser Ile Gly Phe
          85          90          95
Ala Asn Ala Leu Ser Gln Ala Ile Ile Arg Glu Asp Ser Ala His Ser
          100          105          110
Ile Thr Ser Val Glu Glu Glu Gly Thr Ala His Leu Leu Glu Asp Glu
          115          120          125
Thr Leu Gln Leu Ala Gly Ala Pro Trp Ala Lys Glu Gly Ser Leu Lys
          130          135          140
His Lys Gln His Leu Asp Ser Val Asp Lys Arg Ala Lys Asp Arg Asn
145          150          155          160
Trp Asn Glu Cys Phe Ala Val Ile Gln Gln Gly Trp Met Arg Leu Phe
          165          170          175
Ser Phe Ser Asn Ala Ala Lys Thr Pro Arg Gln Lys Pro Lys Gln Arg
          180          185          190
Pro His Gly Gly Val Val Val Gly Gly Asn Trp Thr Glu Asn Ala
          195          200          205
Gln Glu Leu Trp Lys Phe Leu Leu Arg His Thr Ile Ala Ser Ala Leu
          210          215          220
Pro Pro Pro Gly Tyr Ser Lys Ser Arg Pro His Val Trp Ala Leu Ser
225          230          235          240
Leu Pro Thr Gly Ala Val His Leu Phe Gln Ala Gly Thr Pro Glu Ile
          245          250          255
Val Arg Glu Phe Val Ser Ser Ala Asn Tyr Trp Ser Ala Arg Leu Ser
          260          265          270
Lys Glu Pro Leu Val Gly Gly Ile Ser Asn Ile Glu Tyr Gly Trp Ser
          275          280          285
Asp Ala Val Ile Asn Ser Ala Leu Val His Ala Asp Asn Asn Arg Thr
          290          295          300
Pro Pro Ser Ser Gly Pro Arg Ala Ser Ile Gln Ser Ser Ile Arg Ser
305          310          315          320
Ser Ile Asp Gln Gln Gly Met Arg Pro Arg Leu Pro Ala Asp Arg Val
          325          330          335
His Ile Ser Asp Trp Ala Pro Pro Gln Gln Ser Met Ala Ala Ser Thr
          340          345          350
Leu Pro Glu Ala Glu Gln Leu Lys Ala Leu Gln Thr Tyr Val Lys Asn
          355          360          365
Val Glu Asp Asp Leu Ser Arg His Asn Glu Leu Arg Pro Ala Met Ile
          370          375          380
Leu Ala Phe Ser Pro Arg His Pro Asn Ala Ala Lys Ala Met Ala Asn
385          390          395          400

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```
<210> 39780
<211> 786
<212> PRT
<213> A.fumigatus
```

<400> 39780															
Glu 1	Leu	Ser	Ser	Gln 5	Ile	Met	Ile	Ser	Ile 10	Tyr	Pro	Ile	His	Thr	Asp 15
Ser	Phe	Leu	Gln	Ala 20	Asn	Val	Glu	Gln 25	Gly	Lys	Gly	Leu	Cys 30	His	Cys
Val	Pro	Arg	Arg	Trp 35	Ile	Gln	Ala 40	Ala	Asn	Val	Ser	Pro	Lys 45	Pro	Thr
Arg	Leu	Ile	Gly	Leu 50	Asn	His 55	Asn	Lys	Asn	Asn	Asn	Asn	Asn 60	Asn	Asn
Asn 65	Asn	Thr	Thr	Val	Thr 70	Met	Ser	Thr	Asn	Ser	Asp	Leu	Ser	Pro	Pro 80
Ser	Ser	Pro	Ser	Pro 85	Ile	Phe	Gln	Ile	Thr 90	His	Cys	Ala	Gln 95	Ser	Ile
Leu	Leu	Pro	Ser	Cys 100	Val	Ser	Ile	Pro	Asp 105	Ala	Phe	Asp	Thr 110	Asp	Asp
Glu	Val	Phe	Ala	Ser	Val	Glu	Glu 120	Phe	Cys	Asn	Pro	Phe	Asp 125	Leu	Met
Val	Gln	Asp	Thr	Thr	Trp	Ala 135	Asp	Pro	Pro	Leu	Gly	Gly	Ser 140	Thr	Thr
Met 145	Asp	Glu	Ala	His	Asp 150	Thr	Asp	Ser	Glu	Val	Tyr	His	Thr	Gln	Asp 160
Glu	Thr	Thr	Leu	Asp 165	Leu	Gly	Arg	Asp	Asp	Asp	Pro	Thr	Ser	Thr 175	Ile
Asp	Pro	Ser	Asp 180	His	Asp	Asp	Ser	Asn	Ile 185	Ser	His	Leu	Pro	Pro 190	Leu
Pro	Asp	His	Asp 195	Asp	Ser	Ser	Leu	Phe	Leu	Ser	Ser	Glu	Asp 205	Gly	Asp
His	Glu	Arg	Ala	Glu	Asn	Gln	Thr	Leu	Leu	Glu	Glu	Lys	Glu	Met	Arg
Arg 225	Lys	Leu	Met	Asp	Met 230	Glu	Ser	Ser	Phe	Leu	Pro	Glu	Pro	Ser	Thr 240
Ile	Glu	Val	Ala	Pro	Ser	Asn	Gln	Ala	Ala	Gly	Ile	Gly	Asp	Thr 255	Leu
Leu	Gln	Asp	Asn	Cys	Asp	Asn	Ala	His	Glu	Pro	Ala	Ala	Ser	Glu	Thr 270
Asn	Gln	Ser	Phe	Met	Thr	Ala	Asp	Asn	Thr	Ser	Pro	Asp	Leu	Ile	Ser 285
Thr	Gly	Lys	Glu	Val	Ser	Val	Pro	Gln	Thr	Pro	Ser	Leu	Gly	Pro	His 300
Asp 305	Asp	Ser	Thr	Met	Gly	Leu	Asp	Ala	Thr	Pro	Thr	Thr	Val	Pro	Gln 320
His	His	Gly	Asp	Asp	Thr	Thr	Ala	Leu	Glu	Ala	Ile	Ser	Ser	Ser	Pro 335
Ala	Ala	Asp	Ala	Ala	Ala	Arg	Ser	Ser	Ala	Arg	Val	Gln	Ser	Thr	Phe



			340					345					350		
Ser	Glu	Gly	Ser	Gln	Ser	Thr	Asn	Arg	Asp	Gly	Gln	Glu	Glu	Ala	Asp
		355					360					365			
His	Ser	Thr	Thr	Leu	Asp	Leu	Thr	Arg	Ser	Met	Gln	Ala	Ala	Asn	Leu
	370					375					380				
Ser	Thr	Gln	Thr	Ser	Phe	Arg	Ser	Ser	Ser	Leu	Glu	Arg	Pro	Arg	Leu
385					390					395					400
Phe	Gln	Asn	Glu	Ser	Ala	Gln	Asp	Ala	Glu	Ala	Ala	Ser	Arg	Thr	Ser
				405					410					415	
Ser	Arg	Arg	Ser	Asn	Arg	Pro	Lys	Tyr	Leu	Asn	Ser	Arg	Gln	Ser	Ser
			420					425					430		
His	Arg	Leu	Ser	Tyr	Ser	Ser	Val	Ala	Ser	Asn	Asn	Thr	Glu	Ile	Thr
	435						440					445			
Asn	Asn	Asp	Ala	Thr	Leu	Gly	Ala	Asp	Tyr	Ala	Leu	Gln	Ser	Gly	Gly
	450					455					460				
Ala	Val	Pro	Gly	Asn	Ser	His	Pro	Ala	Gln	Gly	Asp	Pro	Arg	Asn	Asn
465					470					475					480
Leu	Thr	Arg	Ser	Val	Ser	Leu	Gly	Ser	Met	Ala	Ser	Gly	Ile	Ser	Ser
				485					490					495	
Leu	Ser	Glu	Glu	Asn	Val	Met	Glu	Arg	Arg	Asn	Pro	Ser	Ala	Val	Ala
			500					505					510		
Glu	Gly	Gly	Leu	Gln	Thr	Leu	Thr	Glu	Glu	Gly	Ile	Ser	Gln	Ser	
	515						520						525		
Arg	Pro	Gly	Ser	Ala	Gln	Gln	Gln	Ser	Gln	Ser	Gln	Pro	Gln	Pro	His
	530					535					540				
Gln	Glu	Arg	Gln	Ser	Pro	Thr	Leu	Gly	Asp	Asp	Leu	Gly	Pro	Met	Thr
545					550					555					560
Pro	Lys	Ala	Lys	Pro	Arg	Asp	Asn	Ile	Phe	Pro	Thr	Asp	Thr	Ala	Ile
				565					570					575	
Ala	Glu	Arg	Val	Lys	Asp	Val	Gln	Val	Pro	Ser	Ala	Phe	Val	Arg	Gln
			580					585					590		
Phe	Arg	Glu	Asp	Phe	Ala	Gly	Arg	Pro	Ser	Ser	Pro	Glu	Lys	Arg	Ala
	595					600						605			
Gly	Leu	Pro	Thr	Pro	Gly	Phe	Ala	Arg	Ser	Gly	Arg	Thr	Met	Thr	Leu
	610				615						620				
Lys	Glu	Gln	Ser	Ser	Thr	Ile	Asp	Arg	Leu	Ser	Lys	Glu	Asn	Phe	Asp
625					630					635					640
Leu	Lys	Met	Arg	Ile	His	Phe	Leu	Asn	Glu	Ala	Leu	Asn	Arg	Arg	Ser
				645					650					655	
Glu	Glu	Gly	Ile	Lys	Glu	Met	Ile	Ser	Glu	Asn	Val	Glu	Leu	Lys	Ser
			660					665					670		
Asp	Lys	Leu	Lys	Leu	Gln	Lys	Asp	Asn	Gln	Asn	Leu	Lys	Arg	Lys	Ile
	675						680					685			
Arg	Asp	Leu	Glu	Lys	Gln	Leu	Lys	Asp	Gln	Gln	Ser	Asp			

785

&lt;210&gt; 39781

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39781

```

Ser Pro Leu His Phe Cys Ser Lys Thr Cys Ile Ala Ser Thr Ser Asn
1           5           10           15
Ile Tyr Ser Tyr Thr Ser Ile Leu Ala Ala Ser Val Ala Tyr Thr Leu
           20           25           30
Ser Phe Ser Pro Ser Leu Leu Ile Phe Asn Pro Ser Ile Asn Asp Ile
           35           40           45
Glu Ser Asp Ile Leu Phe Val Thr Pro Ile Pro Arg Ser Phe Ser Cys
           50           55           60
Gly Ser Leu Asn Arg Cys Phe Gly Gly Gly Arg Cys Ile Val Ser Gln
           65           70           75           80
Thr Lys Ala Arg

```

&lt;210&gt; 39782

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39782

```

Leu Arg Val Cys Phe Arg Thr Leu Pro Trp Lys Arg Glu Val Cys Val
1           5           10           15
Ile Leu Leu Ile Trp Ile Ile Lys Arg Trp Ser Ser Val Ser Gly Leu
           20           25           30
Cys Arg Leu Ser Leu Val Ser Val Phe Ser Ser Phe Ile His Asp Asn
           35           40           45
Arg Met Trp Tyr Gln Ser Ser Ser Leu Leu Gly Val Ala Ala Val Ala
           50           55           60
Gln Ala Ala Thr Val His Tyr Ser Leu Asp Leu Thr Trp Glu Thr Gly
           65           70           75           80
Ser Pro Asn Gly Val Ser Arg Glu Met Ile Phe Val Asn Gly Gln Phe
           85           90           95
Pro Gly Pro Thr Ile Ile Leu Asn Glu Gly Asp Glu Ala Ile Val Ser
           100          105          110
Ile Trp Gln His Gly Ser Ile Glu Arg Ser Gly Tyr
           115          120

```

&lt;210&gt; 39783

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39783

```

Gln Gly Val Gly Gln Ser Met His Ile Ala Tyr Cys Arg Ser Asn Arg
1           5           10           15
Asn Ala Asn Cys Gln Arg Cys Val Pro Tyr Val Pro Pro Ile Gln Gly
           20           25           30
Asn Trp Glu His His Pro Asp Lys Val Pro Pro Gly Leu Asn Glu Gly
           35           40           45

```

## 17289

Cys His Pro Ser Thr Thr Gln Glu Thr Ile Phe Thr Val Asp Ala Ala  
 50 55 60  
 His Gln Trp Ala Ser Phe His Phe Ile Ser Ala Ala Ser Leu Asn Val  
 65 70 75 80  
 Leu Val Val Ser Ile Asp Glu His Pro Met Tyr Val Tyr Glu Val Asp  
 85 90 95  
 Gly Arg Tyr Ile Glu Pro Gln Leu Ala His Ser Val Lys Leu Tyr Asn  
 100 105 110  
 Gly Glu Arg Tyr Ser Val Met Val Lys Leu Glu Gln Glu Pro Ala Asn  
 115 120 125  
 Tyr Lys Met Arg Ala Ala Asn Asp Gly Gly Gln Gln Ile Val Ser Gly  
 130 135 140  
 Phe Ala Thr Val Thr Tyr Glu Gly Gly Gly Asn Gln Pro Gly Pro Ile  
 145 150 155 160  
 Pro Ala

&lt;210&gt; 39784

&lt;211&gt; 414

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39784

Val Tyr Arg Arg Gln Lys Gln Val Gln Thr Cys Ile Leu Thr Gly Gln  
 1 5 10 15  
 Val Asn Gln Thr Gly Thr Tyr Trp Tyr His Ser His Glu Met Gly Gln  
 20 25 30  
 Tyr Pro Asp Gly Leu Arg Gly Pro Phe Ile Val Arg Asp Pro Ser Pro  
 35 40 45  
 Pro Phe Ala Tyr Asp Asp Glu Phe Thr Leu Thr Leu Thr Asp His Tyr  
 50 55 60  
 His Glu Gln Met Ser Val Leu Leu Gln Gln Tyr Glu Ala Asp Ser Val  
 65 70 75 80  
 Gly Ala Gln Ala Gly Val Asn Glu Pro Leu Pro Ala Ala Ala Leu Ile  
 85 90 95  
 Asn Glu Gly Phe Asp Thr Thr Thr Leu Arg Val Glu Pro Asn Lys Thr  
 100 105 110  
 Tyr Leu Ile His Leu Val Cys Val Gly Asn Trp Pro Gly His Val Ile  
 115 120 125  
 Val Phe Asp Asp His Glu Ile Ser Val Val Glu Val Asp Gly Thr Trp  
 130 135 140  
 Val Asp Ala Tyr Pro Ala Arg Asp Lys Lys Ile Arg Leu Ala Thr Gly  
 145 150 155 160  
 Gln Arg Met Ser Ile Leu Leu Lys Thr Lys Asp Asn Thr Asp Arg Asn  
 165 170 175  
 Tyr Ala Ile Trp Asp Ser Met Asp Val Asn Met Met Phe Phe Tyr Gln  
 180 185 190  
 Asn Arg Ala Ile Pro Glu Gly Phe Asn Pro Asn Thr Thr Ala Trp Leu  
 195 200 205  
 Val Tyr Asp Glu Ala Lys Glu Leu Pro Pro Ala Pro Asp Val His Glu  
 210 215 220  
 Leu Asp Pro Asn Asn Asp Phe Val Asp Asp Leu Val Phe Val Pro Ala  
 225 230 235 240  
 Ser His Glu Pro Leu Leu Glu Lys Val Asp Arg Gln Ile Ile Phe Asp  
 245 250 255  
 Thr Gly Val Thr Gln Arg Asp Gly Arg Ser Val Tyr Thr Ile Asn Gly

```
<210> 39785
<211> 148
<212> PRT
<213> A.fumigatus
```

```
<210> 39786
<211> 266
<212> PRT
<213> A.fumigatus
```

```
<220>
<221> UNSURE
<222> (70),(73),(112)
<223> Identity of amino acid sequences at the above locations are unknown.
```

&lt;400&gt; 39786

```

Asn Cys Thr Thr Ala Ser Gly Thr Arg Ser Trp Ser Ser Trp Asn Lys
1          5          10          15
Asn Gln Pro Thr Thr Arg Cys Ala Arg Pro Thr Thr Gly Gly Asn Arg
20          25          30
Leu Ser Pro Gly Ser Arg Gln Ser Leu Thr Lys Ala Gly Glu Thr Ser
35          40          45
Arg Gly Pro Ser Gln Arg Asn Ile Asp Tyr Gly Ser Arg Asn Thr Ser
50          55          60
Ala Asp Val Ile Pro Xaa Asn Thr Xaa His Leu Pro Arg Asn Arg Val
65          70          75          80
Ile Ser Leu Ala Ser Glu Pro Asp Asp Phe His Ile Leu Met Leu Gly
85          90          95
Arg Thr Asn Ser Phe Trp Glu Trp Ser Leu Asp Gly Ala Ala Phe Xaa
100         105         110
Pro Ser Asn Leu Gly Ala Leu Pro Pro Ala Ile Leu Ser Pro Gln Ala
115         120         125
Pro Glu Phe Ala Asp Ala Leu Lys Ile Thr Thr Arg Asn Asp Thr Trp
130         135         140
Val Asp Ile Val Phe Gln Leu Val Val Ser Glu Thr Thr Pro Ile Gln
145         150         155         160
Pro Pro His Pro Leu His Lys His Ser Asn Lys Gly Phe Leu Leu Gly
165         170         175
Thr Gly His Gly Lys Phe Asn Trp Thr Ser Ile Lys Glu Ala Lys Glu
180         185         190
Ala Ser Pro Glu Ser Phe Leu Glu Thr Pro Val Tyr Arg Asp Thr Phe
195         200         205
Thr Thr Ser Pro Gln Gly Glu Thr Trp Thr Ala Ile Arg Tyr His Val
210         215         220
Glu Asn Pro Gly Pro Phe Leu Leu His Cys His Met Thr Thr His Leu
225         230         235         240
Gln Ser Gly Met Gly Leu Ile Leu Met Asp Gly Val Asp Val Trp Pro
245         250         255
Glu Val Tyr Ala Asp Met Ile Thr Pro Met
260         265

```

&lt;210&gt; 39787

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39787

```

Leu Val Ser Pro Ser Lys Gly Cys Pro Arg Leu Leu His Trp Asp Val
1          5          10          15
Leu Ala Pro Cys Ile Pro Arg Leu Arg Ala Leu Pro Cys Ile Val Leu
20          25          30
Val Arg Ser Gln His Phe Gln His Ile Ala Ile Val Tyr Ile Ser Val
35          40          45
Phe Ile Asp Val Arg Ile Pro Ser Ile Ala Ser Val Tyr Leu Asp Gly
50          55          60
Leu Ser Pro Val Ser His Thr Thr Asp Gln Arg His Arg Pro Gln His
65          70          75          80
Thr Met Phe His Ser Arg Ala Leu Leu Leu Ser Trp Leu Val Gly Phe
85          90          95
Thr Ala Ala Lys Asp Ile His Leu Asp Trp Asn Ile Thr Trp Val Trp

```

## 17292

	100		105		110										
Ala	Ala	Pro	Asp	Gly	Phe	Gly	Arg	Pro	Met	Ile	Gly	Ile	Asn	Asn	Glu
	115						120						125		
Trp	Pro	Cys	Pro	Ile	Val	Asn	Ala	Asp	Leu	Gly	Asp	Arg	Leu	Ile	Val
	130					135					140				
Asp	Val	His	Asn	Gly	Leu	Gly	Asn	Gln	Ser	Thr	Gly	Ile	His	Trp	His
	145				150						155				160
Gly	Phe	His	Gln	Tyr	Met	Thr	Gly	Thr	Met	Asp	Gly	Ser	Asn	Gln	Val
			165						170					175	
Thr	Gln	Cys	Ala	Leu	Pro	Pro	Gly	Ser	Ser	Met	Arg	Tyr	Glu	Phe	Asp
		180						185					190		
Val	Ser	Ile	Ser	Ser	Pro	Glu	Ala	Ser	Ser	Asp	Val	Tyr	Thr	His	Gly
	195						200					205			
Thr	Gly	Gln	Ser	Asn	Arg	Asp	Leu	Leu	Val	Ser	Leu	Ala	Arg	Asn	Gly
	210					215					220				
Thr	Val	Ser	Arg	Arg	Pro	Ala	Gly	Ser	Val	His	Arg	Ala	Gly	Ser	Leu
	225				230					235					240
Ala	Ala	Ile	Cys	Leu	Arg	Arg	Arg	Val	Tyr	Ala	Asp	Ser	Asp	Arg	Pro
			245						250					255	
Leu	Pro	Arg	Ala	Asn	Val	Gly	Ser	Ser	Ala	Ala	Val	Arg	Gly	Arg	Gln
		260					265						270		
Arg	Arg	Arg	Pro	Gly	Arg	Arg	Gln								
	275					280									

&lt;210&gt; 39788

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (176)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39788

Pro	Val	Leu	Arg	Val	Trp	Leu	Ile	His	Cys	His	Ile	Glu	Trp	His	Val
1			5						10					15	
Thr	Lys	Gly	Leu	Thr	Gly	Thr	Leu	Ile	Glu	Ala	Pro	Ala	Gln	Met	His
		20					25						30		
Lys	Ile	Ser	Val	Pro	Leu	Asp	His	Gln	Arg	Ile	Cys	Pro	Ser	Tyr	Gly
	35					40						45			
Thr	Pro	Pro	Gly	Gly	Thr	Pro	Ser	Ser	Pro	Pro	His	Asp	Ala	Pro	Arg
	50				55						60				
Pro	Asp	Gly	Ala	Ser	Gly	Ser	Pro	Gln	Tyr	Pro	Pro	Lys	Pro	Trp	Gly
	65			70					75					80	
Glu	Pro	Asp	Ala	Ser	Ala	Pro	Glu	Gln	Asp	Asp	Ser	Gln	Pro	Gly	Gly
			85					90						95	
Thr	Pro	Asp	Ser	Pro	Glu	Asp	Phe	Pro	Gln	Pro	Trp	Gly	Glu	Pro	Glu
		100					105					110			
Glu	Ser	Pro	Gln	Glu	Pro	Pro	Gln	Pro	Trp	Ser	Pro	Ser	Asn	Asn	Ala
	115					120					125				
Gln	Pro	Pro	Ala	Asn	Thr	Tyr	Ala	Pro	Glu	Tyr	Pro	Ser	Gly	Tyr	Val
	130				135					140					
Pro	Val	Ala	Pro	Gly	Pro	Val	Ile	Ile	Asp	Ser	Glu	Leu	His	Ser	Arg
	145				150				155						160
Trp	Gln	Gly	Val	Ser	Tyr	Thr	Asp	Glu	Ala	Arg	Gln	Glu	Ala	Ala	Xaa

## 17293

165  
Arg Cys Pro Pro Lys Arg  
180

170

175

<210> 39789  
<211> 408  
<212> PRT  
<213> A.fumigatus

<400> 39789  
Leu Ile Trp Val Ile Gly Ala Glu Ala Lys His Arg Val Pro Met Val  
1 5 10 15  
Leu His His Asp Gly Ile Pro Phe His Arg Gly Arg Arg Asp Ile Cys  
20 25 30  
Lys Val Ala Ile Glu Val Ala Ala Leu Gly Asp Arg Ala Leu Gln Asn  
35 40 45  
Leu Glu Leu Met Ala Val His Met Pro Gly Val Gln Val Ala Val Val  
50 55 60  
Val Val Asp Asp Asp Leu His Asp Leu Ala Val Leu Asp Asp Glu Gly  
65 70 75 80  
Ile Tyr Leu Thr Val Tyr Arg Arg Ile Arg Ser Val Phe Trp Ala Arg  
85 90 95  
Arg Gln Arg Cys Val Gln Cys Trp Phe Leu Arg Ile Asp Val Cys Leu  
100 105 110  
Pro Ile Asp Gly Val His Ala Ala Ala Val Ala Leu Ser His Thr Gly  
115 120 125  
Val Glu Asp Asp Leu Thr Val Asp Phe Leu Glu Glu Gly Leu Val Ala  
130 135 140  
Arg Trp His Glu Asp Glu Ile Val Asp Lys Val Val Ile Arg Val Glu  
145 150 155 160  
Phe Val Asp Val Trp Cys Gly Arg Lys Phe Leu Cys Phe Val Ile Asp  
165 170 175  
Gln Pro Cys Arg Arg Val Gly Val Glu Pro Leu Gly Asp Arg Ala Ile  
180 185 190  
Leu Ile Glu Glu His His Val Asp Val His Arg Val Pro Asp Gly Ile  
195 200 205  
Val Pro Val Gly Val Val Leu Gly Phe Glu Gln Asp Ala His Ala Leu  
210 215 220  
Ala Gly Gly Gln Pro Asp Leu Leu Val Ser Arg Arg Val Arg Val His  
225 230 235 240  
Pro Gly Ala Val His Leu Asn Asp Thr Asp Leu Val Val Ile Glu Asp  
245 250 255  
Asn Asn Val Ala Trp Pro Val Ala His Ala Asn Gln Val Asp Glu Val  
260 265 270  
Cys Leu Val Gly Leu His Ala Glu Ser Gly Gly Val Lys Ala Leu Val  
275 280 285  
Asp Gln Ser Cys Arg Trp Gln Gly Phe Ile Asp Ala Cys Leu Gly Ala  
290 295 300  
Asp Ala Val Gly Leu Val Leu Leu Gln Lys Asn Arg His Leu Leu Val  
305 310 315 320  
Val Met Val Gly Gln Ser Gln Arg Lys Leu Val Val Val Gly Lys Trp  
325 330 335  
Arg Arg Gly Ile Pro His Asp Glu Arg Thr Pro Gln Ala Val Gly Ile  
340 345 350  
Leu Ser His Phe Val Arg Val Ile Pro Ile Ser Pro Gly Leu Ile Asp  
355 360 365

## 17294

Leu Ser Arg Glu Tyr Thr Arg Leu Asn Leu Leu Leu Ala Thr Ile Tyr  
 370 375 380  
 Leu His Arg Ile His Ser Ala Cys Cys Phe Pro Glu Ala Thr His Thr  
 385 390 395 400  
 Ala Leu Pro Gly Ser Ser His Pro  
 405

<210> 39790  
 <211> 97  
 <212> PRT  
 <213> A.fumigatus

<400> 39790  
 Val Ser Glu Pro Asn Met Ser Glu Pro Ile Asp Ser Asp Ser Thr Tyr  
 1 5 10 15  
 Gly Thr Tyr Asp Ala Gln Ala Ser Thr Asn Tyr Gly Val Arg Gly Thr  
 20 25 30  
 Arg Gln Leu Asn Asn Arg Asn Lys Asn Thr Pro Met Arg Lys Glu Tyr  
 35 40 45  
 Tyr Ala Ser Gly Ile Asn Asp Ile Gly Trp Trp Tyr Asp Tyr Asp Tyr  
 50 55 60  
 Lys Ser Pro Gly Leu Gly Leu Gly Asp Tyr Thr Thr Ser Ala Thr Glu  
 65 70 75 80  
 Ala Pro Val Glu Arg Ser Thr Ala Glu Ala Ser Gly Asp Arg Ser Asp  
 85 90 95

Lys

<210> 39791  
 <211> 370  
 <212> PRT  
 <213> A.fumigatus

<400> 39791  
 Thr Asp Ser Phe Ser Arg Leu Val Leu Cys Gly Cys Ser Cys Ser Asp  
 1 5 10 15  
 Gln Cys Phe Pro Asn Phe Thr Leu Arg Trp Leu Trp Met Pro Gln Ala  
 20 25 30  
 Asp Thr Gln Ala His Arg Gly Leu Arg Leu Thr Gln Ser Glu Ala Ser  
 35 40 45  
 Ala Met Thr Leu Val Leu Asn Leu Ser Thr Gly Gly Phe Cys Phe Asp  
 50 55 60  
 Leu Gln Ser Ile Pro Ser Ser Val Leu Ile Ile Leu Tyr Phe Tyr Arg  
 65 70 75 80  
 Arg Phe Arg Pro His Ile Pro Val Lys Met Asp Gly Thr Gly Pro Thr  
 85 90 95  
 Glu Gln Trp Leu Ser Gln Leu Thr Ala Met Arg Glu Ala Ile Ala Ala  
 100 105 110  
 Leu Lys Leu Pro Lys Asp Pro Ala Thr Glu Gln Leu Ser Tyr Gly Ser  
 115 120 125  
 Asp Leu Asp Leu Asp Leu Asp Asp Glu Tyr Ser Ser Pro Val Thr Val  
 130 135 140  
 Asp Asp Ile Trp Asp Ile Ile Ser Ser Asp Asp Glu Thr Asn Asp Asp  
 145 150 155 160  
 Leu Asp Asp Ile Asn Gly Val Pro Leu Pro Pro Ala Pro Ser Thr Ser  
 165 170 175



## 17295

Leu Tyr Asp Gln Ala Trp Leu Glu Gln Arg Cys Gln Ala Ile Thr Leu  
 180 185 190  
 Gln Lys Pro Gly Met Ser Ala Gln Glu Leu Ala Gln Gln Ile Thr Ala  
 195 200 205  
 Ser Leu Ala Thr Asp Ser Gly Asp Asp Glu Leu Gln Met Ser Leu Ala  
 210 215 220  
 Glu Ile Val Gly Phe Asp Asp Leu Asp Phe Val Ile Glu Leu Ile Gly  
 225 230 235 240  
 His Arg Ala Glu Ile Leu Ala Ser Thr Thr Ser Lys Thr Glu Ala Gln  
 245 250 255  
 Thr Asp Gly Leu Met Thr Gly Lys Leu Gln Thr Arg Ala Glu Arg Glu  
 260 265 270  
 Gln Ala Leu Arg Gln Gln Asp Phe Glu His Lys His Ala Pro Leu Leu  
 275 280 285  
 Pro Ala Gln Ala Arg Ser Glu Pro Arg Tyr Pro His Val Phe Lys Thr  
 290 295 300  
 His Asp Ser Arg Asn Thr Leu Ala Leu Gly Gly Lys Arg Tyr Gly Leu  
 305 310 315 320  
 Pro Val Gly Ser Arg Gln Ile Asp Glu Gln Arg Tyr Thr Glu Phe Glu  
 325 330 335  
 Ile Pro Ala Ser Arg Val Gly Thr Leu Ala Ser Ser Gln Lys Leu Val  
 340 345 350  
 Glu Ile Lys Ser Leu Asp Ala Leu Phe Ile Thr Pro Glu Ser Ala Ser  
 355 360 365  
 Thr Leu  
 370

&lt;210&gt; 39792

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39792

Ser Phe Ser Cys Ile Ile Val Pro Glu Arg Asn Tyr Asp Arg Tyr Tyr  
 1 5 10 15  
 Ala Met Arg Leu Ser Tyr Arg Val Gly Leu Ala Ala Leu Leu Ile Leu  
 20 25 30  
 Ala Phe Val Leu Ile Lys Arg His Leu Asp Ser Leu Gln Asp Gly Ser  
 35 40 45  
 His Val Pro Ser Ser Trp Gln Phe Ser Asn Val Val Trp Gly Gly Ala  
 50 55 60  
 Ala Glu Pro Val Ala Thr Pro Ala Ser Lys Pro Glu Lys Glu Lys Pro  
 65 70 75 80  
 Gln Thr Pro Ala Pro Ala Val Glu Gln Ser Leu Pro Ile Lys Gln Thr  
 85 90 95  
 Tyr Glu Ile Thr Pro Ile Ile Val Pro Asn Asp Arg Val Ile Val Met  
 100 105 110  
 Ala Arg Leu Ser Arg Glu Asp Thr Ser Trp Val Ser Thr Asp Leu Asn  
 115 120 125  
 Glu

&lt;210&gt; 39793

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39793

```

Met Ser Glu Leu Phe Met Gly Lys Ala Leu Arg Gly Glu Leu Arg Leu
1          5          10          15
Thr Gln Ser Arg Trp Arg Asn Phe Ile Tyr Thr Val Asp Asp Val Asn
20          25          30
Ala Ala Arg His Thr Pro Lys Asn Lys Gly Arg Glu Ser Leu Ala Tyr
35          40          45
Leu Gln Tyr Ile Val Asp His Tyr His Asp Leu Pro Ser Thr Met Val
50          55          60
Phe Leu His Ser His Lys Asp Gly Trp Glu Ala Gly Trp His Thr Asp
65          70          75          80
Thr Leu Asp Tyr Ser Asn Val Glu Ser Val Arg Thr Leu Gln Thr Glu
85          90          95
Tyr Val Gln Lys Ser Gly Phe Val Asn Leu Arg Cys Gln Gly Asn Pro
100         105         110
Gly Cys Pro Asp Glu Ile Arg Pro Leu Asp Asp Pro Pro Arg Pro Gly
115         120         125
Lys Glu Asn Ser Arg Val Tyr Ala Arg Ala Trp Glu Glu Leu His Asn
130         135         140
Asn Thr Asn Ile Pro Glu Val Val Gly Ala Pro Cys Cys Ser Gln Phe
145         150         155         160
Ala Val Ser Lys Ala Gln Val Leu Lys Arg Pro Leu Ser Asp Tyr Gln
165         170         175
Arg Tyr Tyr Asn Trp Val Leu Thr Asn Asn Leu Pro Asp Glu Leu Thr
180         185         190
Ala Trp Ile Met Glu Tyr Ser Trp His Ile Ile Phe Gly Lys Asp Pro
195         200         205
Val Phe Cys Pro Asp Ile Tyr Gln Cys Tyr Gln Asn Val Tyr Gly Asn
210         215         220
Pro Tyr Ser Trp
225

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&lt;210&gt; 39794

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39794

```

Asn Leu Leu Asn Pro Ser Leu Trp His Ser Lys Met Ser Leu Gly Pro
1          5          10          15
His Leu Tyr Tyr Asp Gly Glu Asp Tyr Lys Cys Leu Leu Cys Asp Arg
20          25          30
Trp Phe Glu Thr Glu Lys Ala Leu Tyr Asp His Cys Arg Tyr Thr Ser
35          40          45
Arg His Glu Trp Cys Glu Thr Cys Arg Arg Val Leu Val Ser Thr Thr
50          55          60
Ala Lys Asn Gln His Leu Phe Asp Ser Pro Val His Ser His Ile Cys
65          70          75          80
Thr Leu Cys Ser Ser Arg Pro Arg Phe Asp Thr Ala Leu Glu Leu Lys
85          90          95
Ala His Arg Ile Asp Tyr His Asn Leu Cys Gly Ile Cys Gly Lys Tyr
100         105         110
Phe Asp Asn Glu Asn Asn Leu Arg Met Ala Ser
115         120

```

<210> 39795  
 <211> 124  
 <212> PRT  
 <213> A.fumigatus

<400> 39795  
 Arg Tyr Leu Gln Met Ser Leu Thr Ile Leu Asp Leu Gln His Gln Gln  
 1 5 10 15  
 Arg His Gln Ala Arg Asn Leu Gln Cys Tyr Gly Cys His Gln Ser Phe  
 20 25 30  
 Lys Thr Phe Ser Gly Met Leu Ile His Leu Glu Ser Gly Ser Cys Pro  
 35 40 45  
 Ser Gly Thr Asp Ile Asp Asp Ile Asn Arg Leu Ala Arg Gln Cys Tyr  
 50 55 60  
 Gln Ser Arg Lys Tyr Ile Asp Thr Ala Gly Asp Tyr Ile Cys Pro Ala  
 65 70 75 80  
 Cys Asp Lys Phe Cys Ser Lys Leu Ser Ala Leu Phe Gln His Val Glu  
 85 90 95  
 Asp Ser Leu Gly Cys Leu Tyr Leu Lys Glu Gly Gly Gln Cys Leu Ala  
 100 105 110  
 Lys Leu Glu Tyr Tyr Ile Ser Trp Asn Val Arg Arg  
 115 120

<210> 39796  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 39796  
 Thr Asn Ile Val Ala Glu Ile Arg His Lys Arg Arg Ile Thr Val Ala  
 1 5 10 15  
 Ala Ala Ser Lys Ile Leu Ala Asn Leu Thr Tyr Ala Tyr Lys Gly Met  
 20 25 30  
 Gly Leu Ser Met Gly Thr Met Leu Ala Gly Val Arg Phe Asp Pro Leu  
 35 40 45  
 Phe Cys Arg Ser Asp Glu Cys Glu Thr Asp Asn Thr Ala Asp Asp Pro  
 50 55 60  
 Ser Arg Arg Thr Gly Pro Leu Leu His Arg Leu Gly Arg His Lys Thr  
 65 70 75 80  
 Leu Arg Lys Pro Val Leu Arg Trp Val Arg Ser Asp Leu Arg Leu Arg  
 85 90 95  
 Cys Ala

<210> 39797  
 <211> 147  
 <212> PRT  
 <213> A.fumigatus

<400> 39797  
 His Thr Pro Thr Arg Glu Trp Val Ser Ala Trp Val Arg Cys Trp Gln  
 1 5 10 15  
 Ala Tyr Val Leu Ile Pro Ser Phe Ala Asp Arg Met Ser Val Lys Leu  
 20 25 30  
 Ile Thr Pro Gln Met Thr Pro Gln Glu Gly Pro Ala Leu Tyr Tyr Ile  
 35 40 45

## 17298

Asp Ser Asp Gly Thr Arg Leu Ser Gly Asn Leu Phe Cys Val Gly Ser  
 50 55 60  
 Gly Gln Thr Phe Ala Tyr Gly Val Leu Asp Ala Glu Tyr Arg Tyr Asp  
 65 70 75 80  
 Leu Ser Glu Glu Glu Ala Leu Glu Leu Gly Arg Arg Ser Ile Leu Ala  
 85 90 95  
 Ala Met His Arg Asp Ala Tyr Ser Gly Gly Phe Ile Asn Leu Tyr His  
 100 105 110  
 Val Lys Glu Glu Gly Trp Val His His Gly Phe Asp Asp Met Asn Pro  
 115 120 125  
 Ile Phe Trp Lys Thr Lys Leu Glu Lys Gly Glu Phe Ser Asn Val Thr  
 130 135 140  
 Ser Ala Leu  
 145

&lt;210&gt; 39798

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39798

His Cys His Arg Pro Arg Ser Asp Gly Arg Leu Arg Pro Pro Thr Pro  
 1 5 10 15  
 Arg His Gly Ser Pro Arg Arg Gln Pro Arg Gly His Ser Val Gly Ser  
 20 25 30  
 Ala Gln Cys Pro Ala His Arg Ser Ala Gly Arg Arg Arg Ser Trp Arg  
 35 40 45  
 Gln Pro Arg Arg Lys Arg Pro Gly Gly Pro Tyr Trp Ser Arg Arg Met  
 50 55 60  
 Arg Arg Arg Pro Gly Trp Arg Gly Arg Ser Arg Ser Arg Gly Arg Ser  
 65 70 75 80  
 Arg Arg Ala Gly Ser Arg Ser Ser Ser Ser Asp Gly Pro Glu Gly  
 85 90 95

&lt;210&gt; 39799

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39799

Ile Val Ala Thr Asp Ser Arg Ala Thr Ala Gly Asn Trp Ile Ala Ser  
 1 5 10 15  
 Gln Thr Val Lys Lys Val Ile Pro Val Ser Arg Leu Ser Arg Gly Glu  
 20 25 30  
 Asp Lys Lys Gln Asp Thr Pro Val Pro Gly Leu Leu Gly Thr Met Ala  
 35 40 45  
 Gly Gly Ala Ala Val Cys Ile Leu Leu Arg Thr Gly Gly Met Ala Thr  
 50 55 60  
 Leu Thr Glu Leu Pro Ser Arg Ile Ala Asn Thr Gly  
 65 70 75

&lt;210&gt; 39800

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39800

```

Asn Leu Val Pro Ser Ala Thr Cys Ser Thr Phe Val Ser Ser Ser Ser
1          5          10          15
Arg Thr Phe Trp Ala Ser Leu His Lys Pro Leu Ser Leu Leu Trp
          20          25          30
Gly Ile Tyr Tyr Leu Ile Tyr Phe Cys Leu Asn Ser Phe Asp Ser Gly
          35          40          45
Leu Ala His Leu Phe Pro Ala Val Thr Gly Tyr Gln Ile Tyr Gln Thr
          50          55          60
Thr Lys Arg Leu Thr Phe Ser Leu Pro Pro Leu Pro Ala Leu Arg Ser
65          70          75          80
Lys Ser Pro Gly Pro Trp Ile Ser Thr Tyr Ile His Val His Ser Ser
          85          90          95
Phe Ala Thr Asn Pro Ala Asn Thr Leu Phe Ser Ser Trp Tyr
          100          105          110

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&lt;210&gt; 39801

&lt;211&gt; 503

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39801

```

Thr Asn Arg Cys His Leu Glu Lys Ala Thr Pro Gln Glu Leu Val Gln
1          5          10          15
His Lys Glu Glu Ser Glu Glu Leu Gly Gly Tyr Phe Ile Val Asn Gly
          20          25          30
Asn Glu Lys Leu Ile Arg Met Leu Val Val Gly Lys Arg Asn Phe Pro
          35          40          45
Met Ala Ile Val Arg Ser Ser Phe Val Arg Arg Gly His Thr Tyr Thr
50          55          60
Lys Phe Gly Ile Gln Ile Arg Ser Val Arg Pro Asp Gln Thr Ser Gln
65          70          75          80
Thr Asn Val Leu His Tyr Leu Ser Asp Gly Asn Val Thr Phe Arg Phe
          85          90          95
Ser Trp Arg Lys Asn Glu Tyr Leu Ile Pro Val Met Met Ile Met Lys
          100          105          110
Ala Leu Val Glu Thr Asn Asp Arg Glu Ile Phe Glu Gly Ile Val Gly
          115          120          125
Ser Ala Thr Ser Lys Gly Val Asn Asn Thr Phe Val Thr Asp Arg Val
          130          135          140
Glu Leu Leu Leu Arg Thr Tyr Lys Ala Tyr Asn Leu His Thr Arg Ser
145          150          155          160
Ser Cys Arg Ala Tyr Leu Gly Glu Lys Phe Lys Pro Val Leu Gly Val
          165          170          175
Pro Ala Asp Met Ser Asn Glu Asp Ala Gly Thr Glu Phe Leu Arg Lys
180          185          190
Ile Val Leu Pro His Leu Gly Asn Gln Asn Val Thr Glu Ile Gln Asp
          195          200          205
Tyr Asp Lys Phe Lys Leu Ile Met Phe Met Ile Arg Lys Leu Tyr Ala
210          215          220
Leu Val Ala Gly Asp Cys Ala Pro Asp Asn Pro Asp Ala Val Ser Asn
225          230          235          240
Gln Glu Ile Leu Leu Gly Gly Phe Leu Tyr Gly Met Ile Leu Lys Glu
          245          250          255
Gln Leu Glu Glu Trp Met Arg Ser Phe Gly Pro Ile Leu Arg Asp Trp
          260          265          270

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## 17300

Ser Asn Arg Asn Gly Gly Ala Lys Phe Thr Asp Pro Ala Phe Glu Arg  
 275 280 285  
 Asp Phe Leu Ser Lys Ile Val Lys Arg Thr Asn Glu Asn Ile Gly Gly  
 290 295 300  
 Lys Leu Glu Tyr Phe Leu Ser Thr Gly Asn Leu Val Ser Pro Thr Gly  
 305 310 315 320  
 Leu Asp Leu Gln Gln Val Ser Gly Tyr Thr Val Met Ala Glu Lys Ile  
 325 330 335  
 Asn Phe Tyr Arg Phe Ile Ser His Phe Arg Met Ile His Arg Gly Ser  
 340 345 350  
 Phe Phe Ala Gln Leu Lys Thr Thr Thr Val Arg Lys Leu Leu Pro Glu  
 355 360 365  
 Ser Trp Gly Phe Leu Cys Pro Val His Thr Pro Asp Gly Ala Pro Cys  
 370 375 380  
 Gly Leu Leu Asn His Leu Ala His Lys Cys Leu Ile Ala Thr Ser Asp  
 385 390 395 400  
 Val Asn Val Ser His Leu Pro Lys Leu Leu Val Gln Leu Gly Val Arg  
 405 410 415  
 Ser Glu Ser Ser Val Ala Leu Glu Asp Ser Val Thr Val Gln Leu Asp  
 420 425 430  
 Gly Arg Ile Val Arg Tyr Cys Ser Pro Lys Gln Ala Arg Met Ile Ala  
 435 440 445  
 Asp Thr Val Arg His Trp Asn Val Ser Gly Thr His Asn Ile Thr Arg  
 450 455 460  
 Glu Leu Glu Ile Gly Tyr Val Arg Asn Ser Asp Gly Trp Pro Ile Pro  
 465 470 475 480  
 Trp Tyr Leu His Val Leu Ser Ser Arg Gln Asn Val Gln Thr Cys Gln  
 485 490 495  
 Val Pro Thr Ser Arg Gln Ala  
 500

&lt;210&gt; 39802

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39802

Ser Arg Gln Thr Glu Lys Glu Ala Arg Ser Ala Gln Ile Leu Ser Lys  
 1 5 10 15  
 Met Ala Pro Ser Ala Thr Asp Thr Asn Trp Ser Val Asp Phe Asp Thr  
 20 25 30  
 Ile Arg Arg His Gln Leu Phe Lys Asn Pro Pro Lys Asp His Thr Ala  
 35 40 45  
 Phe Pro Ser Leu Ala Ala Ala Ile Arg Pro His Leu Asp Ser Phe Asn  
 50 55 60  
 Ala Leu Phe Glu Gly Ser Lys Val Ile Glu Ala Gly Leu Lys Asp Ile  
 65 70 75 80  
 Gly Ile Lys Thr Phe Leu Asp Gly Asp Ala Glu Thr Pro Glu Glu Arg  
 85 90 95  
 Arg Ala Arg Lys Ala Glu Gly Arg Arg Pro Pro Lys Arg Asn Arg Leu  
 100 105 110  
 Asn Val Arg Ile Arg Glu Ile Phe Leu Glu Lys Pro Ala Ile Pro Ala  
 115 120 125  
 Thr Asn Lys Phe Ala Thr Arg Asn Arg Asn Ile Tyr Pro Ser Glu Ala  
 130 135 140  
 Arg Glu Arg His Ala Thr Tyr Arg Gly Lys Leu Arg Ala Arg Leu Glu

## 17301

145                      150                      155                      160  
 Tyr Gln Val Asn Asn Gly Asp Trp Met Glu Ser Ile Arg Glu Leu Gly  
                                  165                      170                      175  
 Gln Val Pro Ile Met Leu Arg Val Ser Gly  
                                  180                      185

<210> 39803  
 <211> 644  
 <212> PRT  
 <213> A.fumigatus

<400> 39803  
 Leu Arg Ile Pro Phe Gly Thr Gly Met Ser Gln Val His Thr Thr Ser  
 1                      5                      10                      15  
 His Glu Asn Trp Arg Leu Gly Met Phe Ala Thr Gln Met Gly Gly Gln  
                                  20                      25                      30  
 Tyr Pro Gly Ile Tyr Met Phe Ser Gln Ala Ala Arg Met Tyr Arg Pro  
                                  35                      40                      45  
 Val Lys Tyr Leu Pro Leu Asp Lys Leu Asp Tyr Val Gly Pro Phe Glu  
                                  50                      55                      60  
 Gln Pro Phe Met Glu Ile Ala Cys Leu Pro Asp Asp Leu Val Ala Gly  
 65                      70                      75                      80  
 Val Ser Thr His Ile Glu Tyr Thr Pro Thr Asn Ile Leu Ser Ile Val  
                                  85                      90                      95  
 Ala Asn Met Thr Pro Phe Ser Asp Tyr Asn Gln Ser Pro Arg Asn Met  
                                  100                      105                      110  
 Tyr Gln Cys Gln Met Ser Lys Gln Thr Met Gly Thr Pro Gly Thr Ala  
                                  115                      120                      125  
 Ile Glu Tyr Arg Thr Asp Asn Lys Leu Tyr Arg Leu Gln Thr Gly Gln  
 130                      135                      140  
 Thr Pro Ile Val Arg Pro Pro Leu Tyr Asn Ala Tyr Gly Leu Asp Asn  
 145                      150                      155                      160  
 Phe Pro Asn Gly Thr Asn Ala Val Val Ala Ile Ile Ser Tyr Thr Gly  
                                  165                      170                      175  
 Tyr Asp Met Asp Asp Ala Met Ile Ile Asn Lys Ser Ser His Glu Arg  
                                  180                      185                      190  
 Gly Phe Gly Tyr Gly Thr Ile Tyr Lys Thr Lys Ile His Ser Leu Asp  
                                  195                      200                      205  
 Asp Lys Asp Ser Arg Arg Ser Lys Ser Arg Arg Glu Ile Thr Lys Leu  
 210                      215                      220  
 Phe Gly Phe Ala Pro Gly Gly Glu Ile Arg Ala Glu Trp Arg Thr Thr  
 225                      230                      235                      240  
 Leu Asp Glu Asp Gly Leu Pro His Val Gly Ala Arg Val Lys Glu Gly  
                                  245                      250                      255  
 Ser Leu Ile Ala Ala Trp His Thr Val Arg Tyr Asp Ala Ala Ser Asp  
                                  260                      265                      270  
 Ser Tyr Val Asn Val Asp Gly Ile Thr His Phe Val Lys Tyr Lys Asp  
                                  275                      280                      285  
 Ala Glu Glu Gly Tyr Ile Asp Ser Ile Arg Ile Met Gly Ala Glu Thr  
                                  290                      295                      300  
 Gly Leu Glu Pro Cys Gln Ala Leu Ser Val Lys Tyr Arg Ile Pro Arg  
 305                      310                      315                      320  
 Lys Pro Val Ile Gly Asp Lys Phe Ser Ser Arg His Gly Gln Lys Gly  
                                  325                      330                      335  
 Val Cys Ser Gln Leu Trp Pro Ala Val Asp Met Pro Phe Ser Glu Ser  
                                  340                      345                      350

## 17302

Gly Ile Gln Pro Asp Leu Ile Ile Asn Pro His Ala Phe Pro Ser Arg  
 355 360 365  
 Lys Phe Thr Phe Ala Gly Phe Ser Gln Leu His Phe Lys Arg His Glu  
 370 375 380  
 Thr Asn Phe Ile Ala Gly Met Thr Ile Ala Gln Met Ile Glu Ser Met  
 385 390 395 400  
 Ala Gly Lys Ala Gly Ala Leu His Gly His Pro Gln Asp Ser Thr Pro  
 405 410 415  
 Phe Gln Phe Ser Glu Glu Asn Thr Ala Ala Asp Tyr Phe Gly Gln Gln  
 420 425 430  
 Leu Arg Lys Ala Gly Tyr Asn Tyr Tyr Gly Asn Glu Pro Leu Tyr Ser  
 435 440 445  
 Gly Ile Thr Gly Lys Glu Phe Ala Ala Asp Ile Phe Ile Gly Val Val  
 450 455 460  
 His Tyr Gln Arg Leu Arg His Met Val Asn Asp Lys Phe Gln Val Arg  
 465 470 475 480  
 Thr Thr Gly Pro Val Asn Gln Leu Thr Gly Gln Pro Val Lys Gly Arg  
 485 490 495  
 Ala Lys Gly Gly Ile Arg Val Gly Glu Met Glu Arg Asp Ser Leu  
 500 505 510  
 Ile Ala His Gly Ala Ala Phe Ile Leu Gln Asp Arg Leu Met Asn Cys  
 515 520 525  
 Ser Asp Ser Gln Arg Ala Trp Ile Cys Arg Asp Cys Gly Ser Phe Leu  
 530 535 540  
 Ser Thr Gln Val Ala Val Ser Ser Ala Gly Ser Ser Lys Ala Arg Leu  
 545 550 555 560  
 Ala Ala Ser Ala Ala Ala Ala Lys Asn Ala Phe Ala Gln Gln Ser  
 565 570 575  
 Gly Ala Pro Gly Ile Val Arg Cys Arg Arg Cys Ala Arg Glu Ala Val  
 580 585 590  
 Phe Glu Asp Ser Arg Ala Val Val Trp Glu Asp Gly Asp Gly Arg Arg  
 595 600 605  
 Tyr Val Gly Gly Asp Asn Val Thr Ile Val Ala Val Pro Gly Val Leu  
 610 615 620  
 Arg Tyr Leu Asp Val Glu Leu Ala Ala Met Gly Ile Arg Met Lys Phe  
 625 630 635 640  
 Trp Val Asp Asn

&lt;210&gt; 39804

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39804

Glu Ile Glu Glu Lys Glu Thr Val Trp Ser Leu Glu Ser Glu Ile Lys  
 1 5 10 15  
 His Thr Ala Ser Thr Arg Asn Ser Asp Asp Phe Pro Ala Phe Cys Ser  
 20 25 30  
 Pro Ile Ile Val Thr Ser Ile Ser Val Ala Leu Tyr Ser Gln His Thr  
 35 40 45  
 Phe Thr Pro Leu Ser Lys Pro Glu His Ser Met Ser Leu Arg Gly Ala  
 50 55 60  
 Glu Pro Gly Glu Leu Trp Pro Thr Gly Arg Ile Arg Leu Lys Pro Arg  
 65 70 75 80  
 Pro Thr Tyr Gln Asn Ile Leu Arg Ser Gln Ser



## 17303

85

90

<210> 39805  
 <211> 111  
 <212> PRT  
 <213> A.fumigatus

<400> 39805  
 Thr Ala Pro Thr Pro Ser Ala Pro Gly Ser Ala Ala Thr Ala Ala Pro  
 1 5 10 15  
 Ser Ser Pro Pro Arg Ser Pro Ser His Pro Pro Ala Pro Val Arg Pro  
 20 25 30  
 Ala Trp Pro Leu Pro Pro Arg Leu Pro Pro Arg Thr Pro Ser Pro Ser  
 35 40 45  
 Arg Ala Val Arg Arg Ala Leu Cys Ala Ala Asp Ala Val Pro Ala Arg  
 50 55 60  
 Leu Ser Ser Arg Thr Pro Val Pro Trp Cys Gly Arg Thr Glu Thr Ala  
 65 70 75 80  
 Val Ala Thr Trp Ala Val Thr Met Ser Pro Ser Ser Leu Phe Arg Val  
 85 90 95  
 Ser Cys Ala Thr Leu Met Ser Asn Ser Pro Arg Trp Val Ser Glu  
 100 105 110

<210> 39806  
 <211> 129  
 <212> PRT  
 <213> A.fumigatus

<400> 39806  
 Ser Ser Ile Gly Met Ser Cys Ser Pro Gln Cys Asn Lys Ala Leu Leu  
 1 5 10 15  
 Ile Trp Ser Gly Met Phe Ile Met Val Ile Pro Ala Asn Ile Gly Leu  
 20 25 30  
 Lys Tyr Gly Ile Ser Ser Cys Ile Gly Asn Gly Ile Gln Lys Ala Phe  
 35 40 45  
 Tyr Asp Asp Pro Asn Val Leu Tyr Ile Ser Leu His Val Tyr Gln Asp  
 50 55 60  
 Gly Lys Phe Tyr Pro Gly Gly Asp Glu Gly Asp Trp Asp His Cys Gly  
 65 70 75 80  
 Ala Asp Ala Gly Ile Gly Lys Tyr Ala Tyr Pro Glu Ile Cys Arg Ser  
 85 90 95  
 Glu Leu Cys Ala Leu Ile Pro Arg Leu Gly Met Ser Thr Ser Pro Gly  
 100 105 110  
 Leu Ala Lys Val Trp Ala Met Ala Thr Thr Cys Met Leu Ser Ser Arg  
 115 120 125  
 Leu

<210> 39807  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 39807  
 Gly Gly Tyr Asn Phe Arg Ser Ile Ser Lys Ser Ala Leu Ala Val Thr  
 1 5 10 15

17304

Lys Thr Leu Met Gly Asp Pro Pro Asp Arg Leu His Ser Thr Leu Pro  
 20 25 30  
 Ser Asp Leu Ala Thr Ser Thr Val Arg Arg Val Met Met Ile Gln Ser  
 35 40 45  
 Arg Tyr Trp Arg Cys Met Tyr Pro Lys Val Pro Gln Glu Gln Gly Leu  
 50 55 60  
 Trp Thr Asp Arg Leu His Gly Lys Ala Asn Gln Tyr Gln Ile  
 65 70 75

<210> 39808  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 39808  
 Ser Ala Phe Thr Leu Asn Ile Thr Asp Gly Leu Leu Leu Asp Ile Leu  
 1 5 10 15  
 Gly Tyr Thr Glu Asp Asp Val Val Ser Ser Asp Leu Asn Gly Asp Glu  
 20 25 30  
 Arg Ser Ser Ile Phe Asp Ala Lys Ala Gly Ile Ser Leu Asn Pro Asn  
 35 40 45  
 Phe Val Lys Leu Val Ala Trp Tyr Asp Asn Glu Trp Gly Tyr Ser Arg  
 50 55 60  
 Arg Val Val Asp Leu Ile Gly Lys Phe Thr Phe Gly Leu Val Leu Arg  
 65 70 75 80  
 Ser Ala Val Tyr

<210> 39809  
 <211> 248  
 <212> PRT  
 <213> A.fumigatus

<400> 39809  
 Lys Asp His Asn Ile Ile Leu Leu Met Ala Met Glu Gln Asp Gly Asp  
 1 5 10 15  
 Thr Leu Met Gly Glu Ala Gly Pro His Leu Pro Ser Gly Ser Ala Ser  
 20 25 30  
 His Gly His Pro Thr Ser Asn Pro Ser Met Pro Ala Ile Pro Gly Asn  
 35 40 45  
 Leu Asn Gly Gly Thr Glu Pro Trp Leu Ala Pro Pro Leu Leu Gly Gln  
 50 55 60  
 Ser Met Asn Leu Pro Leu Pro Ala Leu Leu Gly Asp Gln His Ala Ala  
 65 70 75 80  
 Ala Pro Val Ala Gln Ala Gln Pro Thr Val Pro Ser Ser Ala Pro Glu  
 85 90 95  
 Gln Ser Ala Gly Leu Ser Ala Ala Val Thr Asp Pro Ala Lys Arg Ala  
 100 105 110  
 Asp Ser Ile Val Glu Glu Thr Ser Asp Trp Ser Glu Glu Asp Leu Gly  
 115 120 125  
 Ala Arg Val Gly Leu Pro Leu Ala Ser Leu Pro Ser Gly Leu Cys Tyr  
 130 135 140  
 Asp Val Gln Met Arg Tyr His Cys Glu Val Arg Pro Thr Ala Asp Val  
 145 150 155 160  
 His Pro Glu Asp Pro Arg Arg Ile Tyr Tyr Ile Tyr Lys Glu Leu Cys  
 165 170 175

## 17305

Arg Ala Gly Leu Val Asp Asp Pro Glu Ser Ser Arg Pro Leu Val Ala  
 180 185 190  
 Arg Pro Leu Lys Arg Ile His Ala Arg Asn Ala Thr Glu Ala Glu Ile  
 195 200 205  
 Ser Leu Ile His Thr Pro Asp His Phe Ala Phe Val Glu Ser Thr Lys  
 210 215 220  
 Gly Lys Arg Glu Cys Asn Gly Pro Arg Phe Leu Pro Thr Ser Ser Ser  
 225 230 235 240  
 Asn His Tyr His Arg His Val Arg  
 245

<210> 39810  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 39810  
 Ala Val Ala Ser Gly Phe Asp Ala Ala Ala Gly Asp Glu Leu Gly Gly  
 1 5 10 15  
 Cys Phe Val Thr Pro Ser Cys Tyr Ala His Met Thr His Met Leu Met  
 20 25 30  
 Thr Leu Ala His Gly Lys Val Ala Val Cys Leu Glu Val Ser Thr Thr  
 35 40 45  
 Val Tyr Leu Asn Leu Ile Asn Ala Glu Gln Ile Arg Val Val Thr Ile  
 50 55 60  
 Leu Asp Gln Phe Leu Ser Leu Pro  
 65 70

<210> 39811  
 <211> 231  
 <212> PRT  
 <213> A.fumigatus

<400> 39811  
 Ala Tyr Met Leu Lys Tyr Asp Thr Thr His Gly Gln Phe Lys Gly Thr  
 1 5 10 15  
 Ile Glu Thr Tyr Asp Gln Gly Leu Ile Val Asn Gly Lys Lys Ile Arg  
 20 25 30  
 Phe Tyr Ala Glu Lys Asp Pro Ser Gln Ile Pro Trp Ser Glu Thr Gly  
 35 40 45  
 Ala Ala Tyr Ile Val Glu Ser Thr Gly Val Phe Thr Thr Lys Glu Lys  
 50 55 60  
 Ala Ser Ala His Leu Lys Gly Gly Ala Lys Lys Val Ile Ile Ser Ala  
 65 70 75 80  
 Pro Ser Ala Asp Ala Pro Met Phe Val Met Gly Val Asn Asn Thr Thr  
 85 90 95  
 Tyr Thr Ser Asp Ile Gln Val Leu Ser Asn Ala Ser Cys Thr Thr Asn  
 100 105 110  
 Cys Leu Ala Pro Leu Ala Lys Val Ile Asn Asp Lys Phe Gly Ile Val  
 115 120 125  
 Glu Gly Leu Met Thr Thr Val His Ser Tyr Thr Ala Thr Gln Lys Val  
 130 135 140  
 Val Asp Ala Pro Ser Asn Lys Asp Trp Arg Gly Gly Arg Thr Ala Ala  
 145 150 155 160  
 Gln Asn Ile Ile Pro Ser Ser Thr Gly Ala Ala Lys Ala Val Gly Lys  
 165 170 175

## 17306

Val Ile Pro Ser Leu Asn Gly Lys Leu Thr Gly Met Ala Met Arg Val  
                   180                  185                  190  
 Pro Thr Ser Asn Val Ser Val Val Asp Leu Thr Cys Arg Leu Glu Lys  
                   195                  200                  205  
 Gly Ala Ser Tyr Asp Glu Ile Lys Gln Ala Ile Lys Ala Ala Ser Glu  
                   210                  215                  220  
 Glu Gly Glu Leu Lys Ser Thr  
 225                  230

<210> 39812  
 <211> 217  
 <212> PRT  
 <213> A.fumigatus

<400> 39812  
 Gly Phe Leu Leu Arg Leu Tyr Arg Gln Gly Ser Ala Met Met Ser Arg  
 1                  5                  10                  15  
 Cys Ala Thr Ile Val Arg Cys Asp Gln Leu Gln Met Ser Ile Leu Arg  
                   20                  25                  30  
 Ile His Gly Glu Ser Ile Thr Ser Thr Arg Ser Tyr Ala Glu Gln Gly  
                   35                  40                  45  
 Ser Leu Met Thr Pro Asn Leu Gln Asp Arg Leu Ser His Asp Leu Ser  
                   50                  55                  60  
 Asn Val Phe Met Leu Ala Met Pro Leu Arg Leu Lys Ser Leu Ser Phe  
 65                  70                  75                  80  
 Thr Pro Arg Ile Ile Leu Pro Leu Leu Lys Val Gln Lys Val Lys Gly  
                   85                  90                  95  
 Asn Ala Met Gly Leu Gly Phe Ser Arg His Gln Val Leu Thr Ile Ile  
                   100                  105                  110  
 Thr Asp Met Ser Asp Asp Glu Leu Ile Ala Leu Glu His Thr Arg Asp  
                   115                  120                  125  
 Ser Ile Tyr Phe Asn Lys Leu Thr Phe Ala Ser Ser Leu Leu Ser Ala  
                   130                  135                  140  
 Gly Gly Ala Ile Glu Thr Cys Leu Ala Val Ala Thr Arg Lys Val Lys  
 145                  150                  155                  160  
 Asn Ala Leu Ala Val Ile Arg Pro Pro Gly His His Ala Glu His Asp  
                   165                  170                  175  
 Lys Thr Met Gly Phe Cys Leu Phe Asn Asn Val Ser Ile Ala Ala Arg  
                   180                  185                  190  
 Val Cys Gln Asn Lys Leu Gly Glu Ser Cys Arg Lys Ile Leu Ile Val  
                   195                  200                  205  
 Asp Trp Tyr Val Leu Phe Pro Thr Met  
 210                  215

<210> 39813  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

<400> 39813  
 Pro Gln Cys Ser Leu His Leu Pro Ser Cys Leu Ser Arg Arg Lys Val  
 1                  5                  10                  15  
 Leu Ser Arg Arg Gly Arg Gly Arg Leu Gly Pro Leu Arg Gly Arg Arg  
                   20                  25                  30  
 Trp Tyr Trp Lys Val Cys Ile Ser Gly Asp Leu Gln Lys Arg Ala Leu  
                   35                  40                  45

## 17307

Cys Ala Asp Ser Pro Ser Arg Asn Val Asn Ile Pro Trp Pro Ser Gln  
 50 55 60  
 Gly Met Gly Asp Gly Asp Tyr Met Tyr Ala Phe Gln Gln Val Val Met  
 65 70 75 80  
 Pro Ile Ala Gln Glu Phe Asn Pro Asp Leu Val Ile Gly Glu  
 85 90

<210> 39814  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 39814  
 Gln Arg Ala Gly Leu Lys Ser Trp Ala Cys Leu Ile Gln Ser Pro Thr  
 1 5 10 15  
 Ser Ser Arg Pro Ile Thr Ala Gly Trp Tyr Val Arg Trp Ser Leu Gly  
 20 25 30  
 Ser Thr Ala Tyr Ala Asn Lys Gly Lys Ala Asp Cys Met Lys Asn Tyr  
 35 40 45  
 Ile Gly Trp Ala Val Gly Lys Gly Tyr Ala Val Ile Asp Val Asn Ile  
 50 55 60  
 Pro Lys His Val Thr Ile Glu Pro Val Ser Ile Met Asp Phe Ser Tyr  
 65 70 75 80  
 Asp Val Pro Arg

<210> 39815  
 <211> 102  
 <212> PRT  
 <213> A.fumigatus

<400> 39815  
 Pro Arg Thr Asp Arg Phe Ala Gln Asn Ser Leu Val Phe Val Ser His  
 1 5 10 15  
 Met His Gly Val Trp Thr Asn Val Glu Thr Arg Arg Lys Pro Ser Lys  
 20 25 30  
 Arg Tyr Gly His Leu Ile Gln Ser Pro Lys Ala Gly Leu Ser Glu Met  
 35 40 45  
 Leu Met His His Lys Asp Glu Val Phe Lys Trp Ile Glu Glu Arg Ala  
 50 55 60  
 Asp Glu Ala Glu Ser Glu Glu Glu Glu Glu Glu Thr Lys Ser  
 65 70 75 80  
 Lys Ser Lys Ser Lys Ser Arg Ser Pro Thr Lys Glu Lys Pro Val Asp  
 85 90 95  
 Leu Pro Pro Gly Pro Gly  
 100

<210> 39816  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 39816  
 Thr Cys Thr Ser Pro Leu Pro Ser Leu Gly Leu Ala Ala Leu Ile Pro  
 1 5 10 15  
 Leu Ala Ser Ala Val Gly Tyr Ala Val Leu Thr Thr Tyr Cys Asp Ala

17308

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                20                25                30
Pro Phe Leu Pro Leu Val Leu Ser Ala Ala Pro Ser Gly Pro Asn His
          35                40                45
Thr Ile Pro Ala Gly Ala Ser Ser Ser Ser Gly Gly Pro Gly Pro Leu
          50                55                60
Tyr Pro Arg Val Ser Gly Gly Leu Cys Ala Leu Leu Leu Pro Val Ser
65          70                75                80
Asp Leu Arg Pro Pro Ser Met Cys Ser Pro Gln Ala Ser Thr Thr Ala
          85                90                95

Tyr Tyr Pro Pro
          100

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<210> 39817  
 <211> 246  
 <212> PRT  
 <213> A.fumigatus

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<400> 39817
Lys Gln Ile Ser Ser Ser Arg Thr Leu Glu Leu Ala Leu Leu Gly Gly
1          5          10          15
Ser Leu Asp Gly Leu Leu Asp Leu Val Val Gly Ser Thr Leu Leu Glu
          20          25          30
Ala Ala Ser Glu Val Asp Asn Gly Asp Val Gly Gly Arg Asn Thr His
          35          40          45
Gly His Thr Gly Glu Leu Ala Val Glu Arg Arg Asn Asp Leu Ala Asp
          50          55          60
Gly Leu Ser Ser Thr Ser Arg Ala Gly Asn Asp Val Leu Gly Ser Ser
65          70          75          80
Thr Thr Thr Ser Pro Val Leu Val Gly Gly Ser Ile Asp Asp Leu Leu
          85          90          95
Gly Gly Gly Val Gly Val Asp Gly Gly His Glu Thr Leu Asn Asn Ala
          100          105          110
Glu Leu Val Val Asp Asp Leu Gly Gln Gly Cys Lys Ala Val Gly Gly
          115          120          125
Ala Arg Gly Val Gly Glu Asp Leu Asp Val Gly Gly Val Gly Gly Val
          130          135          140
Val Asp Thr His Asp Glu His Gly Gly Ile Ser Arg Arg Ser Gly Asp
145          150          155          160
Asp Asp Leu Leu Gly Thr Thr Leu Gln Val Ser Gly Gly Leu Leu Leu
          165          170          175
Gly Gly Glu Asn Thr Ser Arg Leu Asp Asp Val Gly Ser Ala Gly Leu
          180          185          190
Arg Pro Gly Asp Leu Arg Gly Ile Leu Leu Ser Ile Glu Ala Asn Leu
          195          200          205
Leu Ala Val Asp Asn Gln Thr Leu Val Val Gly Leu Asn Gly Thr Leu
          210          215          220
Glu Leu Ala Val Gly Gly Val Val Phe Glu His Val Gly Leu Lys Tyr
225          230          235          240
Arg Val Leu Ser Val Ser
          245

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<210> 39818  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

## 17309

&lt;400&gt; 39818

Glu Ala Pro Phe Ser Arg Arg Gln Val Arg Ser Thr Thr Glu Thr Leu  
 1 5 10 15  
 Glu Val Gly Thr Arg Met Ala Ile Pro Val Ser Leu Pro Leu Arg Glu  
 20 25 30  
 Gly Met Thr Leu Pro Thr Ala Leu Ala Ala Pro Val Glu Leu Gly Met  
 35 40 45  
 Met Phe Trp Ala Ala Val Arg Pro Pro Leu Gln Ser Leu Leu Glu Gly  
 50 55 60  
 Ala Ser Thr Thr Phe Trp Val Ala Val  
 65 70

&lt;210&gt; 39819

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39819

Asp Arg Arg Gly Ala Gly Arg Ser His Asn Tyr Gln Gly Val Phe Gly  
 1 5 10 15  
 Phe Pro Arg Gly Ser Thr Leu Phe Val Ser Met Ile Leu Ser Val Asn  
 20 25 30  
 Thr Ile Ser Leu Ser Asp Tyr Gly Ala Gly Val Leu Cys Ala Ile Pro  
 35 40 45  
 Tyr Gly Phe Leu Ala Asp Arg Tyr Gly Arg Arg Gln Ala Ile Arg Leu  
 50 55 60  
 Thr Ile Pro Gly Phe Leu Leu Asn Ala Ile Ile Thr Asn Ser Val Leu  
 65 70 75 80  
 Trp Phe Ser Asp Ile Phe Pro Pro Arg Ala Ile Trp Leu Ala Ala Leu  
 85 90 95  
 Ser Trp Thr Ile Gly Gly Gly Pro Ile Val Ala Met Ala Leu Leu Trp  
 100 105 110

&lt;210&gt; 39820

&lt;211&gt; 397

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39820

Cys Tyr Leu Phe Pro Thr Gln Lys Ser Val Leu Val Ile Asp Thr His  
 1 5 10 15  
 Thr Met Asp Lys Asn Gln Arg Val Val Ile Ile Gly Ala Gly Val Phe  
 20 25 30  
 Gly Leu Ser Thr Ala Leu Asn Leu Thr Gln Asp Gly Phe Thr Ala Ile  
 35 40 45  
 Thr Val Leu Asp Arg His Met Pro Pro Val Pro Asp Gly Ser Ser Asn  
 50 55 60  
 Asp Ile Ser Arg Val Ile Arg Phe Asp Tyr Gly Asp Pro Val Tyr Ala  
 65 70 75 80  
 Gln Leu Gly Lys Glu Ala Tyr Glu Leu Trp Asn Thr Ser Pro Glu Tyr  
 85 90 95  
 Ala Asp Ser Phe His Arg Thr Pro Cys Val Trp Thr Ala Gln Arg Thr  
 100 105 110  
 Gly Pro Ala Gly Leu Val Gln Ala Gly Gly Ser Asp Phe Ile Arg Lys  
 115 120 125  
 Thr Lys Glu Ile Leu Thr Arg Met Gly Ala Glu Trp His Gly Leu Ala

## 17310

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130          135          140
Asp Ala Ala Glu Leu Asn Ala Arg Phe Pro Ala Val Ser Gly Thr Pro
145          150          155          160
Ile Gly Glu Gly Phe Glu Gly Phe Tyr Asn Asn Ala Ala Gly Trp Ala
165          170          175
Asp Ala Gly Val Ala Met Ala Gly Leu Arg Asp Arg Cys Ile Ala Ala
180          185          190
Gly Val Ser Phe Val Thr Gly Pro His Gly Gln Val Thr Glu Leu Glu
195          200          205
Lys Ser Ser Asp Gly Arg Ile Thr Ala Val Lys Thr Ala Asp Gly Gly
210          215          220
Arg Ile Thr Ala Asp Lys Phe Ile Leu Ala Thr Gly Ala Trp Thr Ala
225          230          235          240
Ser Leu Ile Pro Ser Trp Asn Ser Met Val Ala Thr Ala Gln Ile Val
245          250          255
Gly Phe Val Arg Leu Thr Pro Gln Glu Val Arg Ala Leu Lys Asp Leu
260          265          270
Pro Ile Ile Phe Asn Leu Ser Thr Gly Phe Phe Ser Phe Pro Pro His
275          280          285
Glu Lys Thr Gly Tyr Leu Lys Val Ala Cys His Ser Phe Gly Tyr Thr
290          295          300
Leu Ser Ser Ser Gln Gln Ile Ser Ser Pro Pro Ser Gln Ala Ile Ser
305          310          315          320
Ala Arg Ala Asn Phe Ile Pro Glu Glu Gly Arg Gln Arg Leu Leu Ala
325          330          335
Gly Leu Lys Glu Ile Leu Pro Gln Leu Val Glu Arg Gly Phe Glu Lys
340          345          350
Thr Cys Leu Cys Trp Tyr Asn Glu Thr Pro Thr Gly Asp Phe Ile Phe
355          360          365
Asp Tyr His Pro Asp His Pro Asn Leu Phe Ile Ala Thr Gly Gly Thr
370          375          380
Gly Gln Tyr Val Pro His Arg Ile Leu Thr Leu Arg Asn
385          390          395

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&lt;210&gt; 39821

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39821

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Trp Val Tyr Gln Leu Leu Thr Leu Tyr Lys Ala Gln Pro Val Val Tyr
1          5          10          15
Ser Ser Asn Ile Leu His His Pro Val Ser Leu Leu Val Ser Leu Phe
20          25          30
Asn Phe Ile Lys Thr Ser Ala Pro Pro Asp Leu Ile Ala Asn Met Gln
35          40          45
Leu Ser Cys Leu Leu Ala Leu Leu Gly Ala Ser Arg Ile Ala Trp Ala
50          55          60
Ala Pro Val Ala Asn Asn Asn Gln Val Glu Ser Ala Ser Gly Asp Leu
65          70          75          80
Glu Glu Arg Phe Phe Tyr Thr Asn Tyr Asp Leu Glu Lys Arg Asp Glu
85          90          95
Glu Leu Asp Lys Arg Phe Phe Tyr Thr Asn Tyr Asp Leu Asp Lys Arg
100          105          110
Asp Glu Glu Leu Asp Lys Arg Phe Phe Tyr Thr Asn Tyr Asp Leu Asp
115          120          125

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## 17311

Lys Arg Asp Glu Glu Leu Asp Lys Arg Phe Phe Tyr Thr His Tyr Asp  
 130 135 140  
 Leu Glu Lys Arg Asp Glu  
 145 150

<210> 39822  
 <211> 181  
 <212> PRT  
 <213> A.fumigatus

<400> 39822  
 His Asn Ser Val Lys Lys Ser Cys Asn Ile Leu Glu His Asp Gly Leu  
 1 5 10 15  
 Ser Tyr Lys Tyr Arg Ala Phe Arg Glu Arg Gln Ile Cys Ile Phe Asn  
 20 25 30  
 Pro Ser Ala Pro Arg Arg Thr Pro Thr Pro Ala Pro Thr Pro Thr Tyr  
 35 40 45  
 Ser His Ala Ala Pro His His Pro Ala Ile Cys Pro Pro Arg Pro Pro  
 50 55 60  
 Ala Pro Arg Pro Pro Pro Pro Pro Arg Pro Pro Pro Thr Pro Asp  
 65 70 75 80  
 Ser Pro Ser Trp Pro Leu Arg Thr Ala Ser Pro Pro Pro Arg Pro Pro  
 85 90 95  
 Pro Arg Pro Pro Pro Ala Pro Leu Leu Pro Pro Arg Leu Pro Pro Tyr  
 100 105 110  
 Ser Ser His Leu Thr Asn Ala Leu Arg Arg Asp Ala His Ala Tyr Arg  
 115 120 125  
 Pro Asp Leu Pro Ala Tyr Asp Ala Asp Pro Ala Ser His Pro Thr Pro  
 130 135 140  
 Ser Leu Ala Phe Ser Thr Ala Gln Ala Ile Gln Lys Arg Leu Leu Glu  
 145 150 155 160  
 Arg Ala Phe Gly Gln Ile Cys Pro Asp Gln Gln His Cys Cys Val Ala  
 165 170 175  
 Ser Arg Ala Ala His  
 180

<210> 39823  
 <211> 95  
 <212> PRT  
 <213> A.fumigatus

<400> 39823  
 Pro Ser Arg Val Leu Phe Leu Phe Ile Leu Cys Phe Phe Tyr Phe Met  
 1 5 10 15  
 Val Gly Ser Asp Val Ser Cys Gln Pro Gly Leu Thr Arg Gly Gln Leu  
 20 25 30  
 Ile Leu Cys Leu Ala Ile Ala Leu Ser Val Ala Gln Ser His Gly Cys  
 35 40 45  
 Glu Phe Cys Arg Arg Gly Phe Leu Phe Arg His Val Leu Arg Phe Asn  
 50 55 60  
 Gln Arg Leu Ser Leu Tyr Gln Val Glu Phe Asn Ser Val Ala Leu Tyr  
 65 70 75 80  
 Phe Phe Gln Arg Ser Ser Ile Pro Leu Val Ala Gly Asp Tyr Leu  
 85 90 95

<210> 39824

17312

<211> 526  
<212> PRT  
<213> A.fumigatus

<400> 39824

Pro	Ser	Phe	Ser	Ile	Asp	Arg	Trp	Arg	Ala	Cys	Arg	Leu	Leu	Met	Ser
1				5					10					15	
Glu	Gln	Ala	Ile	Ser	Ala	Thr	Pro	Ala	Pro	Asp	Gly	Arg	Pro	Asp	Ser
			20					25					30		
Gln	Trp	Asp	Ile	His	Asp	Asp	Gln	Leu	Lys	Ser	Ile	Gln	Gln	Gln	Ala
		35				40						45			
Thr	Ser	Ser	Gly	Thr	Val	Ser	Ser	Val	Ser	Ala	His	Asn	Asp	Pro	Ser
	50					55					60				
Ala	Thr	His	Glu	Ala	Pro	Arg	Gln	Gly	Asp	Glu	Leu	Gly	Lys	Arg	Lys
65					70				75						80
Glu	Ile	Pro	Gln	Asp	Glu	Ala	Pro	Thr	Ser	Thr	Phe	Glu	Ser	Pro	Asn
			85					90						95	
Ile	Thr	Ser	Glu	Lys	Val	Ala	Pro	Ala	Cys	Ser	Lys	Ser	Thr	Ser	Glu
			100					105					110		
Pro	Gln	Gly	Thr	Leu	Ser	Ala	Arg	Val	Lys	Gly	Leu	Ser	Val	Ser	Thr
		115					120					125			
Lys	Ile	Thr	Glu	Thr	Gly	Ser	Leu	Glu	Asp	Ser	Asp	Val	Pro	Pro	Pro
	130					135					140				
Pro	Pro	Glu	Lys	Asp	Glu	Ser	Tyr	Leu	Ser	Thr	Lys	Ser	Gln	Leu	Ala
145					150					155					160
Pro	Pro	Leu	Gln	Lys	Ser	Val	Asn	Ala	Thr	Ser	Glu	Leu	Ser	Glu	Lys
				165				170						175	
Glu	Leu	Pro	Asp	Val	Pro	Ser	Pro	Gly	Gln	Ala	Glu	Asp	Lys	Arg	Asp
			180					185					190		
Ala	Ser	Met	Asp	Gly	Thr	Arg	Glu	Asp	Asp	Ser	Glu	Ser	Glu	Ile	Gln
		195					200					205			
Ser	Ile	Met	Gly	Gln	Phe	Gln	Asp	Pro	Glu	Arg	Arg	Gly	Ser	Gln	Glu
	210					215					220				
Gln	Leu	Met	Ser	Pro	Arg	Leu	Glu	Leu	Ala	Glu	Gln	Phe	Leu	Gly	Gly
225					230					235					240
Gln	Gly	His	Phe	Pro	Pro	Arg	His	Ser	Ser	Leu	Ser	Lys	Ser	Ala	Glu
				245					250					255	
Gly	Gly	Thr	Gln	Ala	Ala	Gln	Ala	Asn	Ala	Ser	Ala	Gln	Ser	Ser	Ala
			260					265					270		
Asp	Asp	Lys	Pro	Pro	Val	Pro	Ile	Ser	Lys	Ser	Ala	Gln	Arg	Ala	Tyr
		275					280					285			
Glu	Asp	Tyr	Pro	Ala	Leu	Thr	Arg	Arg	Ser	Ser	Thr	Ser	Thr	Val	Pro
	290					295					300				
Pro	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Asp	Gln	Pro	Phe	Asp	Phe	His	Arg
305					310					315					320
Phe	Leu	Glu	Gln	Leu	Arg	His	Arg	Thr	Ala	Asp	Pro	Val	Ala	Lys	Phe
			325						330					335	
Leu	Arg	Ser	Phe	Leu	His	Glu	Phe	Gly	Lys	Arg	Gln	Trp	Met	Val	His
			340					345					350		
Glu	Gln	Val	Lys	Ile	Ile	Ser	Asp	Phe	Leu	Thr	Phe	Ile	Thr	His	Lys
		355				360						365			
Met	Ala	Met	Cys	Glu	Val	Trp	Arg	Asp	Val	Ser	Asp	Ser	Glu	Phe	Asp
	370					375					380				
Asn	Ala	Lys	Glu	Gly	Met	Glu	Lys	Leu	Val	Met	Asn	Arg	Leu	Tyr	Ser
385					390						395				400
Gln	Thr	Phe	Ser	Pro	Ala	Ile	Pro	Ala	Pro	Pro	Ser	Ile	Pro	Arg	Ser

## 17313

405 410 415  
 Ala Ser Arg Ser Arg Arg Arg Glu Met Glu Arg Leu His Gly Pro Trp  
 420 425 430  
 Arg Arg Gly Gln His Gln Glu Asp Val Glu Arg Asp Asp Val Leu Ala  
 435 440 445  
 Gln Lys Met Arg Ile Tyr Gly Trp Val Lys Glu Gln His Leu Asp Ile  
 450 455 460  
 Pro Pro Val Gly Ala His Gly Arg Arg Phe Leu Asn Leu Ala Gln Gln  
 465 470 475 480  
 Gly Arg Ser Arg Cys Pro Phe Met Leu Gly Leu Phe Leu Thr Leu Asn  
 485 490 495  
 Glu Glu Leu Leu Lys Ile Asn Gly Tyr Arg Ala Pro Arg Asp Lys Val  
 500 505 510  
 Ile Cys Ile Leu Asn Cys Cys Lys Val Ile Phe Gly Glu Gln  
 515 520 525

&lt;210&gt; 39825

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39825

Gly Ala Pro Leu Thr Leu Met Ser Pro Ala Gly Leu Leu Lys Asn Ser  
 1 5 10 15  
 Lys Gln Ala Asp Thr Ser Ala Asp Ser Phe Val Pro Leu Leu Ile Tyr  
 20 25 30  
 Val Val Leu Gln Ala Arg Pro Asp His Leu Val Ser Asn Ile Gln Tyr  
 35 40 45  
 Ile Leu Arg Phe Arg Asn Gln Asp Lys Leu Gly Gly Glu Ala Gly Tyr  
 50 55 60  
 Tyr Leu Ser Ser Leu Val Cys Gln Ser Thr Leu Phe Ala Asp Asn Ala  
 65 70 75 80  
 Cys Asn Val Thr Asp Ser Ile Asn Ser Pro Val Leu Ser Asn Leu Ser  
 85 90 95  
 Arg Pro Trp Ile Gly Pro Ala  
 100

&lt;210&gt; 39826

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39826

Asp Ser Ser Phe Ser Gly Gly Gly Gly Gly Thr Ser Leu Ser Ser Asn  
 1 5 10 15  
 Glu Pro Val Ser Val Ile Phe Val Glu Thr Asp Asn Pro Phe Thr Arg  
 20 25 30  
 Ala Asp Asn Val Pro Trp Gly Ser Asp Val Asp Phe Glu Gln Ala Gly  
 35 40 45  
 Ala Thr Phe Ser Asp Val Met Phe Gly Asp Ser Asn Val Glu Val Gly  
 50 55 60  
 Ala Ser Ser  
 65

&lt;210&gt; 39827

&lt;211&gt; 291

17314

<212> PRT

<213> A.fumigatus

<400> 39827

```

Arg Ile Cys Ser His Cys Ala Ala Met Cys Gly Ile Tyr Phe Ser Leu
1           5           10           15
Ser Thr Asn Gly Ser Val Leu Pro Asn Glu Glu Thr Cys Ser Leu Leu
          20           25           30
Arg Asn Arg Gly Pro Asp Ser Tyr Gln Val His Thr Arg Lys Gln Glu
          35           40           45
Leu Tyr Val Ser Arg Thr Asp Gln Ser Gly Val Thr Ala Thr Leu Thr
          50           55           60
Phe Ile Ser Thr Val Leu Ser Leu Arg Gly Asp His Val His Ala Gln
65           70           75           80
Pro Leu Val Asp Ser Ser Thr Gln Ser Val Leu Cys Trp Asn Gly Glu
          85           90           95
Ala Trp Lys Ile Ala Gly Glu Pro Ile Gln Asp Asn Asp Thr Glu Ser
          100          105          110
Ile Phe Gln Ser Leu Leu Arg Ala Ser His Ser Ser Leu Asp Ala Val
          115          120          125
Asp Arg Gly Tyr Pro Leu Gln Lys Val Leu Ser Val Ile Ser Asn Ile
          130          135          140
Ser Gly Pro Phe Ser Phe Val Phe Tyr Asp Ala Val Asn Ser Arg Leu
145          150          155          160
Tyr Phe Ser Arg Asp Cys Leu Gly Arg Arg Ser Leu Leu Arg Gly Leu
          165          170          175
Asp Asp Ser Gly Asn Leu Arg Ile Cys Ser Val Cys Asp Ser Ser Ser
          180          185          190
Ser Ser His Phe Glu Glu Val Asp Thr Asn Gly Val His Cys Ile Asp
          195          200          205
Phe Glu Gln Val Val Leu Gln Asn Ala Leu Ala Ser Gly Ala Val Lys
          210          215          220
Phe Asn Pro Asp Ala Ile Gln Thr Leu Arg Trp Glu Pro Lys Asp Ala
225          230          235          240
Asn Ala Cys Cys Leu Val Tyr Thr Leu Ser Pro Pro Arg Leu Thr Gln
          245          250          255
Ser Leu Thr Gly Arg Thr Glu Lys Ser Asn Thr Thr His Glu Gln Ile
          260          265          270
Ser Pro Glu Trp Asn Ala Pro Val Ile Asp Ser Arg Leu Leu Arg Arg
          275          280          285
Pro Arg Ala
          290

```

<210> 39828

<211> 354

<212> PRT

<213> A.fumigatus

<400> 39828

```

Gln Asp Gly Gln Lys Ser Pro Ile Pro His Met Asn Lys Ser Leu Pro
1           5           10           15
Asn Gly Thr Pro Pro Ser Leu Thr Val Asp Ser Cys Ala Val Gln Glu
          20           25           30
Leu Glu Arg Arg Leu Arg Gln Ser Leu His Leu Arg Ile Gln Lys Val
          35           40           45
Pro Glu Pro Pro Ser Ile Thr Thr Ser Asp Val Lys Val Ala Val Leu

```

## 17315

```

      50                      55                      60
Phe Ser Gly Gly Leu Asp Cys Thr Leu Leu Ala Arg Val Ser His Asp
65                      70                      75                      80
Ile Leu Pro Lys Asn Glu Ser Ile Asp Leu Leu Asn Val Ala Phe Glu
      85                      90                      95
Asn Pro Arg Val Ala Ala Ala Ala Ala Gly Lys Glu Gly Ala Thr Leu
      100                      105                      110
Ser Val Tyr Glu Ser Cys Pro Asp Arg Ile Thr Gly Arg Ala Ala Phe
      115                      120                      125
Ala Glu Leu Gln Arg Val Cys Pro Glu Arg Asn Trp Arg Phe Val Ala
      130                      135                      140
Ile Asp Ile Pro Tyr Thr Glu Thr Val Ala His Arg Asp Met Val Lys
145                      150                      155                      160
Arg Leu Met Arg Pro His Asn Thr Glu Met Asp Leu Ser Ile Ala Cys
      165                      170                      175
Ala Leu Tyr Phe Ala Ser Arg Ala Arg Gly Met Ala Val Asn Ser Gln
      180                      185                      190
Asp Ser Ser Ser Glu Pro Thr Gln Tyr Thr Ser Pro Ala Arg Val Leu
      195                      200                      205
Leu Ser Gly Leu Gly Ala Asp Glu Leu Phe Ala Gly Tyr Ala Arg His
      210                      215                      220
Gly Val Ala Phe Ala Arg Asp Gly Phe Arg Gly Leu Ile Asp Glu Ile
225                      230                      235                      240
His Leu Asp Val Ser Arg Leu Gly Lys Arg Asn Leu Gly Arg Asp Asp
      245                      250                      255
Arg Ile Leu Ser Asn Trp Gly Arg Glu Ala Arg Cys Pro Phe Leu Asp
      260                      265                      270
Glu Asp Phe Val Ser Tyr Val Leu Glu Ala Pro Val Trp Glu Lys Cys
      275                      280                      285
Gly Phe Gly Val Pro Asp Pro Pro Glu Thr Thr Gly Val Asp Tyr Thr
      290                      295                      300
Gly Ile Asp Pro Glu Lys Arg Ala Leu Arg Leu Leu Ala Ile Lys Leu
305                      310                      315                      320
Gly Met Thr Thr Val Ala Arg Glu Lys Lys Arg Ala Ile Gln Phe Gly
      325                      330                      335
Ser Arg Thr Ala Lys Met Glu Lys Gly Arg Thr Lys Gly Thr Asp Ala
      340                      345                      350
Leu Ser

```

&lt;210&gt; 39829

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39829

```

Lys His His Lys Ala Arg Arg Pro Leu Leu His Thr Leu Leu Lys Ser
1                      5                      10                      15
Phe Ile Gly His Met Ser Ser Gly Glu Ile Ser His Glu Thr Ala Cys
      20                      25                      30
Ala Asp Cys Val Gln Arg Gln Thr Val Leu Thr Asn Tyr Tyr Thr Gln
      35                      40                      45
Leu Ala Phe Ala Thr Ala Thr Gln Asn Gln His Met Gln Asn Ser Gln
      50                      55                      60

```

&lt;210&gt; 39830

<211> 247  
 <212> PRT  
 <213> A.fumigatus

<400> 39830

```

Ser Thr Lys Ala Gly Met Ile Pro Cys Arg Ile Ile Asn Leu Glu Ser
1          5          10          15
Ala Leu Ser Cys Thr Gln His Cys Pro Phe Ala Arg Leu Leu Cys Ser
20          25          30
Ser Lys Thr Ser Thr Met Ala Pro Ala Ala Ile Asp Pro Arg Ile Val
35          40          45
Asp Val Ala Glu Pro Arg Lys Glu Thr Leu Pro Leu Pro Pro Asn Ala
50          55          60
Arg Glu Arg Leu Glu Lys Ala Gly Ile Asp Leu Ser Ala Gly Tyr Pro
65          70          75          80
Tyr Arg Pro Ala Arg Pro Leu Tyr Val Asp Asp Val Tyr Asn Ile Arg
85          90          95
Asn Tyr Asp Arg Pro His Ile Asp Pro Gly Thr Arg Ala Asp Pro Glu
100         105         110
Lys Lys Ala Leu Leu Ser Ala Ala Lys Glu Val Ile His Leu Thr Lys
115         120         125
His Ile Gly Thr Glu Ile Val Gly Leu Gln Leu Lys Asp Leu Asn Asp
130         135         140
Lys Gln Lys Asp Glu Leu Gly Leu Leu Ile Ala Glu Arg Ser Val Val
145         150         155         160
Phe Phe Arg Asp Gln Asp Ile Ser Pro Gln Gln Gln Lys Glu Leu Gly
165         170         175
Glu Trp Phe Gly Glu Val Glu Val His Val Arg Arg Cys Ile Ile Ser
180         185         190
Ala Lys Leu Leu Gly His Trp Thr Asn Ser Cys Ser Ala Ala Ser Thr
195         200         205
Thr Gly Ala Trp Ser Pro Arg Cys Asn Cys Ile Val Ala Gly Thr Ala
210         215         220
Gly Ser Arg Asn Pro Gly Cys Val Pro Pro Ala Gly Arg Arg Phe Pro
225         230         235         240
Leu Ala Tyr Arg Ser Cys Thr
245

```

<210> 39831  
 <211> 189  
 <212> PRT  
 <213> A.fumigatus

<400> 39831

```

Asp Thr Gly Leu Ile Leu Val Gln Pro Gln Val Pro Gln Val Pro Gly
1          5          10          15
Val Pro Gly Val Thr Val Leu Trp Pro Ala Leu Gln Ala Ala Glu Thr
20          25          30
Pro Ala Ala Phe Arg Arg Pro Gly Ala Ser Arg Trp His Thr Asp
35          40          45
Leu Val His Glu Arg Gln Pro Ala Gly Val Thr His Leu His Asn Asp
50          55          60
Thr Val Pro Ser Ile Gly Gly Asp Thr Leu Trp Ala Ser Gly Tyr Ala
65          70          75          80
Ala Tyr Glu Lys Leu Ser Pro Ser Phe Arg Gln Phe Ile Asp Gly Lys
85          90          95

```

## 17317

Thr Ala Ile Tyr Arg Ser Ala His Pro Tyr Leu Asp Arg Lys His Pro  
                   100                  105                  110  
 Glu Lys Gly Pro Val Tyr Val Glu Arg Glu His Pro Leu Val Arg Val  
                   115                  120                  125  
 His Pro Ala Thr Gly Trp Lys Thr Leu Trp Val Asn Arg Ala Met Thr  
                   130                  135                  140  
 Val Arg Ile Val Gly Leu Asp Lys Ala Gln Asn Asp Val Ile Leu Gly  
 145                  150                  155                  160  
 Tyr Leu Cys Asp Val Tyr Glu Lys Asn Ile Asp Ile Gln Val Arg Phe  
                   165                  170                  175  
 Lys Trp Thr Pro Lys Thr Ser Ala Leu Trp Asp Asn Arg  
                   180                  185

&lt;210&gt; 39832

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39832

Arg Cys Thr Leu Cys Leu Cys Gly Tyr Leu Asp Arg Cys Val Ser Lys  
 1                  5                  10                  15  
 Phe Ser Asp Phe Ala Thr Leu His Ser Met Gly Leu Ala Arg Leu Ser  
                   20                  25                  30  
 Arg Thr Ile Phe Ser Glu Thr Gly Asp Ala Thr Val Pro Val Ala Pro  
                   35                  40                  45  
 His Gly Thr Arg Val Ile Tyr Glu Phe Ser Ile Asp Tyr Gln Ser Ala  
                   50                  55                  60  
 Gly Asn  
 65

&lt;210&gt; 39833

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39833

Asn Met Arg Asp Ile Gly Ala Asn Ala Asp Ser Ala Asp Ser Pro Ser  
 1                  5                  10                  15  
 Thr Pro Leu Lys Ser Pro Arg Pro Leu Ser Asn Pro Leu Gln Asp Gln  
                   20                  25                  30  
 Ala Leu Pro Ser Val Glu Cys Thr Ser Ser Cys Ser Pro Ser Ser Ala  
                   35                  40                  45  
 Gly Arg Leu Thr Pro Val Ser Ser Val Asp Asp Ser Leu Asp His Gln  
                   50                  55                  60  
 Val Glu Arg Ser Ser Leu Thr Pro Asn Thr Gln Ser Leu Phe Gln Asn  
 65                  70                  75                  80  
 Leu Arg Leu Ser Glu Ala Met Arg His Pro Asn His Ser Ser Gln Thr  
                   85                  90                  95  
 Asp Pro Ser Ser Gly Pro Arg Glu Ser Gly Leu Thr Pro His Ser His  
                   100                  105                  110  
 His Thr Thr Tyr Arg Asp Leu Tyr Asn Ala Thr Pro Ser Pro Gly Gly  
                   115                  120                  125  
 Ala Ser Phe Thr Glu Pro Ser Gln Gln Arg Gln Pro Pro Thr Pro Ser  
                   130                  135                  140  
 Ser Pro Leu Ala Ala Val Gly Ser Ser Arg Ser Gln Asn Leu His Pro  
 145                  150                  155                  160

## 17318

Ala Asp Ser Gly Asp Thr Ala Ala Thr Asp Ala Asp Arg Asp Asn Glu  
                   165                  170                  175  
 Pro Glu Pro His Glu Asp Ser Leu Gln Asn Asn Asn Arg Glu Ser Asn  
                   180                  185                  190  
 Asn Asn Asn Glu Asp Phe Leu Tyr Asn Ile Arg Gln Glu Glu Leu Pro  
                   195                  200                  205  
 Pro Val Pro Ile Tyr Asp Ile Arg Leu Gln Ile Ala Leu Arg Arg Val  
                   210                  215                  220  
 Arg Gly Lys Leu Val Asp Leu Ala Gln Val Met Asn Arg Arg Glu Leu  
 225                  230                  235                  240  
 Ala Gln Asp Pro Thr Thr Thr Phe His Lys Leu Tyr Asn Glu Thr Leu  
                   245                  250                  255  
 Glu Ala Ser Arg Phe Ala Tyr Pro Ala Thr Arg Thr Val Gly Phe Ile  
                   260                  265                  270  
 Gly Asp Ser Gly Met Gly Lys Leu Cys Leu Ala Ser Arg Gly Arg Glu  
                   275                  280                  285  
 Gly Asp Glu Arg Gly  
                   290

&lt;210&gt; 39834

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39834

Gln Leu Val Val Val Gly Asp Gln Ser Thr Gly Lys Ser Ser Val Leu  
 1                  5                  10                  15  
 Gln Ala Ile Thr Glu Val Ser Phe Pro Val Lys Asp Thr Met Cys Thr  
                   20                  25                  30  
 Arg Phe Pro Ile Gln Ile Ser Phe Arg Gln Thr Ser Val Ser Asn Gln  
                   35                  40                  45  
 Tyr Pro Val Lys Ala Thr Ile Val Pro Gly Arg Leu Ser Glu Asn Asp  
                   50                  55                  60  
 Glu Ala Leu Val Leu Arg Ala Gln Asp Phe Ile Ile Glu Arg Glu Glu  
 65                  70                  75                  80  
 Leu Thr Ser Glu Val Met Glu Glu Ile Ile Glu Gln Val Cys Glu Ile  
                   85                  90                  95  
 Glu Glu Ile

&lt;210&gt; 39835

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39835

Lys Ile Arg Gly Phe Ser Ala Asp Trp Phe Ser Ser Phe Leu Asp Phe  
 1                  5                  10                  15  
 Val Ala Leu Ser Asp Asn Gly Ile Phe Thr Asn Gly Val Asp Ser Leu  
                   20                  25                  30  
 Phe Lys His Asn Leu Gln Pro Cys Lys Arg His Gln Ser Arg Tyr His  
                   35                  40                  45  
 Gln Pro Leu Arg Arg Tyr Pro Ser Pro Phe Tyr Val Ser Met Leu Thr  
                   50                  55                  60  
 Glu Thr Asp Ser Val Gln Trp Ile Ser  
 65                  70



<210> 39836  
 <211> 450  
 <212> PRT  
 <213> A.fumigatus

<400> 39836  
 Met Val Lys Leu Leu Gln Asn Asp Leu Pro Thr Val Pro His Leu Asp  
 1 5 10 15  
 His Gly Trp Phe Gly Leu Arg Asn Arg Ile Pro Ala Glu Ala His Ile  
 20 25 30  
 Thr Asp Ala Glu Arg Asp Glu Arg Glu Ile Lys Glu Phe Ala Gln Pro  
 35 40 45  
 Ala Trp Glu Gly Val Gly Lys Asp Arg Thr Gly Ile His Ser Leu Ile  
 50 55 60  
 Lys Tyr Val Asp Lys Glu Arg Arg Ala Gln Ile Gln Ser Gly Leu Pro  
 65 70 75 80  
 Gln Ile Ile Ala Glu Ile Arg Arg Lys Leu His Asp Cys Glu Ser Asp  
 85 90 95  
 Leu Gly Arg Met Gly Glu Ala Arg Asp Ser Pro Lys Ala Gln Arg Tyr  
 100 105 110  
 Phe Ile Phe Gln Phe Cys Asn Glu Met Gln Lys Met Ala Asn Ala Ser  
 115 120 125  
 Leu Ile Gly Gln Tyr His Asp Ile Pro Ser Glu Asp Pro Arg Ile Met  
 130 135 140  
 Leu Arg Tyr Arg Val Gln Arg Arg Leu Asp Arg Phe Tyr Glu Glu Met  
 145 150 155 160  
 Val Asp Leu Asp Asn Met Pro Ile Leu Phe Ser Ser Tyr Gln His Asp  
 165 170 175  
 Leu Glu Ile Leu Ser Ser Met Asn Pro Glu Glu Trp Glu Asp Lys Val  
 180 185 190  
 Met Asn Ala Pro Gly Ile Tyr Ser Glu Ile Tyr Lys Glu Ala Lys Ile  
 195 200 205  
 Ser Glu Gly Arg Ser Leu Pro Gly Ser Ile His Pro Asp Val Glu Glu  
 210 215 220  
 Arg Met Phe Arg Lys Leu Thr Thr His Trp Glu Arg Ile Ala Arg Ser  
 225 230 235 240  
 Phe Val Glu Asp Val Lys Asp Leu Val Lys Asp Cys His Asp Val Leu  
 245 250 255  
 Ala Arg Ile Ala Ile Pro Asn Ser Lys Val Arg Leu Glu Val Ser Arg  
 260 265 270  
 Val Val Ala Lys Thr Leu Glu Glu Trp Asn Arg Asp Ala Asp Ala Ala  
 275 280 285  
 Leu Leu Glu Leu Ile Lys Asp Asn Gln Ala Arg Pro Leu Val Thr Arg  
 290 295 300  
 His Pro Leu Leu Ile Ser Glu Thr Ile Ala Ala Asp Lys Gln Arg Gly  
 305 310 315 320  
 Glu Ile Leu Leu Gly Lys Lys Ser Thr Met Ala Pro Asn Gly Glu Ser  
 325 330 335  
 Glu Gly Thr Pro Asn Thr Ile Arg Gly Gly His Gln Gln Arg Phe Ile  
 340 345 350  
 Ser Thr Leu Ser Gln Val Leu Phe Val Arg Ala Arg Leu Glu Ser  
 355 360 365  
 Tyr Tyr Lys Ile Ala Leu Tyr Arg Phe Ile Asp Asn Val Ala Met Gln  
 370 375 380  
 Val Val Glu Arg His Val Leu Gly Pro Lys Cys Pro Met Leu Thr Val

## 17320

385                      390                      395                      400  
 Ser Val Lys Thr Phe Ala Asn Leu Asn Asp Glu Glu Leu Asn Ser Val  
                          405                      410                      415  
 Ala Gly Glu Asp Glu Thr Asp Ile Arg Ile Arg Ala Arg Leu Glu Arg  
                          420                      425                      430  
 Gln Arg Ser Arg Tyr Val Gln Ala Leu Glu Lys Trp Glu Arg Leu Arg  
                          435                      440                      445  
 Ala Leu  
                          450

<210> 39837  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 39837  
 Tyr Leu Lys Tyr Met Leu Cys Thr Tyr Gln Gly Tyr Leu Tyr Lys Lys  
 1                      5                      10                      15  
 Asp Phe Tyr Thr Lys Lys Glu Trp Asp Leu Leu Lys Arg Ala Glu Lys  
                          20                      25                      30  
 Lys Ile Ala Ser Lys Leu Ser Ile Thr Asn Asn Lys Leu Glu Leu Leu  
                          35                      40                      45  
 Tyr Pro Glu Leu Arg Gln Leu Gln Glu Tyr Leu Glu Lys Ile  
                          50                      55                      60

<210> 39838  
 <211> 307  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (4), (18)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 39838  
 Glu Ile Val Xaa Ala Gln Gly Ser Tyr Pro Ser Glu Gly Leu Pro Val  
 1                      5                      10                      15  
 His Xaa Arg Ser Pro Arg Leu Lys Ala Gly Glu Gln Leu Leu Tyr Ala  
                          20                      25                      30  
 Met Leu Arg Asn Ile Arg Ile Cys Glu Thr Glu Gly Leu Ser Ser Glu  
                          35                      40                      45  
 Leu His Leu Asn Gln Asp Gly Lys Asp Ile Met Val Glu Ile Ser Gln  
                          50                      55                      60  
 Ser Glu Leu His Phe His Glu Cys Glu Ser Gly Leu Thr Ile Tyr Val  
 65                      70                      75                      80  
 Pro Arg Asp Glu Gln Ala Gln Tyr Leu Cys Phe Leu Asp Arg Ile Pro  
                          85                      90                      95  
 Gln Ala Leu Met Glu Trp Ile Met Thr Glu Pro Ser Thr Gly Ile Cys  
                          100                      105                      110  
 Glu Pro Ser Thr Asp Lys Ala Leu Asp Val Leu Ser Lys Val Leu Gln  
                          115                      120                      125  
 Ala Glu Pro Lys Tyr Thr Ser Met Thr Leu Asp Arg Ala Gly Ile Met  
                          130                      135                      140  
 Ser Val Glu Thr Pro Glu Glu Met Ala Ala Gly Gln Val Ala Glu Asn  
 145                      150                      155                      160

## 17321

```

Thr Glu Asp Glu Leu Thr Glu Arg His Thr Glu Gly His Asp Ser Ile
      165      170      175
Asp Asp Ala Pro Ser Thr Gly Ala Phe Ile Arg Ser Ala Arg Ser Glu
      180      185      190
Ser Ser Val Thr Leu Thr Asp Glu Phe Ala Ser Gly Pro Tyr Ala Arg
      195      200      205
Pro Ser Ser Pro Ser Arg Gly Leu Ser Trp Thr Pro Leu Thr Pro Arg
      210      215      220
Gly Val Pro Ser Asp Ala Ser Tyr Leu Ser Arg Gly Ser Ala Gln Pro
225      230      235      240
Ile Asp Val Ala Tyr Ala Ala Ile Leu Arg Arg Val Val Thr Ala Ala
      245      250      255
Arg Thr Thr Thr Phe Pro Ser Lys Gly Ala Phe Asn Met Thr Ala Leu
      260      265      270
Ser Asp Ser Leu Gly Pro Gly Asn Glu Pro Phe Gln Leu Arg Ala Ile
      275      280      285
Asp Lys Leu Ser Arg Asp Lys Leu Ile Gly Ala Ala Gly Glu Leu Phe
      290      295      300
Val Ser Ser
305

```

<210> 39839  
 <211> 104  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39839
Val Phe Glu Thr Leu Cys Cys Leu Thr Pro Ser Leu Pro His Phe Gly
1      5      10      15
Arg Asp Asn Trp Gln Ser Thr Ile Arg Asn His Val Lys Leu His Asp
      20      25      30
Asp Tyr Thr Asp Leu Glu Pro Trp Asn Gly Arg Glu Thr Ala Asp Ile
      35      40      45
Thr Tyr Ser Asp Arg Gln Gly Ile Leu Thr Ala Leu Leu Ile Asn Lys
      50      55      60
Gly Tyr Leu Asp Ala Thr Trp Ala Gly Ala Arg Pro Asp Tyr Phe Leu
65      70      75      80
Glu Val Lys Thr Thr Thr Ser Ser Trp Glu Thr Pro Phe Tyr Met Ser
      85      90      95
Lys Tyr Gln Tyr Glu Arg Val Cys
      100

```

<210> 39840  
 <211> 91  
 <212> PRT  
 <213> A.fumigatus  
  
 <220>  
 <221> UNSURE  
 <222> (80), (84)  
 <223> Identity of amino acid sequences at the above locations are unknown.

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<400> 39840
Met Arg Ile Asn Asp Thr Ala Glu Glu Glu Asp Lys Gly Lys Val
1      5      10      15
Leu Thr Pro Leu Met Lys Met Val Ala Tyr Ser Trp Gly Gly Asp Glu

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17322

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                20                25                30
Gly Leu Pro Trp Leu Arg Lys Tyr Gly Glu Val Gln Arg Ser Ser Val
      35                40                45
Asp Asn Ser Val Tyr Leu Asn Asn Pro Cys Glu Glu Asp Pro Ile Phe
      50                55                60
Leu Gly Thr Gly His Leu Thr Ile Ile Asp Arg Ser Asn Asn Leu Xaa
      65                70                75                80
Gln Gly Ala Xaa Cys Lys Leu Leu Ala Pro Gln
                85                90

```

<210> 39841  
 <211> 162  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39841
Val Leu Gln Val Tyr Val His Pro Thr Pro Ser Ser Lys Asp Asn Ile
1                5                10                15
Pro Gly Phe Ile Ala Leu Leu Gln Gln Lys Pro Ala Pro Thr Pro Ser
      20                25                30
Ser Asp Ile Ala Ser Thr Asn Ser Ala Lys Thr Thr Ala Asp Leu Ser
      35                40                45
Ser Tyr Leu Leu Ala Trp Val Pro Glu Ser Ser Leu Gly Asp Ala Tyr
      50                55                60
Ser Thr Tyr Val Lys Val Asp Leu Ser Gly Asp Ser Ser Pro Pro Lys
      65                70                75                80
Gln Arg Tyr Leu Val Pro Pro Leu Pro Thr Thr Thr Thr Tyr Lys Asp
      85                90                95
Pro Ile Gly Leu Tyr Ala Phe Ala Val Pro Leu Ser Glu Ile Tyr Ser
      100                105                110
Leu Leu Val Arg Pro Pro Ser Leu Gly Trp Trp Phe Gly Ser Leu Val
      115                120                125
Ile Asn Thr Arg Ala Gly Asp Ser Phe Pro Ala Leu Phe Phe His Asp
      130                135                140
Ser Glu Cys Glu Ser Thr Ile Leu Gln Lys Lys Lys Arg Thr Arg Gly
      145                150                155                160
Lys Phe

```

<210> 39842  
 <211> 238  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39842
Leu Thr Val Leu Gln Arg Val Gln Ser Leu His Ala Ala His Gln Val
1                5                10                15
Thr Asn Gly Val Asp Leu Pro Trp Gly His Gln Ser Cys Cys Pro Leu
      20                25                30
Asn Ala Ser Thr Ala Pro Pro Arg Cys Gly Val Asp His Arg Arg Asn
      35                40                45
Ser Trp Arg Ile Thr Met Glu Ala Leu Thr Pro Pro Thr Leu Thr Leu
      50                55                60
Val Thr Leu Leu Thr Ala Phe Phe Phe Leu Tyr Arg Ala Trp Leu Arg
      65                70                75                80
Ala Val Tyr Pro Lys Thr Pro Leu Ile Gly Arg Ser Glu Leu Phe Leu

```

Variable	Mean	SD	Min	Max	Median	Q1	Q3	Mode	Skewness	Kurtosis	Shapiro-Wilk	Normality
Age	35.2	12.5	18	65	32	28	38	35	0.15	2.1	0.98	Normal
Gender	1.2	0.4	1	2	1	1	1	1	0.05	0.2	0.95	Normal
Education	12.5	2.1	9	16	12	11	13	12	0.10	1.8	0.97	Normal
Income	4500	1500	2000	8000	4000	3500	4800	4500	0.12	2.0	0.96	Normal
Marital Status	1.5	0.5	1	2	1	1	1	1	0.08	0.3	0.94	Normal
Occupation	2.5	0.8	1	4	2	2	2	2	0.06	0.1	0.99	Normal
Health Status	1.8	0.6	1	3	1	1	1	1	0.04	0.1	0.99	Normal
Stress Level	3.2	1.1	1	5	3	2	4	3	0.18	2.2	0.97	Normal
Life Satisfaction	4.1	0.9	3	5	4	4	4	4	0.03	0.1	0.99	Normal
Work-Life Balance	3.5	1.0	2	5	3	3	3	3	0.07	0.2	0.98	Normal
Family Support	4.3	0.8	3	5	4	4	4	4	0.02	0.1	0.99	Normal
Community Involvement	2.8	0.7	1	4	3	2	3	3	0.09	0.3	0.96	Normal
Personal Growth	3.8	1.0	2	5	4	3	4	4	0.11	0.4	0.95	Normal
Financial Stability	3.0	0.9	2	4	3	2	3	3	0.06	0.2	0.98	Normal
Emotional Well-being	4.0	0.8	3	5	4	4	4	4	0.03	0.1	0.99	Normal
Physical Health	3.5	0.7	2	4	3	3	3	3	0.05	0.2	0.97	Normal
Mental Health	3.2	0.9	2	4	3	2	3	3	0.08	0.3	0.96	Normal
Social Support	4.2	0.7	3	5	4	4	4	4	0.02	0.1	0.99	Normal
Life Goals Achievement	3.7	1.0	2	5	4	3	4	4	0.10	0.4	0.95	Normal
Work-Life Balance	3.5	1.0	2	5	3	3	3	3	0.07	0.2	0.98	Normal
Family Support	4.3	0.8	3	5	4	4	4	4	0.02	0.1	0.99	Normal
Community Involvement	2.8	0.7	1	4	3	2	3	3	0.09	0.3	0.96	Normal
Personal Growth	3.8	1.0	2	5	4	3	4	4	0.11	0.4	0.95	Normal
Financial Stability	3.0	0.9	2	4	3	2	3	3	0.06	0.2	0.98	Normal
Emotional Well-being	4.0	0.8	3	5	4	4	4	4	0.03	0.1	0.99	Normal
Physical Health	3.5	0.7	2	4	3	3	3	3	0.05	0.2	0.97	Normal
Mental Health	3.2	0.9	2	4	3	2	3	3	0.08	0.3	0.96	Normal
Social Support	4.2	0.7	3	5	4	4	4	4	0.02	0.1	0.99	Normal
Life Goals Achievement	3.7	1.0	2	5	4	3	4	4	0.10	0.4	0.95	Normal

```
<210> 39843
<211> 151
<212> PRT
<213> A.fumigatus
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```
<210> 39844
<211> 106
<212> PRT
<213> A.fumigatus
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<400> 39844  
Glu Arg Gly Ser Ser Thr Gly Leu Gly Cys Arg Tyr His Gly Trp Ser  
1 5 10 15  
Tyr Asn Thr Lys Gly Glu Leu Ile Lys Ala Pro His Phe Glu Gln Ile

17324

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                20                25                30
Leu Gly Phe Asp Lys Ser Gln Asn Gly Leu Phe Ala Ile His Val Gln
   35                40                45
Gln Ser Thr Asp Gly Phe Ile Phe Val Asn Leu Glu Ala Asp Ala Pro
   50                55                60
Gly Glu Leu Leu Glu Thr Asp Arg Leu Val Asp Phe Val Lys Cys Asn
65                70                75                80
Gly Pro Ile Pro Gln Ser Arg Trp Ile Gly Gly Arg Ala Ile Glu Gly
                85                90                95
Val Phe Asn Trp Lys Met Ala Ser Lys Phe
   100                105

```

<210> 39845  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39845
Thr Gln Gly Ala Asn Phe Asn Arg Lys Phe Glu His Ser Ser Thr Phe
1                5                10                15
Gly Leu Val Ala Ser Gly Ser Ser Asn Ala Ile Trp Thr Arg Asp Asp
   20                25                30
Asp Leu Thr Gly Thr Val Arg Arg Thr Gly Ala Gly Arg Ala Ile Val
   35                40                45
Gly Ala Gly Glu Glu Val Leu Cys Trp Asp Val Lys Lys Gly Asp Leu
   50                55                60
Leu Gly Arg Trp Arg Asp Thr Ser Cys Lys Ala Gln Val Thr Val Ile
65                70                75                80
Thr Gln Ser Lys Ala Asp Glu Asp Val Phe Ala Val Gly
                85                90

```

<210> 39846  
 <211> 914  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39846
Gly Arg Phe Arg Cys Arg Val Gly Leu Pro Pro Leu Ser Glu Met Gly
1                5                10                15
Gln Leu Pro Ser Trp Cys Leu His Pro Glu Leu Val Leu Phe Arg Tyr
   20                25                30
Asp Asp Gly Ser Ile Arg Ile Trp Asp Ser Arg Thr Glu Thr Val Ile
   35                40                45
Ile Ser Phe Asn Gly His Lys Ser Ala Val Thr Gln Leu Ala Phe Asp
   50                55                60
Ala Ala Gly Val Arg Val Ala Ser Gly Ser Lys Asp Thr Asp Ile Ile
65                70                75                80
Val Trp Asp Leu Leu Ala Glu Val Gly Leu Phe Lys Leu Arg Gly His
                85                90                95
Thr Asp Gln Val Thr Ser Leu His Phe Leu Asn Leu Ser Ser Glu Leu
   100                105                110
Leu His Ala Ala Gly Leu Ser Glu His Ala Gly Phe Leu Leu Thr Thr
   115                120                125
Gly Lys Asp Ser Leu Ile Lys Ile Trp Asp Leu Ser Thr Gln His Cys
   130                135                140
Ile Glu Thr His Val Ala Gln Ser Asn Gly Glu Cys Trp Ser Leu Gly

```

145                      150                      155                      160  
 Leu Ser Pro Asp Gln Ser Gly Cys Ile Thr Ala Gly Asn Asp Gly Glu  
                                  165                      170                      175  
 Leu Lys Val Trp Ser Ile Asp Glu Ser Ala Met Leu Glu Ile Ser Arg  
                                  180                      185                      190  
 Glu Lys Val Gly Ser Glu Gly Arg Lys Ile Leu Thr Asp Arg Gly Thr  
                                  195                      200                      205  
 Phe Tyr Arg Asn Gly Lys Asp Arg Thr Ile Gly Ile Ser Phe His Pro  
                                  210                      215                      220  
 Arg Ala Asp Tyr Ile Gly Phe His Gly Ser Glu Lys Ala Ile Glu Ile  
 225                                   230                      235                      240  
 Trp Arg Ile Arg Ser Ala Thr Glu Val Gln Lys Ser Leu Ala Arg Lys  
                                  245                      250                      255  
 Arg Lys Arg Arg Lys Glu Lys Glu Ala Gln Arg Glu Gly Ala Val Ala  
                                  260                      265                      270  
 Glu Val Asp Asn Glu Lys Val Asp Asp Val Ser Ser Ala Pro Val Thr  
                                  275                      280                      285  
 Glu Val Phe Val Pro His Val Ile Val Arg Thr Gly Gly Lys Val Arg  
                                  290                      295                      300  
 Ser Phe Asp Trp Ile Arg Thr Lys Thr Thr Gly Asn Leu Gln Leu Leu  
 305                                   310                      315                      320  
 Ala Ser Thr Thr Asn Asn Gln Leu Glu Ser Tyr Ser Val Thr Thr Ala  
                                  325                      330                      335  
 Asn Lys Lys Lys Asp Asp Asp Gly Ser Asp Tyr Asn Arg Asn Leu Ala  
                                  340                      345                      350  
 Val Asp Ile Pro Gly His Arg Thr Asp Ile Arg Ser Ile Ala Leu Ser  
                                  355                      360                      365  
 Ser Asp Asp Arg Met Leu Ala Ser Ala Ser Asn Gly Ser Leu Lys Ile  
 370                                   375                      380  
 Trp Asn Val Arg Thr Gln Ser Cys Leu Arg Thr Leu Glu Cys Gly Tyr  
 385                                   390                      395                      400  
 Ser Leu Cys Ser Ala Phe Leu Pro Gly Asp Lys Ile Val Val Val Gly  
                                  405                      410                      415  
 Asn Lys Asn Gly Glu Leu Glu Val Phe Asp Ile Ala Ser Ser Thr Leu  
                                  420                      425                      430  
 Leu Asp Thr Ile Lys Ala His Asp Gly Pro Val Trp Ser Leu His Val  
                                  435                      440                      445  
 His Pro Asp Gly Lys Ser Met Val Ser Gly Ser Ala Asp Lys Ser Ala  
                                  450                      455                      460  
 Lys Phe Trp Asn Phe Gln Val Val Gln Glu Glu Ile Pro Gly Thr Lys  
 465                                   470                      475                      480  
 Arg Thr Thr Pro Arg Leu Lys Leu Val His Thr Arg Thr Leu Lys Val  
                                  485                      490                      495  
 Ala Asp Asp Ile Leu Ser Leu Arg Phe Ser Pro Asp Ala Arg Leu Leu  
                                  500                      505                      510  
 Ala Val Ala Leu Leu Asp Asn Thr Val Lys Val Phe Phe Thr Asp Ser  
                                  515                      520                      525  
 Leu Lys Leu Phe Leu Asn Leu Tyr Gly His Lys Leu Pro Val Leu Asn  
                                  530                      535                      540  
 Met Asp Ile Ser Tyr Asp Ser Lys Leu Ile Val Thr Cys Ser Ala Asp  
 545                                   550                      555                      560  
 Lys Thr Val Arg Leu Trp Gly Leu Asp Phe Gly Asp Cys His Lys Ala  
                                  565                      570                      575  
 Phe Leu Ala His Glu Asp Ser Ile Met Ala Val Ala Phe Val Pro Thr  
                                  580                      585                      590  
 Asn Lys Glu Gly Asn Gly His Asn Phe Phe Ser Ala Ser Lys Asp Arg

595 600 605  
 Val Ile Lys Tyr Trp Asp Gly Asp Lys Phe Glu His Ile Gln Lys Leu  
 610 615 620  
 Gln Gly His His Gly Glu Ile Trp Ala Leu Thr Val Ser His Ser Gly  
 625 630 635 640  
 Glu Phe Ile Val Ser Ala Ser His Asp Lys Ser Ile Arg Ile Trp Gln  
 645 650 655  
 Gln Thr Asp Glu Gln Leu Phe Leu Glu Glu Glu Arg Glu Lys Glu Leu  
 660 665 670  
 Glu Glu Met Tyr Asp Asn Thr Leu Thr Ala Ser Leu Glu Gln Asp Glu  
 675 680 685  
 Asp Ala Asp Gly Glu Lys Ala Glu Ala Val Asp Ala Gly Lys Gln Thr  
 690 695 700  
 Thr Glu Thr Leu Met Ala Gly Glu Lys Ile Met Glu Ala Leu Asp Leu  
 705 710 715 720  
 Gly Met Ala Asp Leu Glu Val Met Arg Gln Trp Arg Ala Val Lys Ala  
 725 730 735  
 Ser Gln Pro Asn Ala Ala Pro Pro Ala Arg Asn Pro Leu Tyr Met Ala  
 740 745 750  
 Leu Gly Asn Ile Ser Ala Glu Gln His Val Leu Ser Val Val Gln Lys  
 755 760 765  
 Val Pro Ala Ala Ala Leu Gln Asp Ala Leu Leu Val Leu Pro Phe Ser  
 770 775 780  
 Lys Val Pro Ala Leu Phe Thr Phe Leu Asn Ile Trp Ala Asn Arg Gly  
 785 790 795 800  
 Trp Asn Ile Pro Leu Thr Cys Arg Val Leu Phe Phe Met Leu Lys Thr  
 805 810 815  
 His His Arg Gln Ile Ile Ala Ser Lys Met Met Arg Pro Met Leu Asp  
 820 825 830  
 Ser Ile Arg Ser Thr Leu Arg Arg Val Leu Thr Arg Gln Lys Asp Glu  
 835 840 845  
 Met Gly Val Asn Leu Phe Cys Leu Ala Glu Leu Arg Pro Thr Arg Gly  
 850 855 860  
 Gly Lys Ala Ala Pro Arg Thr Thr Ser Met Arg Lys Arg Gly Asn Gln  
 865 870 875 880  
 Glu Pro Pro Gln Val Ala Gly Thr Gly Gln Lys Pro Gly Ile Trp Pro  
 885 890 895  
 Lys Trp Leu Leu Arg Ala Trp Ser Tyr Gln His Asp Phe Phe Phe Ser  
 900 905 910  
 Gly Ala

&lt;210&gt; 39847

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39847

Leu Ile Gly Phe Ser Ala Gly Cys Asn Arg Gly Ala Pro Val Ser Ile  
 1 5 10 15  
 Asp Gln Val Val Ser Asp Phe Asp Gly Val Thr Phe His Leu Ser Thr  
 20 25 30  
 Pro Glu Ser Lys Thr Lys Ile Leu Ile Ser Ile His Val Lys Cys Phe  
 35 40 45  
 Lys Glu Leu Val Gln Tyr Gly Ala Gln Glu Val Leu Glu Arg Glu Tyr  
 50 55 60



Gly Pro Tyr Ile Val Thr Pro Glu Pro Gly Tyr Asp Phe Ser Val Gln  
 65 70 75 80  
 Ile Asp Leu Glu Asn Leu Pro Ala Glu Gln Glu Ala Arg Asp Glu Leu  
 85 90 95  
 Ile Met Arg Leu Ala Leu Leu Lys Arg Asn Ala Met Ala Ala Pro Phe  
 100 105 110  
 Glu Arg Ala Phe Asp Glu Phe Ala Lys Leu Ser Glu Glu Ala Ser Arg  
 115 120 125  
 Tyr Thr Ser Glu Ser Ala Pro Gln Gly Val Lys Glu Gly Gly Glu Leu  
 130 135 140  
 Met Ala Ile His Tyr Arg Glu Glu Glu Ala Ile Tyr Ile Lys Ala Ser  
 145 150 155 160  
 His Asp Arg Val Thr Val Ile Phe Ser Thr Val Phe Arg Glu Glu Thr  
 165 170 175  
 Asp Arg Ile Phe Gly Lys Val Phe Leu Gln Glu Phe Val Asp Ala Arg  
 180 185 190  
 Arg Arg Val Val Thr Leu Gln Asn Ala Pro Gln Val Leu Phe Arg Ser  
 195 200 205  
 Asp Pro Pro Leu Glu Leu Gln Gly Val Pro Gly Leu Gln Thr Ala Gly  
 210 215 220  
 Asp Gly Lys Met Ser Tyr Val Thr Phe Gly Lys Gln Thr Ser Leu His  
 225 230 235 240  
 Met Leu Arg Ala Leu Ile Asp Ser Ser Gln Ser Phe Ser Leu Asp Thr  
 245 250 255

<210> 39848  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 39848  
 Gly Thr Lys Thr Ser Val Thr Gly Ala Asp Glu Thr Ser Ser Thr Phe  
 1 5 10 15  
 Ser Leu Ser Thr Ser Ala Thr Ala Pro Ser Arg Trp Ala Ser Phe Ser  
 20 25 30  
 Phe Leu Leu Leu Arg Phe Leu Ala Lys Leu Phe Cys Thr Ser Val Ala  
 35 40 45  
 Glu Arg Met Arg Gln Ile Ser Ile Ala Phe Ser Glu Pro Trp Asn Pro  
 50 55 60  
 Ile  
 65

<210> 39849  
 <211> 217  
 <212> PRT  
 <213> A.fumigatus

<400> 39849  
 Gln Leu Ser Phe Thr Leu Arg Arg Ile Thr Val Ser Val Ile Arg Pro  
 1 5 10 15  
 Asp Gln Ala Asp Ser Asp Ile Ile Ser Leu Glu Val Gly Gly Asp Met  
 20 25 30  
 Thr Val Glu Leu Leu Lys Ala Ile Val Glu Ser Glu Thr Ser Ile Pro  
 35 40 45  
 Thr Asn Asn Gln Arg Leu Val Tyr Asn Asn Gln Leu Leu Gly Asn Asp  
 50 55 60

## 17328

Ala Gln Thr Leu Glu Gln Ile Gly Ile Gly Glu Gly Asp Met Leu Gly  
65 70 75 80  
Val His Val Thr Met Arg Ser Pro Gln Ala Pro Ala Arg Ser Ile Gly  
85 90 95  
Gly Gly Pro Ser Ala Ala Ala Gln Gln Asn Leu Gln Arg Arg Gln Pro  
100 105 110  
Met Thr Pro Asp Pro Glu Thr Ile Arg Leu His Ile Leu Gly Asp Pro  
115 120 125  
Arg Val Arg Glu Ala Val Arg Arg Gln Asn Pro Glu Leu Ala Asp Ala  
130 135 140  
Ala Thr Asp Ala Gln Arg Phe Arg Asp Val Leu Met Ala Gln Gln Arg  
145 150 155 160  
Arg Glu Ala Gln Met Glu Ala Glu Lys Glu Ala Arg Ile Ala Met Leu  
165 170 175  
Asn Ala Asp Pro Phe Asn Pro Glu Asn Gln Arg Glu Ile Glu Glu Ile  
180 185 190  
Ile Arg Gln Asn Ala Val Thr Glu Asn Leu His Thr Ala Met Glu His  
195 200 205  
His Pro Glu Cys Lys Trp Gln Arg Ile  
210 215

&lt;210&gt; 39850

&lt;211&gt; 235

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (175), (181)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39850

Gly Leu Pro Pro Lys Thr Asn Lys Arg Ala Ala Phe Gly Arg Val Thr  
1 5 10 15  
Met Leu Tyr Ile Pro Val Glu Val Asn Gly His Lys Val Asn Ala Phe  
20 25 30  
Val Asp Ser Gly Ala Gln Val Thr Ile Met Ser Pro Glu Cys Ala Thr  
35 40 45  
Ala Cys Asn Ile Met Arg Leu Val Asp Arg Arg Tyr Gly Gly Ile Ala  
50 55 60  
Lys Gly Val Gly Thr Ala Thr Ile Leu Gly Arg Val His Ser Ala Gln  
65 70 75 80  
Ile Lys Ile Gly Ser Met Phe Leu Pro Cys Ser Phe Thr Val Met Glu  
85 90 95  
Gly Lys His Ile Asp Leu Leu Leu Gly Leu Asp Met Leu Lys Arg His  
100 105 110  
Gln Ala Cys Ile Asp Leu Lys Lys Gly Ala Leu Val Ile Gln Asp Glu  
115 120 125  
Ala Val Pro Phe Leu Gly Glu Ala Asp Ile Pro Lys Glu Leu Gln Glu  
130 135 140  
Gly Phe Glu Asp Glu Pro Leu Phe Lys Val Pro Met Gly Ala Glu Val  
145 150 155 160  
Gly Ala Arg Thr Gly Ala Val Thr His Gln Ala Ser Gly Ser Xaa Thr  
165 170 175  
Ser Ala Ala Ala Xaa Ser Ser Ser Thr Pro Arg Thr Asn Ile Arg Pro  
180 185 190

17329

Ala Pro Ser Ser Arg Trp Pro Gln Asp Ser Ile Ala Lys Ile Thr Glu  
 195 200 205  
 Leu Gly Phe Thr Arg Glu Glu Ala Val Arg Ala Leu Asp Ala Ala Asn  
 210 215 220  
 Gly Asp Leu Asp Gly Ala Ile Gly Phe Leu Ile  
 225 230 235

<210> 39851  
 <211> 204  
 <212> PRT  
 <213> A.fumigatus

<400> 39851  
 Asn Arg Ile Thr Asn Ile Thr Met Pro Ser Pro Thr Pro Ser Pro Ser  
 1 5 10 15  
 Ile Trp Ser Arg Lys Arg Asp Leu Val Tyr Leu Ile Phe Phe Val Ile  
 20 25 30  
 His Ile Pro Thr Ile Phe Ser Lys Cys Ser His Ser Arg Ile Gln Tyr  
 35 40 45  
 Arg Asn Ile Ala Asn Cys Lys Ala Val Val Asp Ala Val Pro Leu Leu  
 50 55 60  
 Pro Thr Ala Leu Gln Thr Asp Leu Ala His Gln Ile Arg Ala Phe Tyr  
 65 70 75 80  
 Val Ser Ser Tyr Asn Asp Lys Phe Phe Ala Glu Pro Pro Pro Pro Trp  
 85 90 95  
 Phe Thr Ala Phe Ile Ala Met Glu Leu Phe Tyr His Ala Pro Leu Ser  
 100 105 110  
 Leu Trp Ala Ile Pro Ala Leu Ile Arg Asp Asn Ala Met Val Pro Val  
 115 120 125  
 His Leu Leu Ala Phe Gly Val Gln Ala Phe Val Thr Ser Leu Ala Cys  
 130 135 140  
 Leu Val Gln Val Trp Ser Trp Glu Asp Arg Thr Val Ala Gln Lys Arg  
 145 150 155 160  
 Ser Ile Thr Met Leu Tyr Gly Pro Tyr Val Ala Leu Gly Trp Tyr Pro  
 165 170 175  
 Ile Leu Leu Cys Leu Cys Phe Trp Asp Phe Gly Trp Ala Leu Thr Gly  
 180 185 190  
 Val Ser Arg Gly Val Tyr Gly Ala Gly Tyr Gly Leu  
 195 200

<210> 39852  
 <211> 121  
 <212> PRT  
 <213> A.fumigatus

<400> 39852  
 Gln Ala Ala Leu Cys Leu Ala Pro Gly Phe Leu Lys Ala Gly Leu Asp  
 1 5 10 15  
 Pro Pro Asp Gln Phe Phe Phe Asp Phe Ser Cys Pro Tyr Thr Ser Asp  
 20 25 30  
 Asp Leu Arg Met Asn Met Ala Met His Asp Pro His Glu Lys Asn Gly  
 35 40 45  
 Pro Asp Ala Val Glu Ser Arg Val Gln Thr Asp Phe Pro Val Glu Arg  
 50 55 60  
 Phe Gly Gly Asn Gly Ser Pro Gly Val Arg Arg Ile Glu Val Ile Ser  
 65 70 75 80

## 17330

Ser Gln Phe Asn Leu Val His Arg Ile Ile Phe Phe Phe Gly Val Phe  
                   85                  90                  95  
 Leu Ile Ala Tyr Val Tyr Gly Leu Asp Gly Thr Ile Arg Tyr Thr Tyr  
                   100                  105                  110  
 Gln Val Phe Cys Leu Thr His Ala Ser  
           115                  120

<210> 39853  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<400> 39853  
 Gly Gly His Leu Thr Ala Cys Asp Phe Val Ser Val Leu Pro Leu Gly  
 1                  5                  10                  15  
 Leu Ser Gly Gly Ala Asn Leu Ser Trp Ser Ser Asn Asp Gln Thr Val  
                   20                  25                  30  
 Ala Gln Leu Leu His His Ile Leu Thr Pro Ser Glu Ala Ile Glu Ser  
                   35                  40                  45  
 Asp His Gln Tyr His Asn Ala Val Thr Asn Thr Leu Pro Leu Asn Leu  
           50                  55                  60  
 Glu Pro Glu Ala Arg Pro Gly Leu Pro His Leu Leu Arg His Pro His  
 65                  70                  75                  80  
 Pro Asn His Leu Gln  
                   85

<210> 39854  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 39854  
 Leu Asp Val Tyr Met Pro Ser Ile Arg Val Ala Trp Gln Lys Gln Val  
 1                  5                  10                  15  
 Asn Ser Leu Asp Glu Leu Glu Ala Ser Leu Val Leu Arg Thr Tyr Gln  
                   20                  25                  30  
 Phe Ser Ile Phe Asn Leu Lys Asn Tyr Ile Phe Tyr Leu Leu Ser His  
                   35                  40                  45  
 Ser Phe Met Leu Ser Leu Arg Phe Leu Leu Pro Ser Phe Leu Asn Arg  
           50                  55                  60  
 Ser Thr Ser Ala Ile Val Gln Asp Lys Ser Pro Gly Trp Gly Leu Ser  
 65                  70                  75                  80  
 Arg Ser Leu Ile Ile Pro Cys Leu Cys Glu Ile Ser Arg Phe Arg Ile  
                   85                  90                  95  
 Gln Arg

<210> 39855  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 39855  
 Lys Thr Pro Glu Glu Ala Asn Ile Gly Thr Thr Ala Glu Asp Leu Lys  
 1                  5                  10                  15  
 Met Ala Ala Glu Leu Pro Pro Leu Leu Lys Ala Ser Leu Glu Gln Thr

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```

                20                25                30
Lys Val Ser Tyr Arg Gln Leu Gly Lys Ser Gly Leu Arg Val Ser Val
      35                40                45
Pro Ile Leu Gly Gly Met Ser Ile Gly Ser Pro Glu Trp Gly Ser Trp
      50                55                60
Ile Leu Asp Glu Glu Lys Val Ser Pro Cys Thr Val Lys Phe Asp His
65                70                75                80
Glu Ile Asp

```

<210> 39856  
 <211> 123  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39856
Leu Asn Ser Asp Glu Ser Ser Thr His Glu Thr Ser Gln Gln Trp Gly
1                5                10                15
Pro Leu Asp Gly Gly Lys Leu Ala Arg Pro Leu Ser Gln Val Arg Gly
      20                25                30
Thr Thr Arg Ser Glu Asn Thr Asp Pro Asn Ala Val Thr Lys Ala Asp
      35                40                45
Glu Met Thr Ile Ser Arg Val Glu Glu Leu Ala Lys Asn Lys Gly Trp
      50                55                60
Thr Met Gly Gln Val Ala Leu Ala Trp Val Lys Lys Arg Val Ala Ser
65                70                75                80
Pro Ile Val Gly Phe Ser Ser Val Glu Arg Met Asp Glu Met Ile Gln
      85                90                95
Val Ala Asp Arg Ile Leu Thr Thr Asp Glu Glu Arg Phe Leu Glu Glu
      100                105                110
Pro Tyr Val Pro Lys Pro Ile Gly His Asp
      115                120

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<210> 39857  
 <211> 174  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39857
Met Thr Arg Phe Arg Trp Val Ala Cys His Thr Asp Pro Ala Gly Leu
1                5                10                15
Ser Arg Gln Ala Ile Phe Asn Ala Val Asn Ala Ser Leu Lys Arg Leu
      20                25                30
Gly Thr Asp Tyr Ile Asp Leu Leu Gln Ile His Arg Phe Asp Pro Leu
      35                40                45
Thr Pro Ile Glu Glu Thr Met Glu Val Leu Asn Asp Leu Val Arg Ser
      50                55                60
Gly Lys Val Arg Tyr Ile Gly Ala Ser Ser Met Arg Thr Tyr Gln Phe
65                70                75                80
Ile Met Met Gln His Cys Ala Glu Lys His Gly Trp Thr Lys Phe Val
      85                90                95
Ser Met Gln Asn Gln Tyr Ser Leu Leu Tyr Arg Glu Glu Glu Arg Glu
      100                105                110
Met Asn Arg Phe Cys Asn Glu Thr Gly Val Gly Leu Ile Pro Val Ser
      115                120                125
Thr Asp Asp Leu Thr Leu Met Asn His Arg Leu Met Arg His Pro Asn

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## 17332

130                      135                      140  
 Ser Gly Val Leu Ser Thr Val Val Ser Leu His Val Arg Ser His Lys  
 145                      150                      155                      160  
 Ser Glu Gly Pro Pro Ala Arg Arg Thr Pro Thr Arg Thr Gln  
                     165                      170

<210> 39858  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 39858  
 Val Glu Gln Trp Asp Thr Ala Asn Asn Tyr Ser Asn Gly Lys Ser Glu  
 1                      5                      10                      15  
 Glu Ile Ile Gly Lys Ala Ile Lys His Tyr Asn Leu Pro Arg His Lys  
                     20                      25                      30  
 Ile Leu Ile Leu Thr Lys Cys Trp Ser Pro Val Ser Glu His Asp Asn  
                     35                      40                      45  
 His Tyr Val Val Pro Phe Ala Asp Asn Met Arg Gln Asp Lys Glu Tyr  
                     50                      55                      60  
 Val Asn Gln Phe Gly Lys  
 65                      70

<210> 39859  
 <211> 164  
 <212> PRT  
 <213> A.fumigatus

<400> 39859  
 Thr Phe Asp Lys Lys Phe Gln Glu Ala Glu Ser Thr Pro Phe Thr Val  
 1                      5                      10                      15  
 Ser Thr Pro Pro Thr Asp Ile Thr Met Gly Lys Ala Ala Arg Gly Lys  
                     20                      25                      30  
 Arg Asn Ala Pro Ser Ser Ser Pro Tyr Gln Lys Pro Gly Ala Pro Leu  
                     35                      40                      45  
 Ser Lys Ala Ala Ser Ala Ile Phe Lys Phe Asn Thr Asp Ile Gly Gln  
                     50                      55                      60  
 His Ile Leu Lys Asn Pro Thr Ile Ala Asp Ala Ile Val Asp Lys Ala  
 65                      70                      75                      80  
 Asn Val Gln Pro Ser Gln Thr Val Leu Glu Val Gly Pro Gly Thr Gly  
                     85                      90                      95  
 Ile Leu Thr Thr Arg Ile Leu Glu Lys Ala Lys Lys Val Ile Ala Val  
                     100                      105                      110  
 Glu Leu Asp Pro Arg Met Ala Ala Glu Val Thr Lys Thr Val Gln Gly  
                     115                      120                      125  
 Thr Pro Ala Glu Lys Lys Leu Gln Val Ile Leu Gly Asp Phe Val Lys  
                     130                      135                      140  
 Thr Asp Leu Ser Lys Leu Pro Pro Phe Gln Ile Cys Ile Ser Asn Thr  
 145                      150                      155                      160  
 Pro Tyr Gln Val

<210> 39860  
 <211> 260  
 <212> PRT  
 <213> A.fumigatus

17333

<400> 39860

Thr	Leu	Thr	Ser	Pro	Pro	Gln	Ile	Ser	Ser	Pro	Leu	Ile	Phe	Lys	Leu
1				5					10					15	
Leu	Ser	Met	Pro	Asn	Pro	Pro	Lys	Thr	Cys	Ile	Leu	Met	Val	Gln	Arg
			20					25					30		
Glu	Phe	Ala	Leu	Arg	Leu	Ile	Ala	Arg	Pro	Gly	Asp	Ser	Leu	Tyr	Ser
		35					40					45			
Arg	Leu	Ser	Val	Asn	Ala	Gln	Phe	Phe	Ser	Arg	Ile	Ser	His	Ile	Met
	50					55					60				
Lys	Val	Gly	Lys	Asn	Asn	Phe	Arg	Pro	Pro	Pro	Gln	Val	Glu	Ser	Ser
65				70						75				80	
Val	Val	Arg	Ile	Glu	Pro	Lys	Ala	Asp	Arg	Pro	Asn	Ile	Ser	Trp	Asp
			85						90					95	
Glu	Trp	Asp	Gly	Met	Leu	Arg	Ile	Cys	Phe	Val	Arg	Lys	Asn	Lys	Thr
			100					105					110		
Leu	Arg	Ala	Gly	Phe	Met	Ala	Thr	Lys	Val	Arg	Ala	Leu	Ile	Glu	Arg
		115					120					125			
Asn	Trp	Ile	Thr	Trp	Val	Ser	Met	His	Pro	Glu	Lys	Val	Thr	Gln	Ala
	130					135					140				
Asp	Ile	Asp	Phe	Leu	Gln	Gly	Lys	Asp	Val	Ser	Ala	Leu	Gln	Ser	Val
145				150						155				160	
Asp	Glu	Asp	Met	Asp	Met	Asp	Gln	Asp	Gly	Asp	Glu	Ala	Val	Gln	Gly
			165						170					175	
Gly	Asp	Asp	Glu	Asp	Asp	Ile	Phe	Met	Asp	Leu	Gly	Gly	Glu	Thr	Glu
			180					185					190		
Ala	Pro	Val	Thr	Thr	Ser	Lys	Gly	Ser	Leu	Val	Ala	Ile	Gly	Asp	Gln
		195				200						205			
Gln	Val	Pro	Arg	Ala	Met	Val	Thr	Lys	Leu	Val	Gln	Ala	Lys	Ile	Gln
	210					215					220				
Arg	Val	Leu	Glu	Gln	Thr	Asn	Leu	Ala	Asn	Ala	Arg	Ala	Gln	Lys	Cys
225				230						235				240	
Asp	Glu	Asn	Asn	Phe	Leu	Arg	Leu	Leu	His	Gly	Phe	Asn	Thr	Glu	Gly
			245						250					255	
Ile	His	Phe	Ser												
			260												

<210> 39861

<211> 133

<212> PRT

<213> A.fumigatus

<400> 39861

Thr	Arg	Arg	Pro	Trp	Glu	Lys	Ala	Pro	Ala	Pro	Ala	Ile	Thr	His	Asn
1				5					10					15	
Arg	Thr	Ser	Pro	Leu	Ser	Tyr	Pro	Gly	Arg	Thr	Val	Thr	Leu	Ser	Trp
			20					25					30		
Asp	Ala	Pro	Gly	Pro	Arg	Val	Trp	Val	Arg	Thr	Thr	Ala	Thr	Ser	Arg
		35				40						45			
Thr	Gln	Leu	Arg	Asp	Pro	Pro	Ser	Tyr	Val	Leu	Trp	Ala	Ser	Gln	Leu
	50					55					60				
Asn	Val	Thr	Tyr	Ser	Thr	Leu	Thr	Thr	Ser	Gly	Asn	Ser	Ser	Tyr	Gly
65				70						75				80	
Thr	Thr	Thr	Gln	Pro	Asp	Leu	Ser	Thr	Tyr	Ala	Gly	Asp	Pro	Ala	Leu
			85						90					95	
Asn	Gly	Thr	Ile	Phe	Ile	Ala	Ile	Thr	Asp	Thr	Asp	Leu	Phe	Val	Thr

## 17334

100 105 110  
 Pro Phe Asn Ile Ser Ser Ile Asn Pro His Ile Val Ala Gly Pro Ala  
 115 120 125  
 Leu Tyr Gln Ala Gly  
 130

<210> 39862  
 <211> 379  
 <212> PRT  
 <213> A.fumigatus

<400> 39862  
 His Leu Asn Tyr Leu Leu Asp Val Arg Arg Ile Ser Pro Phe Leu Thr  
 1 5 10 15  
 Ile Thr Met Asn Trp Arg His Phe Leu Leu Ile Asn Val Leu Gly Gly  
 20 25 30  
 Leu Pro Tyr Thr Phe Ala Gly Pro Asn Val Arg Arg Ala Asp Gly Pro  
 35 40 45  
 Ser Ser Glu Pro Pro Ile Leu Ser His Thr Thr Ser Leu Pro His Ser  
 50 55 60  
 Ser Tyr Thr Ala Thr Pro Thr Thr Ser Gly Ala Glu Arg Ala Ser Ser  
 65 70 75 80  
 Val Gly Ser Gly Ile Ser Thr Leu Gly Pro Ala Pro Gly Ala Thr Ser  
 85 90 95  
 Tyr Pro Ser Asp Gly Lys Leu His Asp Leu Gln Pro Ala Pro Phe Thr  
 100 105 110  
 Pro Ala Gly Gly Val Gly Thr Asn Gly Thr Thr Pro Ile Ser Asn Ala  
 115 120 125  
 Lys Ser Asp Phe Asp Tyr Glu Ser Leu Val Gly Phe Tyr Arg Leu Ala  
 130 135 140  
 Gly Arg Thr Val Ala Asp Arg Cys Gln Ala Leu Val Leu Tyr Gln Glu  
 145 150 155 160  
 Tyr Ile Glu Leu Asp Leu Phe His Asp Gly Leu Ala Arg Phe Ser Val  
 165 170 175  
 Ala Glu Phe Thr Ala Ala Gly Leu Thr Ala Glu Asp Arg Phe Leu Ile  
 180 185 190  
 Glu Phe Met Ala Asp Gln Glu Ala Gly His Ala Thr Met Leu Thr Asn  
 195 200 205  
 Ile Leu Gly Asp Gln Ala Pro Arg Gln Cys Val Tyr Asn Tyr Pro Tyr  
 210 215 220  
 Ala Thr Val His Glu Phe Ile Asp Leu Cys Gln Lys Leu Thr Arg Phe  
 225 230 235 240  
 Gly Glu Ala Gly Val Tyr Gly Phe Leu Pro His Leu Asp Ser Arg Glu  
 245 250 255  
 Ala Ala Gly Leu Leu Thr Gln Thr Val Thr Thr Glu Ala Arg Gln Gln  
 260 265 270  
 Met Ile Phe Arg Gln Phe Glu Gly Leu Phe Pro Met Pro Val Trp Phe  
 275 280 285  
 Glu Val Gly Val Pro Gln Ser Trp Ala Trp Thr Leu Leu Ala Pro Tyr  
 290 295 300  
 Ile Ser Tyr Cys Pro Ala Asn Gln Thr Arg Leu Ala Trp Gln Asn Phe  
 305 310 315 320  
 Pro Ser Leu Tyr Ile Glu Asn Gln Pro His Pro Tyr Arg Val Asn Gly  
 325 330 335  
 Ser Ser Ser Val Asn Glu Thr Leu Ala His Gly Gly Met Asn Thr Leu  
 340 345 350



## 17335

Ala Ser Arg Asn Val Thr Gly Pro Glu Ser Cys Leu Asn Lys Thr Ala  
 355 360 365  
 Val Gly Glu Ser Ser Ser Pro Gly Asn Tyr Pro  
 370 375

<210> 39863  
 <211> 978  
 <212> PRT  
 <213> A.fumigatus

<400> 39863  
 Ser Ser Ile Gly Glu Trp Asn Trp Leu Asn Arg Lys Ser Asp Arg Thr  
 1 5 10 15  
 Asn Lys Ser His Trp Val Gln Arg Val Val Cys Ser Ile Ser Arg Ala  
 20 25 30  
 His Thr Val His Val Thr Met Glu Asp Val Arg Pro Thr Ala Lys Trp  
 35 40 45  
 Ala Asn Arg Ile Leu Arg Pro Leu Thr Ser Ile Tyr His Arg Leu Glu  
 50 55 60  
 Lys His His Glu Ile Val Ser Ser Ile Ala Gln Ser Lys Trp Lys Glu  
 65 70 75 80  
 Arg Pro Glu Asn Ala Asp Thr Glu Gln Ala Lys Pro Arg Thr Val Pro  
 85 90 95  
 Ser Thr Glu Ala Ser Cys Gln Phe Ser Asp Glu Glu Pro Asp Asp Pro  
 100 105 110  
 Ala Trp Val Pro Gly Lys Arg Glu Lys Arg Arg Ile Arg His Asn Tyr  
 115 120 125  
 Ser Ser Arg Gly Gln Arg Asn Gly Gly Arg Arg Arg Ser Arg Leu Leu  
 130 135 140  
 Ile Arg Ser Pro Glu Leu Gln Arg Thr Leu Pro Gly Ala Ile Glu Ile  
 145 150 155 160  
 Ala Thr Pro Leu Ile Thr Gly Lys Ala Arg Gln Val Cys Glu Gly Leu  
 165 170 175  
 Ser Ile Arg Lys Arg Leu Phe Ser Val Asp Ala Pro Ala Ala Ala Ser  
 180 185 190  
 Glu Ser His Glu Gly Gly Thr Gly Arg Arg Lys Thr Thr Arg Thr Lys  
 195 200 205  
 Asn Ser Ser Phe Pro Ala Tyr Gln Gly Ser Trp Lys Glu Val Leu Asp  
 210 215 220  
 Leu Ser Gly Asp Ala Gly Phe Ala Asp Ile Ala His Leu Leu Asp Arg  
 225 230 235 240  
 Ile Phe Leu Lys Phe Leu Tyr Thr Thr Arg Thr Asn Ala Pro Gly Ser  
 245 250 255  
 Gln Gln Gln Gly Gln Gly Ala Arg Ser Leu Val Ser Met Ile Ala Arg  
 260 265 270  
 Arg Leu Pro Glu Phe Ile Ala Tyr Glu Gln Arg Phe Gln Asp Glu Thr  
 275 280 285  
 Asp Glu Asp Cys Glu Val Asp Met Cys Asp Ala Tyr Phe Thr Glu Leu  
 290 295 300  
 Glu Ala Tyr Tyr Ala Pro Asn Gly Asn Gly Trp Glu Pro Leu Arg Glu  
 305 310 315 320  
 Ala Val Arg Ala Gln Gly Val His Leu Val Val Arg Met Ile Glu Asn  
 325 330 335  
 Gly Trp Leu Thr Lys Leu Val Ala Cys Arg Leu Met Asp Glu Cys Met  
 340 345 350  
 Arg His Gly Glu Ala Asp Ala Phe Glu Met Ile Ile Ser Ser Thr Leu

		355							360							365				
Ser	Thr	Ile	Asn	Ser	Tyr	His	Tyr	Pro	Ala	Thr	Phe	Asp	Pro	Gln	Arg					
	370					375					380									
Pro	Ser	Thr	His	Cys	Asp	Asp	Pro	Val	Tyr	Met	Leu	Arg	Thr	Tyr	Tyr					
385					390					395					400					
Ser	Arg	Cys	Gly	Gly	Arg	Ala	Phe	Val	Tyr	Asn	Glu	Leu	Ser	Lys	Leu					
				405					410					415						
Leu	Leu	Arg	Arg	Val	Val	Pro	Pro	Glu	Trp	Met	Val	Thr	Thr	Trp	Trp					
				420				425					430							
Lys	Lys	Cys	Val	Asp	Glu	Ala	Ile	Arg	Ser	Val	Ser	Thr	Glu	Asp	Thr					
		435				440						445								
Asp	Ser	Ala	Thr	Ala	Thr	His	Leu	Ile	Glu	Ala	Ile	Leu	Leu	Ser	Ala					
	450					455					460									
Gly	Gly	Ile	Asp	Gln	Ser	Thr	Glu	Arg	Thr	Ala	Leu	Leu	Glu	Lys	Asp					
465					470					475					480					
Leu	Asn	Gln	Arg	Lys	Ile	Leu	Arg	Leu	Lys	Asp	Ser	Arg	Ala	Ser	Ala					
				485					490					495						
Val	Thr	Ser	Pro	Leu	Pro	Asn	Asp	Leu	Thr	Pro	Cys	Pro	Ile	Pro	Val					
			500					505					510							
Gln	Asp	Ala	Leu	Ser	Asn	Leu	Val	Ser	Ser	Leu	Val	Thr	Ala	Leu	Cys					
		515					520					525								
Gly	Met	His	Ile	Ala	Arg	Ser	Asn	Ala	Ser	Asp	Ala	Pro	Glu	Arg	Arg					
	530					535					540									
Val	Gly	Leu	Lys	Ala	Arg	His	Thr	Ile	Asn	Cys	Leu	Ala	Leu	Thr	Val					
545					550					555					560					
Glu	Thr	Asp	Ile	Gly	Leu	Arg	His	Arg	Gln	Ala	Ile	Asp	Asp	Ala	Pro					
				565					570				575							
Ser	Tyr	Gln	Thr	Leu	Arg	Arg	Gly	Tyr	Leu	Leu	Leu	Gly	Asn	Tyr	Met					
			580					585					590							
Leu	Gln	Ile	Gly	Glu	Glu	Thr	Pro	Val	Thr	Met	Arg	Pro	Arg	Cys	Asp					
		595					600					605								
Pro	Val	Ser	Lys	Gln	Arg	Ile	Asp	Ser	Phe	Phe	Glu	Ser	Leu	Ala	Leu					
	610					615				620										
Gln	Gln	Asp	Met	Leu	Lys	Glu	Phe	Ser	Asp	Leu	Val	Gln	Arg	Val	Ser					
625					630					635					640					
Arg	Tyr	Cys	Gly	Gln	Gly	Asp	Leu	Arg	Glu	Gln	Arg	Arg	Thr	Ser	Val					
				645					650					655						
Ala	Val	Arg	Thr	Lys	Ile	Ser	Gln	Leu	Ala	Arg	Gln	Ala	Gly	Val	Arg					
			660					665					670							
Gly	Leu	Ser	Tyr	Phe	Leu	Gly	Lys	Val	Ala	Ala	Glu	Thr	Ala	Met	Ala					
		675					680					685								

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<210> 39864
<211> 250
<212> PRT
<213> A.fumigatus
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<400>	39864															
Leu	Ser	Arg	Gly	Ala	Leu	Trp	Gly	Val	Asp	Ser	Ala	Asp	Thr	Ile	Leu	
1				5					10					15		
Ala	Tyr	Val	Tyr	Val	Ser	Leu	Leu	Glu	His	Ala	Ser	Gly	Asn	Thr	Lys	
			20					25					30			
Asn	Ala	Val	Val	Tyr	Ile	Lys	His	Ala	Met	Asp	Leu	Trp	Lys	Ile	Ile	
		35					40					45				
Tyr	Gly	Ser	Asn	His	Pro	Asp	Ser	Ile	Thr	Thr	Met	Asn	Asn	Ala	Ala	
	50					55					60					
Val	Met	Leu	Gln	His	Leu	Lys	Gln	Tyr	Ser	Asp	Ser	Arg	Lys	Trp	Phe	
65					70					75					80	
Glu	Ala	Ser	Leu	Ala	Val	Cys	Glu	Ser	Leu	Phe	Gly	Lys	Gln	Ser	Ile	
				85					90					95		
Asn	Thr	Ala	Thr	Ile	Leu	Phe	Gln	Leu	Ala	Gln	Ala	Leu	Ala	Leu	Asp	
			100					105					110			
Gln	Asp	Ser	Lys	Gly	Ala	Val	Gly	Lys	Met	Arg	Asp	Ala	Tyr	Asn	Ile	
		115					120					125				
Phe	Leu	Asn	Gln	Leu	Gly	Pro	Asn	Asp	Arg	Asn	Thr	Lys	Glu	Ala	Glu	
	130					135					140					
Thr	Trp	Leu	Glu	Gln	Leu	Thr	Gln	Asn	Ala	Val	Ser	Ile	Ala	Lys	His	
145					150					155					160	
Ala	Lys	Asp	Ile	Gln	Ala	Arg	Arg	Leu	Arg	Arg	Ile	Asn	Met	Asn	Pro	
				165					170						175	
Arg	Val	Thr	Thr	Leu	Gly	Thr	Lys	Val	Gln	Pro	Gln	Val	Gly	Gln	Thr	
			180					185					190			
Ala	Pro	Glu	Ala	Ser	Gly	Ala	Lys	Gly	Ala	Ala	Asn	Ala	Ser	Met	Asp	
		195					200					205				

## 17338

Ser Arg Ser Ile Asp Glu Leu Leu Lys Phe Ile Glu Gly Gly Asp Ala  
 210 215 220  
 Thr Ser Ser Arg Ser Lys Gln Lys Lys Arg Ala Ala Ala Ser Asn Pro  
 225 230 235 240  
 Lys Leu Arg Gly Ser Lys Lys Ser Ser Ala  
 245 250

&lt;210&gt; 39865

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39865

Val Arg Ile Glu Ser Leu Ser Lys Ser Gln Gln Glu Thr Phe Ser Thr  
 1 5 10 15  
 Ser Val Glu Leu Ala Leu Thr Thr Pro Ser Arg Val Gln Gln Gly Ile  
 20 25 30  
 Asp Ser Leu Gly Glu Met Ala Leu Trp Arg Ser Leu Ala Thr Ser Thr  
 35 40 45  
 Ser Arg Leu Phe Arg Pro Ser Leu Arg Ser Asn Ser Cys Phe Arg Arg  
 50 55 60  
 Pro Leu Ala Thr Pro Pro Ser Ala Gly Pro Asn Asp Tyr Arg Ser Arg  
 65 70 75 80  
 Leu Arg Arg Leu Asn Asp Arg Leu Pro Pro Phe Leu Arg Ser Tyr Thr  
 85 90 95  
 Thr Pro Leu Leu Gly Ala Pro Gly Thr His Ile Thr Ser Phe Leu Ile  
 100 105 110  
 Leu His Glu Ile Thr Ala Ile Val Pro Leu Leu Gly Leu Val Ala Ser  
 115 120 125  
 Phe His Tyr Gly Asp Trp Leu Pro Asp Phe Thr Ser Lys Ser Gly Phe  
 130 135 140  
 Asp Glu Gly Val Gln Arg Phe Gly Arg Trp Leu Arg Lys Lys Gly Trp  
 145 150 155 160  
 Val Glu Asp Ala Asp Val Asp Ile Val Asn Ser Asp Gly Ser Ala Ser  
 165 170 175  
 Gly Asn Asp Ser Thr Thr Gly Ser Pro Gly Gln Ser Gln Leu Arg Pro  
 180 185 190  
 Glu Asp Arg Lys Gly Val Arg Leu Val Leu Glu Phe Ala Thr Ala Tyr  
 195 200 205  
 Ala Ile Thr Lys Ala Leu Leu Pro Val Arg Ile Val Val Ser Ala Trp  
 210 215 220  
 Ala Thr Pro Trp Phe Ala Arg Ser Val Leu Ala Pro Val Gly Arg Gly  
 225 230 235 240  
 Val Gly Ala Leu Leu Gly Lys Lys  
 245

&lt;210&gt; 39866

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39866

Phe Leu Gln Lys Asp Leu Ala Thr Gly Gln Ser Phe Phe Ser Tyr Ser  
 1 5 10 15  
 Gly His Pro His Ala Phe Cys Gly Arg Tyr Leu Trp Ala Arg Ile Ser  
 20 25 30

## 17339

Ser Pro Phe Ile Leu Gly Glu Ala Ser Asp Ala Gly Leu Ala Trp Ile  
 35 40 45  
 Leu Thr Phe Gln Ala Gln Ser Thr Val Lys Thr Ile Val Cys Val Pro  
 50 55 60  
 Arg Pro Leu Ala Leu Asp Leu Trp Ser Thr Ser Leu Lys Val Asp Thr  
 65 70 75 80  
 Ala Pro Leu Asn Thr Ser Cys Glu Cys Tyr Thr Cys Asn Ser His His  
 85 90 95  
 Arg Ala Tyr Ile Leu His Leu Leu Ser Ala Lys Lys Met Leu Ala Trp  
 100 105 110  
 Thr Leu Leu Gln Ile His Asn His His Ile Met Asp Lys Phe Phe Ser  
 115 120 125  
 Ala Ile Arg Thr Ser Ile Glu Arg Gly Thr Phe Leu Thr Asp Ala Asp  
 130 135 140  
 Met Phe His Arg Phe Tyr Ala Pro Glu Leu Pro Glu Lys Thr Gly Glu  
 145 150 155 160  
 Gly Pro Arg Cys Val  
 165

&lt;210&gt; 39867

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39867

Arg Gly Ile Asn Gly His Ile Ile Ser Arg Phe Glu Asn Arg Gly Tyr  
 1 5 10 15  
 Val Ile Ser Gly Thr Gln Trp Leu Leu Leu Ala Leu Ile Val His Ser  
 20 25 30  
 Phe Lys Leu Val Ala Met Lys Leu Val Ser Pro Pro Gln Ser Gln Leu  
 35 40 45  
 Glu Gln His Tyr Ala Asp Leu Ser Asp Lys Pro Phe Phe Lys Gly Leu  
 50 55 60  
 Val Ser Cys Glu Leu Pro Phe His Met Arg Asn  
 65 70 75

&lt;210&gt; 39868

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39868

Arg Ala Tyr Ala Asn Gly Thr Ile Ile Ala Ile Leu Gly Ala Thr Asn  
 1 5 10 15  
 Pro Leu Ala Ser Ala Pro Gly Thr Ile Arg Gly Asp Phe Ala Ile Val  
 20 25 30  
 Ser Ser Ile Glu Thr Ser Leu Ser Trp Phe Val Ala Asp Ile Ala Leu  
 35 40 45  
 Gly Arg Arg Pro Gln Arg Leu Pro Arg Phe Arg Gln Arg Arg Glu Arg  
 50 55 60  
 Gln Glu Gly Asp Cys Pro Leu Val Gln Ala  
 65 70

&lt;210&gt; 39869

&lt;211&gt; 99

&lt;212&gt; PRT

## 17340

&lt;213&gt; A.fumigatus

&lt;400&gt; 39869

Ala	Val	Asn	Gly	Arg	His	Gln	Pro	Leu	Val	Gly	Leu	Thr	Ile	Tyr	Gly
1				5					10					15	
Arg	His	Ser	Gly	Val	Phe	Pro	Ser	Pro	Leu	Ile	Gly	Gly	Gly	Gln	Val
		20					25						30		
Leu	His	Ser	Arg	Met	Arg	Trp	Leu	Lys	Phe	Ser	Ser	Ile	Asn	Phe	Lys
		35					40					45			
Asp	Pro	Arg	Tyr	Phe	Ser	His	His	Arg	Gly	Glu	Val	Arg	Val	Lys	Met
	50					55					60				
Glu	Lys	Ile	Thr	Asp	Lys	Ile	Ala	Ala	Leu	Pro	Pro	Asn	Glu	Asn	Tyr
65					70					75					80
Phe	Ser	Leu	Glu	Phe	Phe	Pro	Pro	Lys	Thr	Gln	Met	Val	Gly	Tyr	Pro
				85					90					95	
Arg	Thr	Phe													

&lt;210&gt; 39870

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39870

Gly	Phe	Ser	Asn	Leu	Gln	Ala	Arg	Leu	Glu	Arg	Met	Ser	Gln	Ala	Leu
1				5					10					15	
Arg	Pro	Leu	Phe	Val	Thr	Val	Thr	Trp	Gly	Ala	Gly	Gly	Ser	Thr	Ala
		20					25						30		
Ala	Arg	Ser	Leu	Glu	Leu	Ala	Glu	Ile	Cys	Gln	Arg	Gln	Leu	Gln	Leu
		35					40					45			
Thr	Thr	Cys	Leu	His	Leu	Thr	Cys	Thr	Asn	Met	Ser	Arg	Ala	Leu	Ile
	50					55					60				
Asp	Glu	Ala	Leu	Glu	Glu	Ala	Lys	Val	Leu	Gly	Ile	Arg	Asn	Ile	Leu
65					70					75					80
Ala	Leu	Arg	Gly	Asp	Pro	Pro	Arg	Ser	Glu	Glu	Tyr	Asn	Thr	His	Gly
				85					90					95	
Glu	Asp	Asp	Ser	Asn	Lys	Asp	Phe	Thr	Phe	Ala	Val	Asp	Leu	Val	Arg
			100					105					110		
Tyr	Ile	Arg	Lys	Met	Tyr	Gly	Asp	Tyr	Phe	Cys	Leu	Gly	Val	Ala	Ala
		115					120					125			
Tyr	Pro	Glu	Gly	His	Pro	Val	Asp	Ser	Tyr	Gln	Asp	Val	Gln	Asp	Pro
	130					135					140				
Val	Arg	Asp	Leu	Pro	Tyr	Leu	Val	Glu	Lys	Thr	Leu	Ala	Gly	Ala	Asp
145					150					155					160
Phe	Ile	Met	Thr	Gln	Leu	Thr	Tyr	Asp	Ile	Asp	Ala	Tyr	Thr	Lys	Phe
				165					170					175	
Glu	Gln	Met	Leu	Arg	Asn	His	Glu	Ser	Gly	Ala	Phe	Lys	Thr	Ile	Pro
			180					185					190		
Ile	Ile	Pro	Gly	Leu	Met	Pro	Ile	His	Ser	Tyr	Lys	Ile	Leu	Thr	Arg
		195					200					205			
Thr	Thr	Lys	Leu	Ser	His	Val	Lys	Ile	Pro	Pro	Gln	Ile	Met	Ser	Lys
	210					215					220				
Leu	Glu	Ala	Val	Lys	His	Asp	Asp	Asp	Ala	Val	Lys	Arg	Ile	Gly	Val
225					230					235					240
Asp	Val	Leu	Ser	Asp	Leu	Val	Glu	Ala	Ile	Lys	Lys	Ile	Pro	Cys	Pro
				245					250					255	

## 17341

Gly Phe Arg Gly Phe His Phe Tyr Thr Leu Asn Leu Glu Lys Thr Val  
 260 265 270  
 Ser Phe Ile Ile Glu Arg Cys Gly Leu Ile Pro Asp Tyr Pro Glu Asp  
 275 280 285  
 Ser Gly Ala Val Val Asp Asp Asp Tyr Thr Thr Ala Pro Thr Gly Ala  
 290 295 300  
 Gln His Arg Ser Leu Ser Arg Arg Arg Ala Ser Ser Val Asn Ser Leu  
 305 310 315 320  
 Pro His Asn Arg Val Ile Val Asp Arg Leu Gln Val Pro Ser Asp Gly  
 325 330 335  
 Ser Ser Arg Ala Ser Thr His Glu Ala Pro Ala Ala Ser Ala Gly Met  
 340 345 350  
 Pro Ala Met Pro Pro Asp Arg Asn Thr Thr Leu Gln Ile Ser Glu Gly  
 355 360 365  
 Gln Gly Ala Leu Gly Arg Glu Ala Thr Trp Asp Asp Phe Pro Asn Gly  
 370 375 380  
 Arg Trp Gly Asp Ala Arg Ser Pro Ala Phe Gly Glu Ile Asp Gly Tyr  
 385 390 395 400  
 Gly Pro Ser Leu His Val Ser Gly Ala Val Ala Arg Arg Ile Trp Gly  
 405 410 415  
 Tyr Pro Val Ser Arg Glu Asp Ile Ser Ala Leu Phe Arg Arg His Val  
 420 425 430  
 Ser Gly Asp Leu Tyr Ile Val Pro Trp Ser Glu Gly Gly Ala Glu Glu  
 435 440 445  
 Asn Ser Ser Gly Leu Asn Ala Glu Thr Glu Val Ile Arg Pro Glu Leu  
 450 455 460  
 Leu Lys Leu Ile Asp Gly Lys Arg Trp Trp Thr Pro Gly Ile Pro Thr  
 465 470 475 480  
 Gly Cys Pro Trp Arg Pro Lys Arg Arg Ser Asn Leu Trp Met Gly Ser  
 485 490 495  
 Ala Arg Arg Arg Ile Arg Leu Pro Gly Ala Ile Arg  
 500 505

&lt;210&gt; 39871

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39871

Asn Ser Leu Thr Ala Asn Ala Gly Gly Leu Leu Ala Ser Gln Pro Ala  
 1 5 10 15  
 Val His Gly Val Arg Ser Asp Asp Pro Thr Phe Gly Trp Gly Pro Pro  
 20 25 30  
 Gly Glu Gly Phe Val Phe Gln Glu Pro Phe Val Glu Phe Phe Cys Pro  
 35 40 45  
 Ser Lys Asp Phe Arg Thr Val Leu Lys Pro Leu Phe Ala Lys His Gly  
 50 55 60  
 His Glu Lys Leu Ala Trp Phe Ala Thr Asn Val Lys Gly Glu Phe Glu  
 65 70 75 80  
 Ser Ser Leu Pro Ala Asp Pro Ala His Ala Asp Thr Ile Glu Met Asn  
 85 90 95  
 Pro Asn Asn Val Asn Ala Val Thr Trp Gly Val Phe Arg Gly Lys Glu  
 100 105 110  
 Ile Val Thr Pro Thr Ile Ile Glu Glu Val Ser Phe Arg Ala Trp Gly  
 115 120 125  
 Glu Glu Ala Phe Arg Ile Trp Asp Glu Trp Arg Arg Val Tyr Pro Arg

17342

130		135		140
Gly Thr Pro Thr Glu Arg	Leu Leu Glu Glu Val Lys Asn Asp Val Trp			
145	150	155	160	
Leu Val Cys Val Val Gly Gln Asp Phe Gly Ala Gly Thr Glu Asn Gly				
	165	170	175	
Ser Glu Glu Glu Gln Gln Glu Thr Lys Trp Met Trp Asn Val Leu Ile				
	180	185	190	
Asn Ser Gln				
195				

<210> 39872  
 <211> 149  
 <212> PRT  
 <213> A.fumigatus

<400> 39872
Asn Ser Thr Lys Thr Asp Glu Thr Ser Leu Ala Ser Pro Ala Arg Cys
1 5 10 15
Leu Ala Trp Ser Ser Ser Ile Ser Gly Leu Ser Arg Ser Ile Ser Asp
20 25 30
Leu Ala Gln Phe Ile Val Ser Thr Phe Phe Pro Ile Arg Asn Phe Arg
35 40 45
Arg Cys Val Gly Leu Ser Glu Gly Leu Thr Gln Arg Ala Ala Thr Glu
50 55 60
Pro Asp Ser Ser Ser Gly Ser Ser Asp Lys Phe Ser Ser Gly Thr Ala
65 70 75 80
Ser Ser Ser Ala Phe Pro Ser Phe Phe Met Ala Leu Ala Arg Ala Ala
85 90 95
Phe Ala Ser Leu Ile Ser Phe Val Ser Ala Ala Ser Asn Phe Met Ala
100 105 110
Ala Ala Ser Arg Ser Leu Thr Leu Ser Ser Ser Ser Leu Thr Ser Val
115 120 125
Ala Ile Gln Thr Phe Phe Thr Phe Ser Met Pro Asn Ile Phe Arg Ile
130 135 140
Leu Ser Arg Leu Arg
145

<210> 39873  
 <211> 156  
 <212> PRT  
 <213> A.fumigatus

<400> 39873
Asp Glu Asp Pro Gln Asn Ala Ser Asn Ser Ala Ser Ser Leu Val Ser
1 5 10 15
Thr Leu Val Pro Ala Leu Val Val Ala Gly Ile Met Val Leu Val Phe
20 25 30
Val Ile Leu Arg Arg Ser Glu Arg Arg Met Tyr Met Pro Arg Thr Tyr
35 40 45
Leu Gly Phe Leu Arg Pro Glu Glu Arg Ser Pro Pro Val Gly Thr Gly
50 55 60
Leu Trp Asn Trp Ile Ile Asp Met Tyr Lys Leu Pro Asp Glu Tyr Val
65 70 75 80
Leu Gln His His Ser Met Asp Ala Tyr Leu Leu Leu Arg Phe Leu Lys
85 90 95
Leu Ile Ser Val Ile Cys Phe Val Gly Cys Leu Ile Thr Trp Pro Ile



17343

		100						105					110							
Leu	Phe	Pro	Val	Asn	Ala	Thr	Gly	Gly	Ala	His	Lys	Glu	Gln	Leu	Asp					
		115						120					125							
Ile	Leu	Thr	Met	Ser	Asn	Ile	Ala	Gln	Asp	Asn	Asn	Ala	Arg	Tyr	Tyr					
		130					135					140								
Ala	His	Ala	Phe	Val	Ala	Trp	Ile	Phe	Val	Gly	Gln									
145						150				155										

<210> 39874  
 <211> 215  
 <212> PRT  
 <213> A.fumigatus

<400> 39874																				
Leu	Ala	Gly	Phe	Val	Phe	Met	Thr	Val	Thr	Arg	Glu	Gly	Ile	Phe	Tyr					
1			5						10				15							
Ile	Asn	Leu	Arg	Gln	Ala	Tyr	Ser	Leu	Ser	Pro	Ala	Tyr	Ala	Ser	Arg					
		20						25				30								
Leu	Ser	Ser	Arg	Thr	Val	Leu	Phe	Thr	Ala	Val	Thr	Asp	Asp	Tyr	Leu					
		35				40					45									
Asn	Arg	Asp	Lys	Ile	Arg	Lys	Met	Phe	Gly	Ile	Glu	Lys	Val	Lys	Asn					
	50					55					60									
Val	Trp	Ile	Ala	Thr	Asp	Val	Lys	Glu	Leu	Glu	Asp	Lys	Val	Lys	Glu					
65				70					75						80					
Arg	Asp	Ala	Ala	Ala	Met	Lys	Leu	Glu	Ala	Ala	Glu	Thr	Lys	Leu	Ile					
			85					90						95						
Lys	Leu	Ala	Asn	Ala	Ala	Arg	Ala	Lys	Ala	Met	Lys	Lys	Glu	Gly	Asn					
		100						105					110							
Ala	Glu	Asp	Asp	Ala	Val	Pro	Leu	Glu	Asn	Leu	Ser	Asp	Glu	Pro	Asp					
		115					120					125								
Asp	Glu	Ser	Gly	Ser	Val	Ala	Ala	Arg	Trp	Val	Lys	Pro	Ser	Glu	Arg					
	130					135					140									
Pro	Thr	His	Arg	Leu	Lys	Phe	Leu	Ile	Gly	Lys	Lys	Val	Asp	Thr	Ile					
145				150					155						160					
Asn	Trp	Ala	Arg	Ser	Glu	Ile	Glu	Arg	Leu	Ser	Pro	Glu	Ile	Glu	Glu					
			165					170						175						
Leu	Gln	Ala	Lys	His	Arg	Ala	Gly	Asp	Ala	Lys	Leu	Val	Ser	Ser	Val					
		180					185					190								
Phe	Val	Glu	Phe	Tyr	Thr	Gln	Ala	Asp	Ala	Gln	Leu	Ala	Phe	Gln	Ser					
		195				200						205								
Gly	Met	Ser	Gly	Val	Gly	Phe														
	210					215														

<210> 39875  
 <211> 127  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (79)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 39875																				
Gln	Met	Trp	Ser	Val	Ala	His	Asn	Leu	Pro	Leu	His	Met	Ala	Pro	Arg					
1				5					10					15						

```
<210> 39876
<211> 152
<212> PRT
<213> A.fumigatus
```

```
<210> 39877
<211> 218
<212> PRT
<213> A.fumigatus
```

```

<400> 39877
Arg Cys Arg Pro Ile Gly Asn Ser Cys His Leu Leu Val Tyr Arg Ser
1          5          10          15
Ala Gly Ala Trp Phe Arg Asp His Trp Ser Val Leu Val Leu Phe Pro
20          25          30
Leu Thr Gly Tyr Asn Met Leu Tyr Val Ser Asn Ala Asp Ile Asp Thr
35          40          45
Gln Gly Lys Ala Tyr Ala Arg Ala Leu Gln His Ile Thr Val Gly Cys
50          55          60

```

## 17345

```

Tyr Leu Leu Val Val Cys Leu Ile Gly Leu Phe Ala Ile Gly Thr Ala
65          70          75          80
Ala Asn Arg Met Ala Leu Gly Pro Leu Ile Leu Met Ile Ile Phe Leu
          85          90          95
Val Leu Met Ile Leu Tyr His Ile Ser Leu His Asn Ala Leu Ser Pro
          100         105         110
Leu Ile Asn Tyr Leu Pro Lys Asn Leu Glu Ala Glu Glu Gln Ser Leu
          115         120         125
Leu Ala Ser Asn Pro Ile Lys His Gly Asp Thr Val Gly Glu His Pro
          130         135         140
Asp Asp Ile Thr Ala Thr Asn Ala Gly Lys Asn Gly Asp Gly Gly Phe
145          150         155         160
Pro Asp Val Asp Ala Ala Glu Lys Gly Leu Thr Thr Thr Pro Ala Thr
          165         170         175
Pro Glu Lys Lys Pro Asn Leu Ile Val Lys Trp Phe Arg Pro Asp Lys
          180         185         190
Tyr Asp Gly Tyr Trp Gln Leu Arg Arg Leu Val Pro Glu Ala His Glu
          195         200         205
Thr Thr Gln Tyr Pro Pro Glu Val Glu Arg
          210         215

```

&lt;210&gt; 39878

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39878

```

Asn Tyr Leu Val Leu Ser Pro Gln Arg Ser Phe Thr Ala Phe Asn Phe
1          5          10          15
Gly Phe Leu Leu Leu Ala Ile Leu Ala Val His Thr Ile Glu Thr Arg
          20          25          30
Lys Ile Pro Asn Phe Phe Ile Asn Trp Arg Ala Trp His Val Gln Val
          35          40          45
Glu Tyr Ser Glu Leu Leu Ser Asp Pro Thr Ser Phe Ser Phe Ser Asp
          50          55          60
Pro Ile Lys Leu Arg Asp Glu Gly Ser Asp Val Lys Leu Leu Leu Ser
65          70          75          80
Pro Leu Val Pro Phe Glu Ile Trp Val Pro Trp Ser Phe Asp Cys Cys
          85          90          95
Leu Thr Phe Ile Tyr
          100

```

&lt;210&gt; 39879

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39879

```

Asn Cys Leu Thr Lys Pro Gly Ile Ile Phe Leu Cys Pro Asn Gln Phe
1          5          10          15
Gln His Arg Tyr Leu Ser Ala Lys Glu Ala Gly Arg Ser Pro Pro Arg
          20          25          30
Leu Leu Ser Arg Leu Tyr Pro Phe Asp Tyr Gln Asn Glu Pro Leu Asn
          35          40          45
Ser Thr Ile Asp Cys Arg Ile Arg Arg Arg Tyr Val Gly Pro Cys Arg
          50          55          60

```

17346

```

Leu Tyr Leu Lys Arg Trp Met Leu Ile Ala Ile Cys Val Gln Asp Glu
65          70          75          80
Ile Ser Ala Ile Val Leu Asp Pro Gly Phe Ser Thr Thr Arg Ala Gly
          85          90          95
Phe Ala Gly Glu Asp Thr Pro Lys Ser Val Ile Pro Thr Tyr Tyr Gly
          100          105          110
Lys Tyr Thr Tyr Glu Ala Gln Glu Lys Leu Ile Phe Gly Asp Asp Ile
          115          120          125
Phe Val Thr Pro Arg Pro Gly Leu Ser Ile His Asn Pro Met Gly Arg
          130          135          140
Asp Gly Val Val Glu Gln Trp Asp Met Ala Glu Lys Val Trp Glu Tyr
145          150          155          160
Ser Phe Thr Ser Arg Leu Thr Gly Pro Lys Ala Gly Asn Pro Phe Gln
          165          170          175
Asn Gly Leu Asn Asp Val Ala Asn Gly Glu Leu Pro Ser Glu Met Glu
          180          185          190
Gly Val Glu Thr Glu Glu Lys Pro Leu Ala Asp Ser Pro Leu Leu Met
          195          200          205
Thr Glu Cys Gly Trp Asn Pro Thr Lys Ala Arg Glu Lys Thr Val Glu
          210          215          220
Ile Ala Met Glu Lys Trp Gly Thr Pro Ala Phe Tyr Leu Ala Arg Asn
225          230          235          240
Gly Val Leu Ala Ala Tyr Val Phe Thr Ile Leu Cys Thr His Ser Leu
          245          250          255
Ser

```

<210> 39880  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39880
Phe Asp Ile Leu Tyr Pro Pro Pro Ser Leu Ser Leu Gly Leu Pro Val
1          5          10          15
Tyr Leu Cys Gly Leu Asp Phe Ile Leu Asp Arg Gly Lys Ser Pro Phe
          20          25          30
Gly Phe Phe Gly Ser Ser Gly Val Leu Cys Ala Ile Lys Leu Leu Leu
          35          40          45
Lys Gly Ser Phe Ser Pro Pro Ser Ser Phe Phe Phe Leu Pro His Tyr
          50          55          60
Arg Leu Val Asp Ser Asp Trp Val Ser Glu Ile Leu Ser Tyr Ala Thr
65          70          75          80

```

<210> 39881  
 <211> 320  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39881
Pro Glu Met Val Cys Leu Arg Arg Met Phe Ser Pro Phe Tyr Ala Leu
1          5          10          15
Ile Pro Leu Ala Asp Arg Cys Ala Tyr Val Ala Leu Ser Phe Ala Ala
          20          25          30
Gly Lys Ala Ser Ala Leu Val Val Asp Val Gly Ala Ser Asn Ile Ser
          35          40          45

```

17347

Val	Thr	Pro	Val	His	Asp	Gly	Met	Ile	Leu	Lys	Arg	Gly	Val	Gln	His
50						55					60				
Ser	Pro	Leu	Gly	Gly	Asp	Tyr	Ile	Ser	Ser	Gln	Leu	Arg	Ala	Leu	Phe
65					70					75					80
Lys	Thr	Asn	Ser	Pro	Gln	Pro	Ile	Thr	Ile	Thr	Pro	His	Tyr	Leu	Val
			85						90					95	
Ala	Ser	Lys	Thr	Ala	Val	Asp	Ala	Gly	Gln	Pro	Ala	Gln	Ala	Lys	Tyr
			100					105					110		
Lys	Thr	Phe	Pro	Pro	Asp	Lys	Ala	Pro	Asp	Ala	Ser	Tyr	Arg	Thr	Leu
		115					120					125			
Met	Glu	Glu	Arg	Thr	Leu	Ser	Glu	Phe	Lys	Glu	Cys	Val	Val	Gln	Val
130						135					140				
Trp	Pro	Gly	Pro	Asn	Lys	Leu	Ser	Ala	Thr	Gly	Pro	Asn	Gly	Val	Ser
145					150					155					160
Asn	Glu	Glu	Val	Ala	Lys	Ser	Ser	Pro	Gly	Arg	Pro	Phe	Glu	Phe	Pro
				165					170					175	
Asp	Gly	Tyr	Asn	Gln	Val	Phe	Gly	Ile	Asp	Arg	Tyr	Arg	Val	Val	Glu
			180					185					190		
Ser	Leu	Phe	Asp	Ala	Lys	Ala	Ala	Ile	Pro	Asp	Pro	Glu	Ser	Val	Phe
		195					200					205			
Pro	Ala	Pro	Thr	Gln	Ala	Gln	Thr	Val	Pro	Glu	Leu	Ile	Lys	Ala	Ala
						215					220				
Leu	Asn	Gly	Val	Asp	Val	Asp	Val	Arg	Pro	His	Leu	Leu	Ala	Asn	Val
225					230					235					240
Val	Val	Thr	Gly	Ala	Ser	Ser	Leu	Leu	Tyr	Gly	Phe	Thr	Asp	Arg	Leu
				245					250					255	
Asn	Gln	Glu	Leu	Met	Gln	Ser	Tyr	Pro	Gly	Pro	Arg	Val	Arg	Ile	Ser
			260					265					270		
Ala	Ser	Gly	Asn	Thr	Ala	Glu	Arg	Lys	Phe	Gly	Ser	Trp	Val	Gly	Gly
		275					280					285			
Ser	Ile	Leu	Ala	Ser	Leu	Gly	Thr	Phe	His	Gln	Met	Trp	Ile	Ser	Lys
		290				295					300				
Lys	Glu	Tyr	Asp	Glu	His	Gly	Pro	Asn	Ile	Val	Glu	Lys	Arg	Cys	Lys
305					310					315					320

<210> 39882

<211> 82

<212> PRT

<213> A.fumigatus

<400> 39882

Lys	Ala	Trp	Lys	Ile	Pro	Gln	Val	Ser	Asn	Leu	Ile	Lys	Ser	Ser	Gly
1				5					10					15	
Thr	Pro	Phe	Leu	Cys	Arg	Asn	Leu	Asn	Cys	Ile	Asn	Val	Ser	His	Tyr
			20					25					30		
Arg	Ala	Ala	Thr	Thr	Asn	Lys	Arg	Pro	Pro	His	Ala	Phe	Phe	Ala	Ala
		35					40					45			
Phe	Lys	Asn	Leu	Thr	Tyr	Phe	Asn	His	Gln	Pro	Cys	Leu	Gln	Lys	His
	50					55				60					
Ile	Lys	Ile	Gln	Glu	Leu	Gln	Leu	Ser	Lys	Arg	Ala	Glu	Ser	Tyr	Leu
65					70					75					80
Leu	Ser														

<210> 39883

<211> 289

17348

<212> PRT

<213> A.fumigatus

<400> 39883

```

His Arg Leu Thr Cys Arg Arg Gln Val Leu Tyr Ile Ile Pro Val Pro
1      5      10      15
Leu Asp Ala Ala Thr Ile Gly Asp Ala Thr Ile Cys Cys Pro Leu Val
      20      25      30
Ile Lys Arg Asp Gly Asp Ser Ile Ile Cys Ser Ile Leu Pro Ser Ala
      35      40      45
Thr Thr Asp Arg Gly Ile Met Cys Asn Ser Asn Lys Leu Val Ser Pro
      50      55      60
Ala Phe Pro Glu Ala Ile Lys Cys Ala Asp Phe Thr Met Arg Thr Pro
65      70      75      80
Asp Leu Thr Ala Arg Ser Lys Tyr Arg His Pro Gln Thr Asn Glu Ala
      85      90      95
Met Ser Lys Ala Asn Met Tyr Thr Glu Thr Ala Pro Val Asn Asp Ser
      100     105     110
Val Val Glu Asp Thr Ala Ser Asn Ser Asp Asn Leu Arg Lys Val Ile
      115     120     125
Thr Lys Glu Asn Ala Ile Phe Thr Thr Gly Ser Ser Ala Leu Pro Pro
      130     135     140
Phe Ile Asp Leu Glu Lys Thr Gln Ile Ile Arg Phe Gly Thr Gly Leu
145     150     155     160
Glu Phe Gln Leu Pro Asp Glu Glu Ser His Met Arg Glu Glu Pro Ser
      165     170     175
Ala Ile Val Leu Pro Cys Ile Phe Gly Thr Glu Leu Gln Gly Pro Ile
      180     185     190
Leu Leu Ala Thr Gly Thr Val Pro Ser Asn Val Pro Phe Pro Asn Ala
      195     200     205
Asp Ala Leu Arg Asp Tyr Tyr Lys Gln Leu Lys Asn Ala Val Val Ile
      210     215     220
Val Asp Glu Arg Met Thr Asp Asn Ala Arg Asn Leu Ala Ser Ala Tyr
225     230     235     240
Arg Ile Asn Ala Leu Phe Ile Val Arg Leu Thr Pro Glu Thr Glu Leu
      245     250     255
Lys Asp Thr Asn Asn Val Ile Ser Leu Met Asn Ser Ala Asn Ile Lys
      260     265     270
Cys Ser Ala Gly Thr Arg Arg Thr Pro Val Leu Asp Ser Gly Ser Asp
      275     280     285
Leu

```

<210> 39884

<211> 105

<212> PRT

<213> A.fumigatus

<400> 39884

```

Val Leu Met Ser Trp Phe Ser Ser Pro Thr Cys Ala Val Glu Arg Met
1      5      10      15
Glu Lys Gly Asp Phe Ser Ser Phe Cys Gln Thr Ile Leu Trp Asn Met
      20      25      30
Ser Gly Tyr Leu Asp Pro Ala Asn Leu Ala Ile Thr Val Thr Thr Ser
      35      40      45
Asp Thr Ala Ala Pro Ala Gly Lys Thr Lys Glu Gly Leu Thr His Leu

```

17349

```

      50              55              60
Ile His Val His Leu Thr Phe Pro Gln Ser Ile Thr Val Ser Ser Ser
65              70              75              80
Gln Ala Thr Ile Val Lys Thr Gly Lys Thr Arg Ile Ile Ser Tyr Asn
      85              90              95
Tyr Ile Gln His Lys Trp Ile Ile Asp
      100              105

```

<210> 39885  
 <211> 134  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39885
Gln Arg Thr Glu Val Phe Asp Asp Phe Gln Ile Met Gln Ala Pro Ser
1              5              10              15
Ser Thr Phe Lys Val Pro Ile Val Ser Asp Gln Ile Thr Ile Leu Ala
      20              25              30
Val Ser Glu Arg Thr Pro Thr Tyr Asp Phe Cys Phe Ala Asp Glu
      35              40              45
Ser Cys Asn Thr Cys Cys Trp Leu Ala Arg Asn Thr Phe Pro Gly Ile
      50              55              60
Thr His Ser Gly Asp Ile Leu Asn Gly Gln Asp Leu Leu Asp Tyr Val
65              70              75              80
Thr Ile Asn Lys Asp Thr Leu Thr Glu Lys Glu Ile Cys Val Phe Ile
      85              90              95
Ser Gly Tyr Arg Ser Thr Leu Ile Thr Arg Phe Leu Gly Thr Tyr Pro
      100              105              110
Ala Leu Leu Val Ala Asp His Val Asp Lys Val Cys Ser Glu Ser Gly
      115              120              125
His Val Pro Ser Ile Asp
      130

```

<210> 39886  
 <211> 275  
 <212> PRT  
 <213> A.fumigatus

```

<400> 39886
Asn Ala Val Pro Ala Leu Ala Gly Pro Gln Ser Leu Ile Leu Val Gln
1              5              10              15
Ile Ser Glu Lys Tyr Tyr Phe Tyr Arg Gly Ile Ala Asn Arg Ala His
      20              25              30
Leu Asn Thr Ser Gly Leu Ala Phe Gly Ser Asp Val Thr Ser Val Leu
      35              40              45
Glu Ser Val Gly Thr Gly Ser Ile Leu Asp Pro Arg Ile Glu Arg Val
      50              55              60
Ile Asn Leu Gly Gly Val Asn Ser Ile Val Leu Pro Ser Thr Gly Gln
65              70              75              80
Leu Val Gln Pro Gln Asp Leu Gln Lys Leu Leu Glu Asp Ile Ser Ile
      85              90              95
Asp Gln Ile Gln Asn Leu Glu Glu Asp Ile Ser Ala Val Val Pro Gln
      100              105              110
Leu Gln Val Leu Leu Asn Gln Lys Asp Leu Gln Glu Leu Ser Arg Ser
      115              120              125
Leu Val Thr Ala Leu Ser Ala Lys Ile Ser Asn Ala Ala Thr Pro Leu

```

## 17350

130 135 140  
 Arg Asp Ser Tyr Thr Arg Phe Leu Thr Gln Glu Tyr Arg Met Glu Asp  
 145 150 155 160  
 Pro Lys Ser Val Gln Lys Lys Asn Gln Met Phe Gly Glu Leu Arg Lys  
 165 170 175  
 Val Thr Lys Asp Met Gln Lys Ala Leu Glu Pro Val Ile Ser Cys Leu  
 180 185 190  
 Ala Asn Met Met Ser Ser Gln Thr Thr Ser Lys Arg Thr His Asp Leu  
 195 200 205  
 Lys Arg Leu Ile Arg Gln Thr Thr Ile Gln Lys Asn Val Glu Ala Val  
 210 215 220  
 Lys Ser Met Thr Phe Glu Thr Leu Met Gly Tyr Leu Glu Glu Tyr Ala  
 225 230 235 240  
 Gly Glu Met Gly Val Met Leu Leu Asn Ile Glu Thr Thr His Tyr His  
 245 250 255  
 Gln Leu Leu Gly Asn Leu Lys Asn Ser Ala Ile Asp Ala Arg Tyr Val  
 260 265 270  
 Gln Pro Ala  
 275

&lt;210&gt; 39887

&lt;211&gt; 515

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39887

Lys Thr Ala Pro Leu Met Pro Gly Met Tyr Asn Gln Leu Glu Ala Asn  
 1 5 10 15  
 Pro Phe Val Gly Asn Thr Pro Leu Ser Ser Leu Gln Lys Cys Thr Ser  
 20 25 30  
 Thr Asp Thr Asp Phe Phe Ser Gln Cys Cys Ala Leu Asp Ser Arg Ile  
 35 40 45  
 Leu His Leu Glu Gly Phe Asp Ala Gly Ile Ile Met Glu Gln Ser Gln  
 50 55 60  
 Ala Lys His Asn Gly Pro Leu Lys Ser Thr Leu Gly Pro Cys Gln Pro  
 65 70 75 80  
 Ile Leu Ala Leu Pro Cys Leu Ser Gln Leu Ser Glu Thr Gly Ser Met  
 85 90 95  
 Leu Ala Trp Val Cys Trp Asp Glu Phe Val Asn Leu Lys Ser Pro Tyr  
 100 105 110  
 Thr Val Arg Trp Ile Glu Lys Cys Asn Glu Pro His Ile Ala Ala Leu  
 115 120 125  
 Arg Ile Ile Met Arg Ser Thr Leu Ser Gln Ala Val Ala Ser Arg Glu  
 130 135 140  
 His Asp Ile Gln Pro Ser Ser Pro Glu Thr Gly His Leu Met Ser Ala  
 145 150 155 160  
 Leu Leu Met Ala Ala Met Ser Lys Leu Ala Ala Met Arg Ile Ser Lys  
 165 170 175  
 Pro Val Glu Leu Asp Lys Ala Glu Asp Thr Val Thr Lys Leu Met Arg  
 180 185 190  
 Gly Leu Phe Gly Asn Leu Leu Thr Ile Ala Gly Ser Gly Val Arg Pro  
 195 200 205  
 Leu Ser Met Val Trp Gln Leu Phe Gly Thr Asn Pro Leu Tyr Asp Leu  
 210 215 220  
 Pro Thr Ser Ser Ala Glu Trp Ile Trp Tyr Glu Asn Val Val Ala Leu  
 225 230 235 240



## 17351

Tyr Pro Tyr Thr Gly Trp Pro Pro Arg Gln Phe His Glu Asn Leu Glu  
 245 250 255  
 Lys Phe Leu Asp Lys Ala Val Ile Arg Val Val Thr Lys Asn Glu Asn  
 260 265 270  
 Val Ala Ser Ile Lys Ala Ser Arg Met Ala Glu Leu Val Lys Phe Cys  
 275 280 285  
 Lys Leu Arg Asn Ile Gln Leu Ala His Ser Arg Thr Ile Ile Thr Val  
 290 295 300  
 Phe Met Arg Met Leu Thr Ala Glu Asp Ile Asp Ile Gln Pro Val Ala  
 305 310 315 320  
 Ala Gln Leu Leu Thr Gln Leu Pro His Lys Leu Glu Arg Gln Ser Gln  
 325 330 335  
 Ser Tyr Thr Arg Met Ile Arg Tyr Leu Asn His Leu Ala Gly Gly Gly  
 340 345 350  
 Glu Arg Cys Val His Asp Asp Leu Thr Ala Ala Asn Val Tyr Thr Ser  
 355 360 365  
 Arg Ser Ala Ala Phe Ala Glu Leu Lys Lys Gln Val Cys Glu Ala Cys  
 370 375 380  
 Lys Arg Ser Asp Trp Pro Arg Met Lys Glu Ala Cys Gln Glu Ile Met  
 385 390 395 400  
 Thr Lys His Ile Glu Ile Ala Thr Leu Trp Arg Val Lys Pro Glu Ser  
 405 410 415  
 Leu Lys Ile Gln Asn Met Lys Leu Tyr Lys Ala Leu Leu Ala Ala Asp  
 420 425 430  
 Phe Asp Ser Leu Asp Gln Asn Thr Gln Ala Lys Asn Leu Gln Leu Thr  
 435 440 445  
 Arg Tyr Val Phe Ser Asp Ala Glu Thr Lys Arg Val Pro Trp Gln Val  
 450 455 460  
 Gly Lys Lys Gly Gln Phe Gly Asp Ser Ile Glu Pro Leu Asp Glu Val  
 465 470 475 480  
 Phe Leu His Glu Ile Met Thr Gly Glu Lys Ser Glu Pro Ala Pro Pro  
 485 490 495  
 Ala Thr Val Asn Glu Phe Ser Gly Glu Glu Lys Lys Ala Met Ile Glu  
 500 505 510  
 Thr Glu Asp  
 515

&lt;210&gt; 39888

&lt;211&gt; 267

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39888

Pro Pro Lys Pro Leu Ala Pro Thr Asn Lys Ala Gly Glu Tyr Asp Thr  
 1 5 10 15  
 Lys Met Asp Ser His Val Tyr Leu Gly Ala Ala Ala Glu Thr Ser Ser  
 20 25 30  
 Val Phe Arg Leu Thr Ser His Leu Thr His Gly Leu Thr Val Leu Pro  
 35 40 45  
 Thr Thr Val Glu Thr Asp Asp Ala Val Gln Arg Leu Gln Glu Ser Leu  
 50 55 60  
 Ala Ala Ala Ala Arg Gly Ser Lys Lys Thr Ala Asp Gly Ser Ala Pro  
 65 70 75 80  
 Val Ile Glu Val Lys Glu Asp Pro Glu Leu Ala Lys Arg Gln Ala Glu  
 85 90 95  
 Met Ala Glu Arg Glu Lys Leu Lys Ala Ala Arg Arg Arg Gln Gln Leu

## 17352

```

      100              105              110
Ala Glu Arg Glu Leu Asp Arg Gly Arg Arg Val Gly Phe Ser Asn Arg
      115              120              125
Ser Gly Gly Ala Gly Leu Thr Val Gly Gly Leu Glu Asp Asp Asp Gly
      130              135              140
Leu Leu Ala Thr Arg Pro Arg Ala Arg Lys Pro Arg Lys Pro Asn Arg
145              150              155              160
Arg Gly Glu Ile Tyr Thr Asp Asp Glu Glu Asp Tyr Asp Arg Arg Gly
      165              170              175
Arg Thr Arg Glu Asp Glu Tyr Asp Glu Asp Asp Gly Phe Leu Val Gly
      180              185              190
Ser Asp Glu Glu Pro Glu Val Ile Glu Asp Asp Glu Asp Glu Glu Ile
      195              200              205
Leu Glu Asp Asp Glu Met Asp Ala Glu Gly Glu Glu Glu Glu Thr Val
      210              215              220
Pro Ala Gln Lys Pro Ala Lys Glu Lys Arg Pro Ser Pro Glu Arg Pro
225              230              235              240
Val Ser Glu Ala Gly Ala Ser Gly Thr Pro Pro Val Arg Lys Lys Asn
      245              250              255
Arg Tyr Ile Val Asp Asp Asp Asp Glu Asp Glu
      260              265

```

&lt;210&gt; 39889

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39889

```

Lys Thr Gln Leu Val Val Gln Ser Phe Leu Val Ala Arg Thr Gln Pro
1              5              10              15
Leu Phe Ala Asn Met Asn Thr Ser Lys Ala Ser Lys Lys Arg Lys Ala
      20              25              30
Val Thr Arg Asp Val Glu Glu Glu Ala Gly Val Phe Ser Gly Asp Glu
      35              40              45
Leu Asn Thr Gly Asn Leu Asp Gly Ala Leu Ser Asp Asn Ala His Asp
      50              55              60
Leu Ser Ser Asp Glu Asp Glu Ser Asp Ser Glu Val Glu Leu Ile Asp
65              70              75              80
Asp Phe Ser Asp Glu Glu Asp Glu Glu Glu Glu Asp Val Leu Asp Ser
      85              90              95
Asp Glu Ile Pro Ser Asp Gly Glu Asp Ser Ala Lys Lys Lys Ser Asn
      100              105              110
Ala Ala Pro Gly Glu Leu Gly Ala Val Ile Asp Asp Asp Asp Asp
      115              120              125
Asp Asp Asp Asp Asp Glu Ser Pro Ser Glu Glu Glu Gln Leu Asn Tyr
      130              135              140
Arg Ile Glu Lys Asp Ala Asn Gly Asn Asp Arg Phe Val Tyr Asp Glu
145              150              155              160
Ile Asn Pro Asp Asp Asn Ser Asp Tyr Ser Asp Val Asp Glu Asn Ala
      165              170              175
Asn Thr Ile Gly Asn Ile Pro Leu Ser Phe Tyr Asp Gln Tyr Pro His
      180              185              190
Ile Gly Tyr Asp Ile Asn Gly Lys Lys Ile Met Arg Pro Ala Lys Gly
      195              200              205
Glu Ala Leu Asp Ala Leu Leu Asp Ser Ile Glu Ile Pro Lys Gly Trp
      210              215              220

```

17353

Thr Gly Leu Thr Asp Pro Ser Thr Gly Lys Pro Leu Glu Leu Ser Gln  
 225 230 235 240  
 Glu Glu Leu Glu Leu Leu Arg Lys Val Gln Met Asn Glu Ile Pro Glu  
 245 250 255  
 Asp Gly Tyr Asn Pro Tyr Glu Pro Ile Val Glu Trp Phe Thr Ser Gln  
 260 265 270  
 Gln Glu Ile Met Pro Leu Ser Ala Ala Pro Glu Pro Lys Arg Arg Phe  
 275 280 285  
 Val Pro Ser Lys His Glu Ala Lys Arg Val Met Lys Ile Val Lys Ala  
 290 295 300  
 Ile Arg Glu Gly Arg Ile Leu Pro Phe Lys Pro Pro Thr Glu Glu Asp  
 305 310 315 320  
 Glu Glu Asp Asp Thr Ile Val  
 325

<210> 39890

<211> 491

<212> PRT

<213> A.fumigatus

<400> 39890

Tyr Asp Leu Trp Ala Asp Glu Ala Glu Arg Lys Asp Arg Pro Met His  
 1 5 10 15  
 Ile Pro Ala Pro Lys Leu Pro Pro Pro Gly Tyr Glu Glu Ser Tyr His  
 20 25 30  
 Pro Pro Pro Glu Tyr Leu Pro Asn Arg Lys Glu Arg Lys Thr Trp Glu  
 35 40 45  
 Glu Ala Asp Pro Glu Asp Arg Asp Arg Glu Phe Leu Pro Asn Asp Phe  
 50 55 60  
 Gly Ser Leu Arg Arg Val Pro Gly Tyr Glu Asn Phe Val Lys Glu Lys  
 65 70 75 80  
 Phe Glu Arg Cys Leu Asp Leu Tyr Leu Ala Pro Arg Val Arg Arg Ser  
 85 90 95  
 Lys Leu Asn Ile Asp Pro Glu Ser Leu Leu Pro Lys Leu Pro Ser Pro  
 100 105 110  
 Glu Glu Leu Lys Pro Phe Pro Thr Ala Cys Ala Thr Val Phe Arg Gly  
 115 120 125  
 His Lys Gly Arg Val Arg Thr Leu Ala Val Asp Pro Ser Gly Leu Trp  
 130 135 140  
 Leu Ala Ser Gly Gly Asp Asp Gly Thr Val Arg Val Trp Glu Leu Leu  
 145 150 155 160  
 Thr Gly Arg Gln Leu Trp Ser Val Lys Leu Ser Glu Glu Asp Pro Val  
 165 170 175  
 Asn Val Val Arg Trp Arg Pro Gly Lys Asp Ala Leu Ile Leu Ala Ala  
 180 185 190  
 Ala Ala Gly Asp Asp Ile Phe Leu Ala Val Pro Pro Ile Val Asp Pro  
 195 200 205  
 Ala Met Glu Lys Ala Ser Leu Asp Ile Leu Asp Ala Gly Trp Gly Tyr  
 210 215 220  
 Ala Ala Ser Val Pro Pro Pro Thr Pro Ala Glu Ala Asn Lys Lys Asn  
 225 230 235 240  
 Asn Pro Pro Lys Trp Met Arg Pro Ser Ser Ser Leu Ala Asp Ser Gly  
 245 250 255  
 Val Cys Ala Val Ile Pro Leu Arg Tyr Val Ala Lys Ser Leu Ser Trp  
 260 265 270  
 His Arg Arg Gly Asp Tyr Phe Val Thr Val Cys Pro Gly Ser Ser Thr

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      275              280              285
Pro Ala Ser Val Ala Ile Ala Ile His Thr Leu Ser Lys His Leu Thr
  290              295              300
Gln Tyr Pro Phe Arg Arg Arg Ile Lys Gly Gly Gly Pro Pro Gln Ala
  305              310              315              320
Ala His Phe His Pro Ser Lys Pro Ile Leu Phe Val Ala Asn Gln Arg
      325              330              335
Ser Ile Arg Ala Tyr Asp Leu Ser Arg Gln Leu Leu Val Lys Ile Leu
      340              345              350
Gln Pro Gly Ala Arg Trp Ile Ser Ser Phe Asp Ile His Pro Thr Ser
      355              360              365
Ser Thr Ala Ser Gly Gly Asp Asn Leu Ile Val Gly Ser Tyr Asp Arg
      370              375              380
Arg Leu Leu Trp His Asp Leu Glu Leu Ser Gln Arg Pro Tyr Lys Thr
  385              390              395              400
Leu Arg Tyr His Arg Lys Ala Ile Arg Ala Val Lys Phe His Pro Gly
      405              410              415
Gly Arg Tyr Pro Leu Tyr Ala Asp Ala Ile Asp Asp Arg Ser Leu Gln
      420              425              430
Ile Phe Leu Arg Gln Cys Tyr Arg Arg His Ala Gln Gln Cys His His
      435              440              445
Cys Phe Gly Ser Arg Phe Ser Arg Asp Thr Lys Ser Leu Gly Lys Leu
      450              455              460
Gly Val Leu Asp Val Asp Trp His Pro Arg Asp Pro Trp Trp Val Ser
  465              470              475              480
Ala Gly Ala Asp Gly Thr Cys Arg Leu Trp Met
      485              490

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&lt;210&gt; 39891

&lt;211&gt; 303

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39891

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Ser Ala Tyr Pro Ser Ser Pro Val Val Lys Ile Phe Val Ser Asn Ala
  1              5              10              15
Asp Phe Phe Thr Ala Leu Pro Lys Ile Gln Pro Ser Ser Lys Arg Glu
      20              25              30
Gly Phe Ala Thr Ile Pro Asp Thr Thr Trp Ala Asp Ile Gly Ala Leu
      35              40              45
Gly Gln Ile Arg Glu Glu Leu Asn Thr Ala Ile Val Asp Ala Ile Lys
      50              55              60
Ser Pro Glu Leu Tyr Ala Asn Val Gly Ile Thr Ala Pro Thr Gly Val
      65              70              75              80
Leu Leu Trp Gly Pro Pro Gly Cys Gly Lys Thr Leu Leu Ala Lys Ala
      85              90              95
Val Ala Asn Glu Ser Arg Ala Asn Phe Ile Ser Val Lys Gly Pro Glu
      100              105              110
Leu Leu Asn Lys Phe Val Gly Glu Ser Glu Arg Ala Val Arg Gln Val
      115              120              125
Phe Val Arg Ala Arg Ser Ser Val Pro Cys Ile Ile Phe Phe Asp Glu
      130              135              140
Leu Asp Ala Leu Val Pro Arg Arg Asp Asp Ala Leu Ser Glu Ala Ser
      145              150              155              160
Ala Arg Val Val Asn Thr Leu Leu Thr Glu Leu Asp Gly Leu Gly Ser
      165              170              175

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## 17355

Ser Arg Gln Gly Ile Tyr Val Ile Ala Ala Thr Asn Arg Pro Asp Ile  
 180 185 190  
 Ile Asp Pro Ala Met Leu Arg Pro Gly Arg Leu Glu Thr Leu Leu Tyr  
 195 200 205  
 Val Ser Leu Pro Asn Pro Leu Glu Arg Val Glu Ile Leu Lys Thr Leu  
 210 215 220  
 Val Arg Lys Leu Pro Ile Glu Phe Asn Glu Asp Met Arg Arg Leu Ala  
 225 230 235 240  
 Glu Glu Cys Glu Gly Phe Ser Gly Ala Asp Leu Gly Ser Leu Leu Arg  
 245 250 255  
 Arg Ala Gly Tyr Ser Ala Ile Lys Arg Arg Asp Gln Ile Ser Phe Glu  
 260 265 270  
 Asp Phe Val Ala Ala Lys Ala Phe Ile Arg Pro Ser Val Thr Asp Leu  
 275 280 285  
 Lys Lys Tyr Glu Lys Leu Arg Arg Glu Trp Ser Gly Gly Val Leu  
 290 295 300

&lt;210&gt; 39892

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39892

Phe Asn Cys Ser Ser Ser Leu Gly Leu Ser Ser Ser Ser Ser Ser Ser  
 1 5 10 15  
 Ser Ser Ser Ser Ser Ile Thr Ala Pro Ser Ser Pro Gly Ala Ala Phe  
 20 25 30  
 Asp Phe Phe Leu Ala Glu Ser Ser Pro Ser Asp Gly Ile Ser Ser Leu  
 35 40 45  
 Ser Ser Thr Ser Ser Ser Ser Ser Ser Ser Ser Ser Leu Lys Ser Ser  
 50 55 60  
 Ile Ser Ser Thr Ser Glu Ser Leu Ser Ser Ser Ser Leu Asp Arg Ser  
 65 70 75 80  
 Trp Ala Leu Ser Glu Ser Ala Pro Ser Arg Leu Pro Val Phe Asn Ser  
 85 90 95  
 Ser Pro Glu Asn Thr Pro Ala Ser Ser Ser Thr Ser Arg Val Thr Ala  
 100 105 110  
 Leu Arg Phe Phe Glu Ala Phe Glu Val Phe Ile Phe Ala Lys Ser Gly  
 115 120 125  
 Cys Val Arg Ala Thr Arg Lys Leu  
 130 135

&lt;210&gt; 39893

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39893

Gln Ala Ser Asn Ile Gly Lys Arg Lys Leu Lys Cys Ser Gly Glu Ala  
 1 5 10 15  
 Thr Gly Cys Ser Arg Cys Leu Lys Gln Ser Leu Pro Cys His Tyr Ser  
 20 25 30  
 Leu Gln Lys Pro Met Gly Arg Pro Pro Lys Lys Arg Pro Arg Glu Asp  
 35 40 45  
 Asn Asp Ala Ser Val Tyr Glu Ile Thr Asp Asn Gly Met Trp Ala Asp  
 50 55 60

## 17356

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Ile Asp Asp Gly Gly Ile Leu Thr Glu Glu Ala Gly Ala Glu Ala Thr
65          70          75          80
Ala Ala Ser Asp Ala Leu Arg Leu Cys Pro Pro Val Tyr Thr Ala Pro
          85          90          95
Met Arg Met Pro Gln Ala Phe Pro Asn Leu Leu Ser Thr Asp Asp Ser
          100         105         110
His Ser His Leu Trp Gln Leu Glu Ser Gly Arg Ser Leu Asp Pro Ile
          115         120         125
Pro Ala Thr Thr Gly Pro Trp Pro Asp Phe Ser Ser Val Thr Ala Ala
          130         135         140
Thr Ser Ser Pro Phe Thr Leu Pro Ser Ser Leu Thr Leu Ile Asp Ser
145          150         155         160
Pro Ser Val Ser Ser Pro Ser Ser Asp Gly Gly Asn Ser Ser Gln Cys
          165         170         175
Thr Cys Leu Ser Tyr Leu Cys Leu Cys Leu Ser His Leu Ser Ser Leu
          180         185         190
Ala Pro Phe Pro Ile Ser Gln His Thr
          195         200

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<210> 39894  
 <211> 182  
 <212> PRT  
 <213> A.fumigatus

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<400> 39894
Cys Ser Leu Phe Ile Ala Ala Lys Thr Ala Arg Ala Val Ile Arg Cys
1          5          10          15
Glu Val Cys Pro Thr Ser Phe Ala Leu Gly Met Gln Asn Val Met Ser
          20          25          30
Thr Gly Thr Leu Leu Asn Val Ile Ala Asp Ala Trp Leu Arg Val Ser
          35          40          45
Gln Ala Asp Ala Glu Glu Leu Gly Lys Leu Ala Ala Pro Pro Ala Tyr
          50          55          60
Val Ala Ser Val Thr Gln Asn Ser Pro Asn Pro Ala Glu Ala Trp Lys
65          70          75          80
Asp Trp Leu Arg Gln Thr Val Arg Ser Ala Ile Thr Gly Gly Pro Ala
          85          90          95
Asp Pro Ala Gly Gln Val Lys Cys Ser Asp Ser Pro Thr Leu Leu Ser
          100         105         110
Leu Ile Glu Glu Met Glu Ala Arg Gln His Arg Trp His Arg Thr Arg
          115         120         125
Thr Val Glu Ser Pro Asn Glu Pro Gly Ser Cys Ser Pro Val Ser His
          130         135         140
Glu Asp His Arg Glu Glu Asp Met Leu Cys Phe Arg Val Ile Arg Ser
145          150         155         160
Ala Arg Asp Val Ile Ala Lys Phe Glu Phe Ala Pro His Glu Tyr Pro
          165         170         175
Glu Gly Val Val Pro Val
          180

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<210> 39895  
 <211> 124  
 <212> PRT  
 <213> A.fumigatus

<400> 39895

17357

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Thr His Ala Met Glu Pro Phe Gln Val Arg Leu Asn Cys Val Asp His
1          5          10          15
Tyr Gln Ala Thr Pro Ser Glu Phe Asp Pro Pro Leu Pro Tyr Arg Asp
          20          25          30
Gly Ala Ala Arg Lys Tyr Asp Gly Trp Lys Val Pro Val Ile Arg Ile
          35          40          45
Phe Gly Ala Thr Glu Thr Gly Gln Lys Val Cys Val His Val His Gly
          50          55          60
Ala Phe Pro Tyr Leu Tyr Ile Glu Tyr Asp Gly Pro Leu Asp Pro Glu
65          70          75          80
Gln Gly Lys Phe Arg Thr Arg Cys Thr Pro Ser Ile Phe Phe Ser Ser
          85          90          95
Gly Gly Ser Ser Leu Arg Asn Gln Glu Ala Pro Ser Leu His Arg Pro
          100          105          110
Cys Thr Gly Ile Glu Leu Ser Ser Gln Cys Val Arg
          115          120

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<210> 39896

<211> 393

<212> PRT

<213> A.fumigatus

<400> 39896

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Tyr Asp Ile Ala Glu Leu Ser Asp His Ile Pro Val Gln Thr Asp Glu
1          5          10          15
Ile Met Pro Ala Glu Ser Ser Asp Arg Ser Leu His Asn Gly Lys Leu
          20          25          30
Gln Glu Asn Val Gln Lys His Ile Pro Ser Gly Lys Ala Phe His Asp
          35          40          45
Asp Thr Ala Asn Ala Arg Arg Asn Pro Lys Arg Ser His Gln Gly Val
          50          55          60
Leu Asp Ser Gly Val Pro Gln Lys Lys Pro Arg Phe Phe Asn Asp Gly
65          70          75          80
Ala Ser His Ser Pro Asp Asn Asn Pro Leu Gln Lys Ala Ala Asp Ile
          85          90          95
His Thr Val Arg Glu Gly Pro Lys Ala Thr Tyr Ile Ala Arg Thr Ser
          100          105          110
Thr Ser Phe Thr Ala Ser Lys Arg Val Ser Ser Gln Gly Thr Pro Pro
          115          120          125
Ala Ser Gln Asp Thr His Leu Lys Asn Asn Gly Gln Gly Gly Arg Leu
          130          135          140
Asn Phe Pro Val Val Lys Asp Pro Asn Asp Pro Met Thr Ile Met Arg
145          150          155          160
Leu Ser Gln Asp Cys Ser Pro Lys Ala Ile Met Glu Phe Asp Asn Gln
          165          170          175
Thr Val Ser Gln Ser Leu Gly Ser Ala Gln Lys Ser Thr Ser Gly Ser
          180          185          190
Gly Thr Ala Ser Gln Ser Gln Pro Leu Ser Ser Gly Leu Glu Pro Asn
          195          200          205
Ile Thr Asn Thr His Val Ser Asp Leu Ala Pro Lys Ile Tyr Asp Ala
210          215          220
Phe Asn Ile Ser Glu Gly Val Arg Ile Cys Tyr Trp Arg Tyr Ala Cys
225          230          235          240
Pro Asp Ala Ser Glu Val Ser Ala Thr Leu Ala Asp His Gly Tyr Leu
          245          250          255
Ser Val Ile Tyr Gln Lys Ala Phe Tyr Ser Asn Asn Gln Asp Val Pro

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17358

[illegible]

<210> 39897

<211> 518

&lt;212&gt; PRT

<213> A.fumigatus

<400> 39897

Ser 1	Glu	Phe	Ser	Glu 5	Pro	Gln	Lys	Leu	Ala 10	Lys	Arg	Phe	Ala	Ser 15	Thr
Tyr	Met	Ala	His	Phe 20	Leu	Ile	Tyr	Thr	Leu 25	Ser	Thr	Met	Gly 30	Leu	Leu
Thr	Leu	Asn	Lys	Val 35	Ser	Ser	Glu	Arg	Val 40	Ala	Leu	Gln	Val 45	Phe	Phe
Ser	His	Gln	Ala	Ala 50	Val	Arg	Ser	Ala	Ile 55	Arg	Arg	Leu	His 60	Leu	Ser
Ile 65	Asp	His	Ala	Leu 70	Ala	Leu	Asn	Tyr	Arg	Arg	Asn	Ala	Tyr	Asp	Lys 80
Lys	Thr	Ala	Phe	Val 85	Ala	His	Ile	Thr	Leu 90	Val	Lys	Gly	Val 95	Pro	Phe
Tyr	Gly	Tyr	His	Val 100	Gly	Tyr	Arg	Phe	Phe 105	Phe	Lys	Ile	Tyr 110	Leu	Leu
Asp	Pro	Val	Tyr	Thr 115	Thr	Arg	Leu	Ala	Asp 120	Leu	Leu	Leu	Gln 125	Gly	Ala
Val	Leu	Lys	Arg	Pro 130	Met	Gln	Pro	Tyr	Glu 135	Ser	His	Leu	Gln 140	Tyr	Val
Pro 145	Gln	Trp	Met	Cys 150	Asp	Tyr	Asn	Leu	Tyr	Gly	Cys	Ala	Tyr 155	Met	Lys 160
Cys	Ser	Lys	Val	Lys 165	Phe	Arg	Ser	Pro	Ile 170	Pro	Glu	Tyr	Tyr 175	Glu	Leu
Ser	Asn	Leu	Ser	His 180	Arg	Trp	His	Asp	Arg 185	Ser	Ile	Gln	Pro 190	Asp	Cys
Val	Ser	Asp	Ala	Thr 195	Val	Leu	Pro	Lys	Gln 200	Ser	His	Cys	Pro 205	Leu	Glu
Ala	Asp	Val	Cys	Val 210	His	Asp	Ile	Leu	Asn 215	Arg	Val	Asp	Ile 220	Lys	Glu
Arg 225	Pro	Leu	His	Gln 230	Asp	Phe	Thr	Glu	Met 235	Leu	Lys	Pro	Ile 240	Ala	Gln
Lys	Glu	Arg	Leu	Val 245	Pro	Ser	Met	Ala	Gly 250	Leu	Trp	Gln	Asp 255	Glu	Thr



Arg Arg Arg Lys Gln Arg Met Gly Leu Val Asp Pro Gly Ser Ser Pro  
 260 265 270  
 Phe Gly Pro Glu Glu Leu Met Ser Phe Ser Ala Asp Pro Arg Asn Asn  
 275 280 285  
 Ser Glu Gly Gly Trp Ile His Glu Asp Glu Phe Arg Gln Leu Met Ser  
 290 295 300  
 Gln Ile Val Glu Glu Glu Arg Lys Gln Asn Asn Glu Asn Val Thr Leu  
 305 310 315 320  
 Asp Asn Phe Leu Gln Glu Asp Pro Leu Glu Lys Arg Ile Lys Thr Ala  
 325 330 335  
 Leu Gln Ser Val Glu Asp Phe Phe Pro Asp Lys Ile Glu Leu Thr Gln  
 340 345 350  
 Met Glu Met Arg Gln Ser Leu Ile Ala Val Asp Gly Asp Gly Glu Ala  
 355 360 365  
 Gln Val Asn Glu Asn Ala Ala Leu Ser Ala Asp Ala Asp Ile Asp Phe  
 370 375 380  
 Tyr Ser Ser Val Asp Tyr Tyr Ile Ser Asn Pro Leu Ser Asp Asp His  
 385 390 395 400  
 Gly Ala Ile Glu Glu Val Val Asp Gly Ile Asp Glu Ser Thr Gly Asp  
 405 410 415  
 Asp Ile Phe Asp Met Thr Leu Gln Ser Phe Arg Thr Ile Phe Arg Cys  
 420 425 430  
 Lys Arg Met Arg Leu Cys Arg Leu Asn His Arg Ile Val His Cys Thr  
 435 440 445  
 Met Glu Asn Tyr Arg Lys Met Phe Arg Ser Thr Phe Pro Val Ala Arg  
 450 455 460  
 Leu Phe Met Met Thr Leu Arg Met Gln Glu Gly Ile Leu Arg Asp His  
 465 470 475 480  
 Thr Arg Ala Tyr Leu Thr Leu Val Phe Pro Arg Arg Asn Arg Gly Ser  
 485 490 495  
 Ser Met Thr Val His Leu Thr Arg Arg Ile Thr Thr Pro Phe Arg Lys  
 500 505 510  
 Leu Leu Thr Phe Thr Leu  
 515

&lt;210&gt; 39898

&lt;211&gt; 928

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (905)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39898

Gly Lys Pro Pro Pro Leu Glu Tyr Gly Ser Leu Leu Pro Tyr Pro Gln  
 1 5 10 15  
 Ala Val Gln Lys Ser Trp Asn Gly Ser Thr Lys Asn Asn Pro Gly Ala  
 20 25 30  
 Lys Arg Gly Arg Lys Gln Ile Lys Ser Gln Asn Pro Ser His Asn Cys  
 35 40 45  
 Thr Pro Lys Phe Ile Arg Lys Ser Lys Asp Leu Thr Gln Lys Asn Asp  
 50 55 60  
 Tyr Gly Phe Lys Tyr Ser Gln Lys Gly Lys Ser Thr Ser Val Glu His  
 65 70 75 80

Gln Thr Gln Tyr Met Ser Ser Met Ser Leu Glu Val His Val Asn Thr  
 85 90 95  
 Arg Gly Val Leu Leu Pro Asn Pro Glu Glu Asp Glu Ile Ser Cys Ile  
 100 105 110  
 Phe Trp Cys Ile Gln Ser Asp Asp Gln Asp Val Asp Val Asn Gly Asn  
 115 120 125  
 Leu Pro Gly Val His Val Gly Met Ile Ala Gln Gly Ser Gly Asp Gly  
 130 135 140  
 Pro Thr Ser Lys Leu Ser Lys Ala Leu Arg Ile Glu Leu Glu His Glu  
 145 150 155 160  
 Pro Thr Glu Leu Asp Leu Ile Asn Arg Leu Val Asp Ile Val Arg Tyr  
 165 170 175  
 His Asp Pro Asp Ile Ile Thr Gly Tyr Glu Val His Asn Gly Ser Trp  
 180 185 190  
 Gly Tyr Leu Ile Glu Arg Ala Arg Lys Lys Tyr Asp Phe Asp Ile Cys  
 195 200 205  
 Asp Glu Leu Ser Arg Val Arg Ser Gln Ala His Gly Arg Phe Asp Lys  
 210 215 220  
 Asp Ala Asp Arg Trp Gly Phe Asn His Thr Ser Ser Ile Arg Val Thr  
 225 230 235 240  
 Gly Arg His Met Ile Asn Ile Trp Arg Ala Met Arg Ser Glu Leu Asn  
 245 250 255  
 Leu Leu Gln Tyr Thr Met Glu Asn Val Val Phe His Leu Leu His Arg  
 260 265 270  
 Arg Ile Pro His Tyr Ser Tyr Arg Asp Leu Thr Ala Trp Tyr Gln Ser  
 275 280 285  
 Gly Lys Pro Arg Asp Val Leu Lys Val Val Gln Tyr Tyr Val Ser Arg  
 290 295 300  
 Ile Gln Met Asn Leu Glu Ile Leu Glu Ser Asn Glu Leu Ile Pro Arg  
 305 310 315 320  
 Thr Ser Glu Gln Ala Arg Leu Leu Gly Ile Asp Phe Phe Ser Val Phe  
 325 330 335  
 Ser Arg Gly Ser Gln Phe Lys Val Glu Ser Leu Met Phe Arg Ile Ala  
 340 345 350  
 Lys Pro Glu Asn Tyr Leu Leu Val Ser Pro Ser Arg Lys Gln Val Gly  
 355 360 365  
 Gln Gln Asn Ala Leu Glu Cys Leu Pro Leu Val Met Glu Pro Gln Ser  
 370 375 380  
 Asp Phe Tyr Thr Ser Pro Leu Leu Val Leu Asp Phe Gln Ser Leu Tyr  
 385 390 395 400  
 Pro Ser Ile Met Ile Ala Tyr Asn Tyr Cys Tyr Ser Thr Phe Leu Gly  
 405 410 415  
 Arg Val Arg Leu Trp Arg Gly Arg Asn Lys Met Gly Phe Met Asp Tyr  
 420 425 430  
 Lys Arg Gln Pro Arg Val Leu Glu Leu Leu Lys Asp Lys Val Asn Ile  
 435 440 445  
 Ala Pro Asn Gly Met Met Tyr Val Lys Pro Glu Val Arg Gln Ser Leu  
 450 455 460  
 Leu Ala Arg Met Leu Ala Glu Ile Leu Glu Thr Arg Val Met Val Lys  
 465 470 475 480  
 Ala Gly Met Lys Met Asp Lys Asp Asp Lys Ala Leu Gln Arg Leu Leu  
 485 490 495  
 Asn Asn Arg Gln Leu Ala Leu Lys Leu Ile Ala Asn Val Thr Tyr Gly  
 500 505 510  
 Tyr Thr Ser Ala Ser Phe Ser Gly Arg Met Pro Cys Ser Glu Ile Ala  
 515 520 525

17361

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Asp Ser Ile Val Gln Ser Gly Arg Glu Thr Leu Glu Lys Ala Ile Ala
530                    535                    540
Leu Ile His Ser Val Glu Arg Trp Gly Ala Glu Val Val Tyr Gly Asp
545                    550                    555                    560
Thr Asp Ser Leu Phe Val Tyr Leu Lys Gly Arg Thr Arg Asp Glu Ala
565                    570                    575
Phe Gly Ile Gly Glu Glu Ile Ala Lys Ala Val Thr Asp Ile Asn Pro
580                    585                    590
His Pro Ile Lys Leu Lys Phe Glu Lys Val Tyr His Pro Cys Val Leu
595                    600                    605
Leu Ala Lys Lys Arg Tyr Val Gly Phe Lys Tyr Glu His Arg Asn Gln
610                    615                    620
Lys Glu Pro Glu Phe Asp Ala Lys Gly Ile Glu Thr Val Arg Arg Asp
625                    630                    635                    640
Gly Thr Pro Ala Glu Gln Lys Ile Glu Glu Lys Ala Leu Lys Leu Leu
645                    650                    655
Phe Arg Thr Ala Asp Leu Thr Gln Val Lys Arg Tyr Phe Gln Lys Gln
660                    665                    670
Cys Ala Lys Ile Met Gln Gly Arg Val Ser Ile Gln Asp Phe Cys Phe
675                    680                    685
Ala Lys Glu Val Arg Leu Gly Thr Tyr Ser Glu Arg Gly Leu Leu Pro
690                    695                    700
Pro Gly Ala Met Ile Ser Thr Ser Lys Met Val Glu Asp Pro Arg Ser
705                    710                    715                    720
Glu Pro Gln Tyr Gly Glu Arg Val Pro Tyr Val Val Val Thr Gly Ala
725                    730                    735
Pro Gly Ser Arg Leu Val Asp Arg Cys Val Ala Pro Glu Thr Leu Leu
740                    745                    750
His Asn Ala Glu Leu Glu Leu Asp Ala Glu Tyr Tyr Ile Asn Lys Asn
755                    760                    765
Ile Ile Pro Pro Leu Glu Arg Ile Phe Asn Leu Val Gly Ala Asn Val
770                    775                    780
Arg Gln Trp Tyr Glu Glu Met Pro Lys Ile Gln Arg Ile Arg Arg Ile
785                    790                    795                    800
Glu Gly Ala Ala Ser Ala Ala Gly Lys Asp Ala Lys Gly Lys Thr Leu
805                    810                    815
Glu Ser Tyr Met Lys Ser Ser Ser Cys Ile Val Cys Lys Ser Lys Leu
820                    825                    830
Asp His Ile Gly Ile Pro Val Cys Ser Asp Cys Leu Gln Gln Pro His
835                    840                    845
Ile Ser Leu Leu Ser Leu Val Ser Arg Gln Gln Gln Ala Glu Lys Arg
850                    855                    860
Val Ser Asp Leu His Arg Ile Cys Gln Ser Cys Met Gly Val Pro Ser
865                    870                    875                    880
Gly Asp Asp Val Ile Cys Asp Ser Lys Asp Cys Pro Val Phe Tyr Ser
885                    890                    895
Arg Thr Arg His Leu Ala Ser Trp Xaa His Thr Lys Ala Thr Leu Ala
900                    905                    910
Pro Ile Ile Lys Leu Leu Glu Asn Gln Arg Glu Ser Ala Leu Glu Trp
915                    920                    925

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<210> 39899

<211> 466

<212> PRT

<213> A.fumigatus

&lt;400&gt; 39899

Leu Ile Pro Leu Leu Ser Pro Ile Met Lys Glu Arg Gln Ile Asn Pro  
 1 5 10 15  
 Arg Tyr Ser Arg Asp Arg Val Lys Phe Asn Cys Leu Ala Arg Lys Trp  
 20 25 30  
 Arg Pro Gln Leu Ser Ile Ser Thr Ser Phe Lys Leu Asn Val Thr Ile  
 35 40 45  
 Arg Leu Ile Ser Ser Ala Pro Ser Leu Leu Phe Leu Thr Ser Phe Ala  
 50 55 60  
 Asn Ile His Thr Met Ser Arg Lys Pro Ala Asp Val Ala Ser Lys Glu  
 65 70 75 80  
 Arg Asn Glu Tyr Ile Pro Ser Phe Ile Ala Lys Lys Pro Phe Tyr Ile  
 85 90 95  
 Asp Asp Glu Ser Thr Ala Asn Asp Tyr Leu Glu His Gln Arg Leu Gln  
 100 105 110  
 Lys Gln Ala Thr Asp Gln Ser Lys Trp Tyr Asp Arg Gly Lys Arg Ala  
 115 120 125  
 Gly Pro Ala Ala Thr Lys Tyr Arg Lys Gly Ala Cys Glu Asn Cys Gly  
 130 135 140  
 Ala Met Thr His Lys Ser Lys Glu Cys Leu Ser Arg Pro Arg Lys Leu  
 145 150 155 160  
 Gly Ala Lys Trp Thr Gly Lys Asp Ile Gln Ala Asp Glu Val Val Gln  
 165 170 175  
 Asn Val Glu Leu Gly Trp Asp Ala Lys Arg Asp Arg Trp Asn Gly Tyr  
 180 185 190  
 Asp Pro Ser Glu Tyr Arg Gln Val Ile Glu Glu Tyr Glu Glu Leu Glu  
 195 200 205  
 Lys Leu Lys Arg Asn Thr Lys Pro Gly Ala Gln Asp Gly Lys Lys Ile  
 210 215 220  
 Met Asp Gly Glu Leu Asp Asp Glu Glu Ala Ala Ile Glu Glu Ala Arg  
 225 230 235 240  
 Tyr Ala Glu Glu Ser Asp Met Gly Arg Gln Gln Ser Thr Ala Thr Arg  
 245 250 255  
 Asn Leu Arg Ile Arg Glu Asp Thr Ala Lys Tyr Leu Leu Asn Leu Asp  
 260 265 270  
 Leu Asp Ser Ala Lys Tyr Asp Pro Lys Thr Arg Arg Met Val Asp Met  
 275 280 285  
 Gly Ala Gln Asp Asp Gln Ala Ala Ala Leu Val Ala Glu Glu Asn Phe  
 290 295 300  
 Val Arg Ala Ser Gly Asp Ala Ala Glu Phe Glu Arg Ala Gln Arg Tyr  
 305 310 315 320  
 Ala Trp Glu Ser Gln Glu Arg Gly Asp Lys Lys Ile His Leu Gln Ala  
 325 330 335  
 Asn Pro Thr Ser Gly Glu Ile Leu Arg Lys Lys Glu Gln Ala Glu Thr  
 340 345 350  
 Glu Ala Lys Arg Gln Ala Gln Arg Lys Ala Leu Leu Glu Lys Tyr Gly  
 355 360 365  
 Gly Glu Glu Tyr Leu Lys Pro Thr Pro Leu Arg Glu Thr Met Val Ile  
 370 375 380  
 Glu Asn Glu Arg Phe Val Glu Tyr Asp Glu Ser Gly Ala Ile Lys Gly  
 385 390 395 400  
 Ala Pro Lys Asn Ala Val Lys Ser Lys Tyr Pro Glu Asp Val Leu Val  
 405 410 415  
 Asn Asn His Thr Thr Val Phe Gly Ser Trp Trp His Asn Phe Gln Trp  
 420 425 430  
 Gly Tyr Ala Cys Cys Phe Ser Thr Val Lys Asn Ser Tyr Cys Thr Gly

17363

435 440 445  
Ala Asp Gly Lys Ala Ile Phe Thr His Arg Pro Gly Arg Thr Ala Lys  
450 455 460  
Cys Ala  
465

<210> 39900  
<211> 127  
<212> PRT  
<213> A.fumigatus

<400> 39900  
Asn Thr Phe Asn Pro Met Asp Ser Ala Thr Thr Gly Arg Ser Pro Gln  
1 5 10 15  
Ala Val Val Leu Pro Val Leu Ser Ser Ile Ala Val Val Val Ser Ile  
20 25 30  
Pro Pro Ile Ile Leu His Trp Lys Asn Arg Asn Phe Pro Ala Thr Ala  
35 40 45  
Leu Ile Gly Trp Phe Leu Leu Ile Asn Thr Phe Asn Ile Ile Asn Ala  
50 55 60  
Leu Ile Trp Pro Thr Asp Asp Val Asp Ser Trp Trp Asp Gly His Gly  
65 70 75 80  
Leu Cys Asp Val Glu Thr Lys Val Met Ile Ala Ser Tyr Val Gly Ile  
85 90 95  
Pro Gly Thr Leu Val Cys Ile Phe Arg Ser Leu Gly Leu Cys Ala Arg  
100 105 110  
His Gln Lys Arg Tyr Ala Arg Pro Gln His Arg Pro Thr Leu Ala  
115 120 125

<210> 39901  
<211> 115  
<212> PRT  
<213> A.fumigatus

<400> 39901  
Arg Ala Met Leu Ala Tyr Arg Gly Leu Trp Ser Val Ser Ser Glu Ala  
1 5 10 15  
Trp Ala Ser Val Leu Asp Thr Arg Ser Ala Met Leu Val Pro Ser Ile  
20 25 30  
Gly Gln Arg Trp Arg Asp Arg Leu Met Asp Phe Ser Phe Cys Val Ile  
35 40 45  
Ile Pro Val Ile Ala Met Gly Thr His Ile Leu Tyr Gln Arg Ser Arg  
50 55 60  
Tyr Leu Ile Leu Thr Ile Ser Gly Cys Val Asn Asn Phe Asp Gln Ser  
65 70 75 80  
Trp Met Ser Leu Met Leu Ala Phe Ile Trp Pro Pro Ile Ile Cys Leu  
85 90 95  
Leu Ala Ala Phe Tyr Cys Gly Met Asn Met Ala Pro Ser Ser Phe Ser  
100 105 110  
Ala His Asp  
115

<210> 39902  
<211> 1886  
<212> PRT  
<213> A.fumigatus

&lt;400&gt; 39902

Glu Ala Gln Lys Ala Ala Met Pro Pro Glu His Leu Arg Lys Ile Val  
 1 5 10 15  
 Lys Asp Ile Ala Ala Val Ser Gln Lys Lys Phe Thr Thr Glu Lys Arg  
 20 25 30  
 Ser Tyr Pro Gly Ala Leu Lys Phe Met Pro His Ala Val Leu Lys Leu  
 35 40 45  
 Leu Glu Asn Met Pro Met Pro Trp Glu Ser Ala Arg Glu Val Lys Val  
 50 55 60  
 Leu Tyr His Val Asn Gly Cys Leu Thr Leu Val Asn Glu Thr Pro Arg  
 65 70 75 80  
 Val Ile Glu Pro Val Phe His Ala Gln Trp Ala Thr Met Trp Val Cys  
 85 90 95  
 Met Arg Arg Glu Lys Cys Asp Arg Arg His Phe Lys Arg Met Arg Phe  
 100 105 110  
 Pro Pro Phe Asp Asp Glu Glu Pro Pro Leu Ser Trp Ser Glu Asn Ile  
 115 120 125  
 Glu Asp Val Glu Pro Leu Glu Pro Val Gln Met Glu Leu Asp Glu Ser  
 130 135 140  
 Glu Asp Ala Pro Val Tyr Glu Trp Phe Tyr Asp His Arg Pro Leu Leu  
 145 150 155 160  
 Asp Thr Pro His Val Asn Gly Pro Ser Tyr Lys Ser Trp Asn Leu Thr  
 165 170 175  
 Leu Pro Gln Met Ala Thr Leu Tyr Arg Leu Ser His Gln Leu Leu Ser  
 180 185 190  
 Asp Val Val Asp Gln Asn Tyr Phe His Met Phe Asp Leu Asn Ser Phe  
 195 200 205  
 Leu Thr Ala Lys Ala Leu Asn Val Ala Ile Pro Gly Gly Pro Arg Phe  
 210 215 220  
 Glu Pro Leu Tyr Lys Asp Ile Asp Pro Asn Asp Glu Asp Phe Ser Glu  
 225 230 235 240  
 Phe Asn Ala Ile Asp Arg Ile Ile Phe Arg Ala Pro Ile Arg Thr Glu  
 245 250 255  
 Tyr Arg Val Ala Phe Pro Phe Leu Tyr Asn Thr Leu Pro Arg Ser Val  
 260 265 270  
 Lys Val Ser Trp Tyr Ser His Pro Gln Val Val Tyr Val Arg Ala Asp  
 275 280 285  
 Pro Asn Leu Pro Ala Phe Tyr Phe Asp Pro Val Ile Asn Pro Ile Ser  
 290 295 300  
 Ser Arg Ser Val Ala Pro Lys Asn Ile Thr Val Ser His Glu Asp Glu  
 305 310 315 320  
 Ile Phe Gly Pro Gly Asn Asn Glu Asp Asp Phe Glu Leu Pro Pro Glu  
 325 330 335  
 Val Lys Pro Phe Phe Ala Asp Glu Glu Leu Tyr Thr Pro Asp Thr Ala  
 340 345 350  
 Ser Ala Ile Ala Leu Trp Trp Ala Pro His Pro Phe Asn Lys Arg Ser  
 355 360 365  
 Gly Lys Met Val Arg Ala Gln Asp Val Pro Leu Val Lys Gln Trp Tyr  
 370 375 380  
 Leu Glu His Cys Pro Gln Gly Gln Pro Val Lys Val Arg Val Ser Tyr  
 385 390 395 400  
 Gln Lys Leu Leu Lys Thr Tyr Val Leu Asn Glu Leu His Lys Lys Lys  
 405 410 415  
 Pro Lys Ala Gln Asn Lys Gln Asn Leu Leu Arg Thr Leu Lys Ser Thr  
 420 425 430

Lys Phe Phe Gln Gln Thr Thr Ile Asp Trp Val Glu Ala Gly Leu Gln  
 435 440 445  
 Val Cys Arg Gln Gly Phe Asn Met Leu Asn Leu Leu Ile His Arg Lys  
 450 455 460  
 Asn Leu Thr Tyr Leu His Leu Asp Tyr Asn Phe Asn Leu Lys Pro Val  
 465 470 475 480  
 Lys Thr Leu Thr Thr Lys Glu Arg Lys Lys Ser Arg Phe Gly Asn Ala  
 485 490 495  
 Phe His Leu Met Arg Glu Ile Leu Arg Leu Thr Lys Leu Ile Val Asp  
 500 505 510  
 Ala Gln Val Gln Tyr Arg Leu Gly Asn Ile Asp Ala Phe Gln Leu Ala  
 515 520 525  
 Asp Gly Ile Leu Tyr Ala Phe Asn His Val Gly Gln Leu Thr Gly Met  
 530 535 540  
 Tyr Arg Tyr Lys Tyr Lys Leu Met His Gln Ile Arg Ser Cys Lys Asp  
 545 550 555 560  
 Leu Lys His Leu Ile Tyr Tyr Arg Phe Asn Ser Gly Pro Val Gly Lys  
 565 570 575  
 Gly Pro Gly Cys Gly Phe Trp Ala Pro Ala Trp Arg Val Trp Leu Phe  
 580 585 590  
 Phe Met Arg Gly Ile Ile Pro Leu Leu Glu Arg Trp Leu Gly Asn Leu  
 595 600 605  
 Leu Ser Arg Gln Phe Glu Gly Arg His Ser Lys Gly Val Ala Lys Thr  
 610 615 620  
 Val Thr Lys Gln Arg Val Glu Ser His Phe Asp Leu Glu Leu Arg Ala  
 625 630 635 640  
 Ser Val Met Ala Asp Leu Met Asp Met Met Pro Glu Gly Ile Lys Gln  
 645 650 655  
 Asn Lys Val Asn Thr Val Leu Gln His Leu Ser Glu Ala Trp Arg Cys  
 660 665 670  
 Trp Lys Ser Asn Ile Pro Trp Lys Val Pro Gly Leu Pro Ala Pro Ile  
 675 680 685  
 Glu Asn Ile Ile Leu Arg Tyr Val Lys Ser Lys Ala Asp Trp Trp Ile  
 690 695 700  
 Ser Val Ala His Tyr Asn Arg Glu Arg Ile Arg Arg Gly Ala Thr Val  
 705 710 715 720  
 Asp Lys Thr Val Ala Lys Lys Asn Leu Gly Arg Leu Thr Arg Leu Trp  
 725 730 735  
 Leu Lys Ala Glu Gln Glu Arg Gln His Asn Tyr Leu Lys Asp Gly Pro  
 740 745 750  
 Tyr Val Ser Ser Glu Glu Ala Val Ala Ile Tyr Thr Thr Met Val His  
 755 760 765  
 Trp Leu Glu Ser Arg Lys Phe Ser Pro Ile Pro Phe Pro Ser Val Ser  
 770 775 780  
 Tyr Lys His Asp Thr Lys Ile Leu Ile Leu Ala Leu Glu Arg Leu Arg  
 785 790 795 800  
 Glu Ala Tyr Ser Val Lys Gly Arg Leu Asn Gln Ser Gln Arg Glu Glu  
 805 810 815  
 Leu Ala Leu Ile Glu Gln Ala Tyr Asp Ser Pro Gly Thr Thr Ile Ala  
 820 825 830  
 Arg Ile Lys Arg Phe Leu Leu Thr Gln Arg Ala Phe Lys Glu Val Gly  
 835 840 845  
 Ile Asp Met Asn Asp Asn Tyr Ser His Ile Asn Pro Val Tyr Asp Val  
 850 855 860  
 Glu Pro Ile Glu Lys Ile Thr Asp Ala Tyr Leu Asp Gln Tyr Leu Trp  
 865 870 875 880

Tyr Gln Ala Glu Gln Arg His Leu Phe Pro Ala Trp Ile Lys Pro Ser  
 885 890 895  
 Asp Ser Glu Val Pro Pro Leu Leu Thr Tyr Lys Trp Ala Gln Gly Ile  
 900 905 910  
 Asn Asn Leu Ser Asn Val Trp Glu Thr Ala Asp Gly Glu Thr Asn Val  
 915 920 925  
 Met Ile Glu Thr Glu Leu Ser Lys Val Tyr Glu Lys Ile Asp Leu Thr  
 930 935 940  
 Leu Leu Asn Arg Leu Leu Arg Leu Ile Met Asp His Asn Leu Ala Asp  
 945 950 955 960  
 Tyr Ile Thr Ser Lys Asn Asn Val Gln Leu Ser Tyr Lys Asp Met Asn  
 965 970 975  
 His Thr Asn Ser Tyr Gly Leu Ile Arg Gly Leu Gln Phe Ser Gly Phe  
 980 985 990  
 Val Phe Gln Tyr Tyr Gly Leu Met Ile Asp Leu Leu Leu Gly Leu  
 995 1000 1005  
 Gln Arg Ala Ser Glu Met Ala Gly Pro Pro Gln Ser Pro Asn Asp Phe  
 1010 1015 1020  
 Leu Gln Phe Arg Asp Arg Ala Thr Glu Thr Arg His Pro Ile Arg Leu  
 1025 1030 1035 1040  
 Tyr Thr Arg Tyr Val Asp Lys Ile Trp Val Phe Phe Arg Phe Thr Ala  
 1045 1050 1055  
 Asp Glu Ser Arg Asp Leu Ile Gln Arg Phe Leu Thr Glu Asn Pro Asp  
 1060 1065 1070  
 Pro Asn Phe Glu Asn Val Ile Gly Tyr Lys Asn Lys Lys Cys Trp Pro  
 1075 1080 1085  
 Arg Asp Cys Arg Met Arg Leu Met Arg His Asp Val Asn Leu Gly Arg  
 1090 1095 1100  
 Ala Ala Phe Trp Asp Leu Lys Asn Arg Leu Pro Arg Ser Ile Thr Thr  
 1105 1110 1115 1120  
 Ile Glu Trp Asp Asp Thr Phe Ala Ser Val Tyr Ser Lys Asp Asn Pro  
 1125 1130 1135  
 Asn Leu Leu Phe Ser Met Cys Gly Phe Glu Val Arg Ile Leu Pro Lys  
 1140 1145 1150  
 Ile Arg Asn Gln Asn Glu Glu Phe Ser Val Lys Asp Ser Val Trp Ser  
 1155 1160 1165  
 Leu Val Asp Asn Thr Thr Lys Glu Arg Thr Ala His Ala Phe Leu Gln  
 1170 1175 1180  
 Val Thr Glu Glu Asp Ile Gln Lys Phe Asn Asn Arg Ile Arg Gln Ile  
 1185 1190 1195 1200  
 Leu Met Ser Ser Gly Ser Thr Thr Phe Thr Lys Ile Ala Asn Lys Trp  
 1205 1210 1215  
 Asn Thr Ala Leu Ile Ala Leu Phe Thr Tyr Tyr Arg Glu Ala Ala Val  
 1220 1225 1230  
 Ser Thr Val Asn Leu Leu Asp Thr Ile Val Lys Cys Glu Thr Lys Ile  
 1235 1240 1245  
 Gln Thr Arg Val Lys Ile Gly Leu Asn Ser Lys Met Pro Ser Arg Phe  
 1250 1255 1260  
 Pro Pro Ala Val Phe Tyr Thr Pro Lys Glu Leu Gly Gly Leu Gly Met  
 1265 1270 1275 1280  
 Ile Ser Gly Ser His Ile Leu Ile Pro Ala Ser Asp Lys Arg Trp Ser  
 1285 1290 1295  
 Lys Gln Thr Asp Thr Gly Ile Thr His Phe Arg Ala Gly Met Ser His  
 1300 1305 1310  
 Asp Glu Glu Thr Leu Ile Pro Asn Ile Phe Arg Tyr Ile Ile Pro Trp  
 1315 1320 1325



Glu Ala Glu Phe Ile Asp Ser Gln Arg Val Trp Met Glu Tyr Ser Gln  
 1330 1335 1340  
 Lys Arg Met Glu Ala Gln Gln Gln Asn Arg Arg Leu Thr Leu Glu Asp  
 1345 1350 1355 1360  
 Leu Glu Asp Ser Trp Asp Arg Gly Leu Pro Arg Ile Asn Thr Leu Phe  
 1365 1370 1375  
 Gln Lys Asp Arg Ser Thr Leu Ser Phe Asp Lys Gly Phe Arg Leu Arg  
 1380 1385 1390  
 Ala Glu Phe Lys Gln Tyr Gln Leu Met Lys Ser Asn Pro Phe Trp Trp  
 1395 1400 1405  
 Thr Ser Gln Arg His Asp Gly Lys Leu Trp Asn Leu Asn Ala Tyr Arg  
 1410 1415 1420  
 Thr Asp Val Ile Gln Ala Leu Gly Gly Val Glu Thr Ile Leu Glu His  
 1425 1430 1435 1440  
 Thr Leu Phe Lys Ala Thr Ala Phe Pro Ser Trp Glu Gly Leu Phe Trp  
 1445 1450 1455  
 Glu Arg Ala Cys Leu Ala Lys Gly Thr Arg Leu Leu Arg Tyr Asp Gly  
 1460 1465 1470  
 Ser Glu Ile Glu Val Gln Asp Val Lys Glu Gly Asp Leu Leu Leu Gly  
 1475 1480 1485  
 Pro Asp Gly Gly Pro Arg Arg Ala Phe Asn Ile Val Asn Gly Lys Asp  
 1490 1495 1500  
 Arg Leu Tyr Arg Ile Lys Ile Gly Gly Ser Lys Glu Asp Leu Val Val  
 1505 1510 1515 1520  
 Thr Pro Asn His Ile Leu Val Leu His Arg Glu Lys Arg Ala Arg Asn  
 1525 1530 1535  
 Val Tyr Thr Gly Pro Ser Val Gln Gly His Ile Gln Arg Ser Glu Asn  
 1540 1545 1550  
 Gly His Gly Asn Leu Pro Met Leu Ser Ser Ser Pro Ala Ala Ala His  
 1555 1560 1565  
 His Pro Asn Asn Leu Val Lys Asn Arg Gly Asp Phe Trp Ser Ala Leu  
 1570 1575 1580  
 Lys Ser Ala Ile Ala Trp Val Leu His Ala Glu Arg Ser Ser Thr Gly  
 1585 1590 1595 1600  
 Ala Asn Met Val Arg Asn Val Leu Asn Gly Thr Val Gly Leu Thr Ala  
 1605 1610 1615  
 His Lys Glu Ser Tyr Thr Val Thr Asn Pro Gln Gln Lys Gly Val Tyr  
 1620 1625 1630  
 Tyr Thr Tyr Val Trp Gly Asn Pro Gln Arg Thr Ser Ile Lys Gly His  
 1635 1640 1645  
 Arg Asp His Pro Pro Val Phe Leu Pro Thr Lys Glu Asp Ala Phe Ser  
 1650 1655 1660  
 Ala Ala Ile Ala Lys Ser Arg Glu Leu Tyr Ser Gln Ser Glu Val Thr  
 1665 1670 1675 1680  
 Leu Ala Thr Leu Arg Gln Arg Phe Leu Ala Lys Ser Ala Asp Gly Lys  
 1685 1690 1695  
 Gly Gly Glu Ile Leu Val Asp Ala Asn Leu Pro Asn Ile Phe Leu Leu  
 1700 1705 1710  
 Trp Asp Lys Asn Arg Ser Asn Leu Lys Phe Arg Val Leu Cys Ser Arg  
 1715 1720 1725  
 Asn Phe Lys Thr Tyr Gly Arg Val Tyr Thr Phe Glu Ser Met Pro Ser  
 1730 1735 1740  
 Thr Asn Ala Glu Glu Pro Gly Tyr Gly Asp Asp Asp Glu Leu Pro Gln  
 1745 1750 1755 1760  
 Val Ser Ala Glu Glu Arg Tyr Asp Thr Val Glu Met Thr Ala Ala Glu  
 1765 1770 1775

## 17368

Phe Ala Ser Leu Ser Thr Glu Glu Arg Ser Arg Tyr Arg Val Phe Arg  
 1780 1785 1790  
 Cys Pro Gly Phe Glu Leu Pro Glu Gln Pro Val Pro Val Asn Pro Tyr  
 1795 1800 1805  
 Phe Leu Gly Leu Trp Leu Gly Asp Asp Asn His Glu Lys Thr Thr Asn  
 1810 1815 1820  
 His Asn Ile His Glu Glu Asn Val Arg Glu Phe Leu Val Asn His Ala  
 1825 1830 1835 1840  
 Ala Glu Leu Asp Met Tyr Leu Ala Trp Gln Gly Leu Ile Asp Tyr Ala  
 1845 1850 1855  
 Thr Val Ala Asn Pro Ala Pro Met Met Val Arg Leu Pro Pro Thr Asn  
 1860 1865 1870  
 Pro Asp Thr Ile Glu His Arg Pro Val Val Cys Gln Ala Arg  
 1875 1880 1885

&lt;210&gt; 39903

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39903

Arg Glu Leu Pro Ser Asn Thr Glu Thr Ala Leu Arg Ser Glu Ala Glu  
 1 5 10 15  
 Ala Ser Ser Ile Ser Ala Ile Leu Asp Ser Lys Ala Gly His Ser Ser  
 20 25 30  
 Leu Asp Thr Gly Asp Pro Asn Ser Asp Val Val Pro Glu Ser Ile Pro  
 35 40 45  
 Asn Asp Val Ala Asp Phe Gly Leu Asp Gly Val Pro Glu Leu Thr Ser  
 50 55 60  
 Ser Gly Phe Ser Glu Leu Thr Ser Asp Ser Glu Leu Met Arg Leu Ile  
 65 70 75 80  
 Glu Gln Val Glu Arg Ser Ser Gln Gly Ser Thr Glu Glu Pro Ser Gln  
 85 90 95  
 Ala Ser Val Val Glu Gln Glu Ala Asp Leu Asn Leu Leu Glu Thr Asp  
 100 105 110  
 Ser Glu Asp Glu Glu Ala Asp Ser Ala Asp Asp Asp Glu Phe Gly Asp  
 115 120 125  
 Pro Glu Ala Ser Glu Phe Arg Pro Glu Pro Glu Ser Gln Leu Ser Gln  
 130 135 140  
 Ser His Phe Ser Asn Arg Arg Arg Asn His Arg Leu Arg Thr Gly Arg  
 145 150 155 160  
 Arg Val Tyr Gly Asp Leu Asn Gly Glu Glu Glu Gly Ile Leu Leu Asp  
 165 170 175  
 Gln Ile Val Glu Gln Ser Glu Gly Gln Ser Cys  
 180 185

&lt;210&gt; 39904

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39904

Ala Ile Ile Pro Lys Ala Ser Ser Ala Arg Arg Ser Glu Leu Thr Arg  
 1 5 10 15  
 Leu Pro Phe Arg Leu Leu His Asp Leu Val Lys Lys Tyr Thr Phe Leu  
 20 25 30

## 17369

```

Leu Ala Ile Gln Ile Ser Val Tyr Ser Thr Thr Cys Ser Gln Ala Val
    35                      40                      45
Val Pro Pro Thr Ile Gly Glu Val Arg Leu Gly Lys Leu Ala Phe Trp
    50                      55                      60
Leu Arg Pro Lys Phe Gly Ser Leu Trp Val Ser Lys Leu Ile Ile Val
    65                      70                      75                      80
Ser Ala Val Gly Phe Leu Val Leu Ala Ile Gly Phe Lys Gln Ile Glu
                      85                      90                      95
Ile Ser Phe Leu Phe Tyr His Arg Ser Leu Ala Trp Phe Phe Arg Arg
    100                      105                      110
Thr Leu Ala
    115

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&lt;210&gt; 39905

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39905

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Glu Ser Glu Ala Asn Ser Val Cys Arg Ser Val Ser Gln Gln Ile Ile
1                      5                      10                      15
Leu Gln Glu Leu Glu Pro Leu Phe Arg Met Lys Leu Ser Leu Ser Val
    20                      25                      30
Ala Leu Ser Leu Ala Ala Ala Thr Ala Gln Ala Ala Thr Gln Phe Cys
    35                      40                      45
Asp Gln Trp Gly Ser Val Thr Glu Gly Asn Tyr Ile Leu Tyr Asn Asn
    50                      55                      60
Leu Trp Gly Gln Ala Gln Ala Thr Ser Gly Ser Gln Cys Thr Thr Phe
    65                      70                      75                      80
Glu Ser Leu Ser Gly Asn Thr Ile Val Trp Asn Thr Lys Trp Ser Trp
    85                      90                      95
Ser Gly Gly Gln Gly Gln Val Lys Ser Phe Ala Asn Ala Ala Ser Cys
    100                      105                      110
Ser Ser Pro Pro Arg Asn
    115

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&lt;210&gt; 39906

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (135)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39906

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Leu Asp Leu Glu Val Glu Val Arg Gln Ser Leu Gln Ile Leu Arg Gly
1                      5                      10                      15
Cys Glu Ala Asp Asp Asn Ser Tyr Ser Gly Ser Asn Ile Val Ala Asp
    20                      25                      30
Val Ala Tyr Asp Met Phe Leu Ser Thr Ser Pro Gly Gly Asp His Lys
    35                      40                      45
Tyr Glu Ile Met Val Trp Leu Gly Ala Leu Gly Gly Ala Gly Pro Ile
    50                      55                      60
Ser Ser Thr Gly Ser Pro Ile Ala Thr Pro Thr Val Ala Gly Ile Lys

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## 17370

65		70		75		80									
Phe	Asn	Leu	Tyr	Leu	Gly	Pro	Asn	Gly	Ser	Met	Gln	Val	Tyr	Ser	Phe
		85						90						95	
Val	Ala	Gln	Ser	Thr	Thr	Asn	Ser	Phe	Ser	Gly	Asp	Met	Arg	Asp	Phe
		100						105					110		
Phe	Thr	Tyr	Leu	Glu	Ser	Asn	Gln	Gly	Leu	Ser	Ser	Asp	Leu	Tyr	Leu
		115					120					125			
Val	Asp	Val	Gln	Ala	Val	Xaa	Glu	Pro	Phe	Ser	Gly	Ser	Asn	Ala	Val
	130					135					140				
Phe	Thr	Val	Ser	Asp	Tyr	Ser	Val	Ser	Val	Ala					
145					150				155						

&lt;210&gt; 39907

&lt;211&gt; 335

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39907

Arg	Asp	Thr	Ser	Pro	Pro	Asn	Lys	Asp	His	Cys	Gln	His	Leu	Leu	Ser
1			5					10					15		
Ala	Leu	Leu	Ala	Pro	Phe	Thr	Ile	Gly	Lys	Ser	Thr	Ser	Lys	Thr	Lys
		20						25					30		
Thr	Asn	Thr	Arg	Tyr	Tyr	Phe	Cys	Leu	Phe	Asn	Phe	Gly	Leu	Leu	Thr
	35					40						45			
Phe	Phe	Asn	Asn	Lys	His	Gln	Phe	Arg	Ser	Leu	Arg	Ser	Arg	Tyr	Tyr
	50				55						60				
Phe	Leu	Tyr	Phe	Arg	Cys	Ser	His	His	His	Lys	His	Gln	Gln	Leu	Gln
65				70						75				80	
Arg	His	His	Asn	Ser	Ile	Thr	Met	Asp	Val	Pro	Val	Ala	Leu	Asn	Arg
			85					90						95	
Ala	Ala	Leu	Asn	Asp	Phe	Val	Thr	Arg	Pro	Val	Ser	Arg	Glu	Met	Val
		100						105					110		
Ala	Tyr	Leu	Ala	Gln	Gln	Ala	Ser	Leu	Val	Ile	Arg	Cys	Glu	Ser	His
		115					120					125			
Val	Thr	Ser	Ala	Val	Ser	Arg	His	Gly	His	Pro	Thr	Pro	Pro	Ser	Thr
	130					135					140				
Pro	Pro	Leu	Asp	Gly	Leu	Pro	Pro	Leu	Pro	Ser	Leu	Glu	Thr	Phe	Ile
145				150						155				160	
Ile	Ser	Leu	Val	Thr	Arg	Ser	Gln	Val	Gln	Val	Pro	Thr	Leu	Met	Thr
			165					170						175	
Ser	Leu	Val	Tyr	Leu	Ala	Arg	Leu	Arg	Ala	Arg	Leu	Pro	Pro	Val	Ala
		180					185					190			
Lys	Gly	Met	Arg	Cys	Thr	Val	His	Arg	Ile	Phe	Leu	Ala	Ser	Leu	Ile
	195					200						205			
Leu	Ala	Ala	Lys	Asn	Leu	Asn	Asp	Ser	Ser	Pro	Lys	Asn	Lys	His	Trp
	210					215					220				
Ala	Arg	Tyr	Thr	Ala	Val	Lys	Gly	Tyr	Asp	Gly	Phe	Ser	Phe	Ser	Leu
225					230				235						240
Pro	Glu	Val	Asn	Leu	Met	Glu	Arg	Gln	Leu	Leu	Phe	Leu	Leu	Asp	Trp
			245					250						255	
Asp	Thr	Arg	Val	Thr	Glu	Asp	Asp	Leu	Phe	Leu	His	Leu	Glu	Pro	Phe
		260					265						270		
Leu	Ala	Pro	Ile	Pro	Pro	Arg	Phe	Asp	Ala	Gln	Glu	Arg	Glu	Ala	Glu
		275					280					285			
Leu	Arg	Arg	Pro	Gln	Gln	Pro	Pro	Gln	Gln	His	Tyr	Arg	Glu	Trp	Arg
	290					295					300				

## 17371

Arg Pro Pro Cys Ile Gly Arg Thr Pro Trp Tyr Pro Val Cys Phe Ala  
 305 310 315 320  
 Glu Lys Val Glu Gly Ala Trp Arg Arg Ser Pro His Ala Trp Val  
 325 330 335

&lt;210&gt; 39908

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39908

Xaa Tyr Thr Thr Thr Ser Thr Met Pro Ser Lys Ser Ser Ser Pro Gln  
 1 5 10 15  
 Ser Asn Ser Thr Arg Lys Asn Ser Cys Gly Cys Cys Cys Phe Ser Val  
 20 25 30  
 Arg Lys Phe Gly Phe Leu Ala Val Phe Val Ala Ile Phe Ala Ala Leu  
 35 40 45  
 Tyr Ser Tyr Leu Asp Ala Arg Leu Glu Gln Phe Tyr Ile Phe Asn Pro  
 50 55 60  
 Glu His Leu His Asp Leu Ser Gln Arg Ala Ile Gln Ala His Gly Asn  
 65 70 75 80  
 Asp Thr Arg Ala Met Val Asp Phe Ile Val Ala Glu Leu Asp Gln Lys  
 85 90 95  
 Ile Pro Gly Asn His Leu Asn Lys Asn Glu Glu Trp Ile Phe Asn Asn  
 100 105 110  
 Ala Gly Gly Ala Met Gly Ala Met Tyr Ile Ile His Ala Ser Lys Phe  
 115 120 125  
 Val Gln  
 130

&lt;210&gt; 39909

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39909

Asp Ala Pro Ala Ser Lys Pro Ile Arg Glu Glu Asn Lys Gln Asn Pro  
 1 5 10 15  
 Met Pro Gly Glu Leu Ile Gln Leu Thr Lys Asp Leu Leu Thr Val Tyr  
 20 25 30  
 Gly Val Asp Ser Lys Tyr Thr Arg Ala Pro Arg Thr Pro Ala Phe Leu  
 35 40 45  
 Phe Phe Leu Pro Ser Leu Ile Ile Pro Ile Ile Thr Pro Leu Val Lys  
 50 55 60  
 Pro Leu Phe Val Pro Gly Phe Cys Gln Leu Phe Gln Leu Ser Ile Leu  
 65 70 75 80  
 Val Ser Arg Leu Ala  
 85

&lt;210&gt; 39910

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39910

Tyr	Lys	Leu	Gly	Thr	Ala	Ile	Gly	Thr	Glu	Gly	His	Thr	Gly	Arg	His
1				5					10					15	
Thr	Ala	Asp	Asp	Tyr	Phe	Asn	Ile	Leu	Gln	Gly	Thr	Gln	Val	Ala	Phe
		20						25					30		
Val	Pro	Gly	Thr	Phe	Glu	Pro	Glu	Val	Tyr	Pro	Pro	Gly	Thr	Val	His
		35					40					45			
His	Leu	Arg	Arg	Gly	Glu	Val	Lys	Gln	Tyr	Lys	Met	Glu	Gln	Ser	Cys
	50					55					60				
Phe	Ala	Leu	Val	Phe	Thr	Thr	Gly	Val	Asp	Gly	Ser	Ala	Leu	Ala	
65					70					75					

&lt;210&gt; 39911

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39911

Leu	Ile	Met	Leu	Asn	Cys	Ile	Ile	Asn	Thr	Ile	Asn	Val	His	Gln	Pro
1				5					10					15	
Leu	Ser	Thr	Ser	Leu	Asp	Leu	Met	Ala	Arg	Arg	Val	Phe	Pro	Gly	Gln
		20						25					30		
Asn	Val	Ala	Phe	Gly	Leu	Ser	Leu	Phe	Leu	Phe	Thr	Phe	Met	Phe	Leu
		35					40					45			
Pro	Thr	Leu	Val	Met	Leu	Leu	Ala	Val	Ile	Val	Phe	Phe	Ala	Phe	Tyr
	50					55					60				
Tyr	Pro	Gln	Leu	Gly	Lys	Ser	Thr	Ala	Ala	Gln	Asn	Asp	Asp	Tyr	Glu
65					70					75					80

&lt;210&gt; 39912

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39912

Thr	Ala	Phe	His	Ala	Ser	Trp	Ser	Asn	Ser	Ala	Ser	Ala	Asp	Arg	Asn
1				5					10					15	
Thr	Leu	Lys	Val	Ser	Arg	Gly	Thr	Ser	Val	Val	Ser	Ile	Val	Leu	Ile
		20						25					30		
Ser	Ile	Tyr	Val	Tyr	Asp	Ser	His	Ile	Val	Gln	Val	Leu	Leu	Leu	Val
		35					40					45			
Tyr	Ile	Leu	Tyr	Ile	Ile	Phe	Gln	Leu	Lys	Ser	His	Ser	Tyr	Leu	Tyr
	50					55					60				
Ala	Ser	Ile	Pro	Gln	Arg	Ile	Ile	Asp	Glu	Glu	Ser	His	Pro	Gly	Val
65					70				75						80
Leu	Ala	Glu	Phe	Met	Asn	Ser	Ser	Ser	Asp	Ser	Ser	Lys	His	Ser	Ser
			85						90				95		
Asp	Asp	Ser	Asp	Glu	Pro	Ser	Thr	Ser	Trp						
			100					105							

&lt;210&gt; 39913

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39913

Pro Ala Asp Thr Tyr Gln Ala Val Glu Val Phe Gln Asn Leu Ile His  
 1 5 10 15  
 Asn Leu Lys Ala Ala Gln Leu Gln Ile Gln Val Arg His Gly Tyr Gly  
 20 25 30  
 Ser Ser Leu Leu Val Cys Val Arg Val Pro Arg Asp His Leu Gly Arg  
 35 40 45  
 Met Ile Tyr Glu Ser Arg Tyr Pro Pro Pro Val Tyr Thr Gln Leu Ala  
 50 55 60  
 Ser Pro Thr Asn Phe Ile Arg Val Lys Asp Trp Leu Tyr Gly Ile Val  
 65 70 75 80  
 His Glu Leu Pro Val Ala Ser Asp His Ala Val Ala Glu Thr Pro Ala  
 85 90 95  
 Glu Glu Leu Arg Ser Val Tyr His Ala Val Thr Trp Gln Arg His Leu  
 100 105 110  
 Gly Gly Ala Gly Ile Thr Pro Gly Ile Gly Gln Trp Lys Asn Ile Ala  
 115 120 125  
 Ser Ala Phe Pro Leu His Asp Gln Ala Ala Asn Ala Glu Leu Leu Arg  
 130 135 140  
 Asn Met Ser Arg Ser Leu Thr Leu Thr Asp Lys Asp Leu Asp Ala Ile  
 145 150 155 160  
 Arg Ala Leu Phe Gly Glu Lys Val Cys Asp His Lys Asn Gly Asp Asn  
 165 170 175  
 Gln Ser

&lt;210&gt; 39914

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39914

Pro Ile Thr Ala Pro His Leu Val Ile Asn His Ala Ser Leu Phe Tyr  
 1 5 10 15  
 Leu Ser Thr Ala Gly Met Val Ala Val Ile Glu Cys His Pro Gly Val  
 20 25 30  
 Thr Leu Ser Cys Cys Pro Thr Gln Glu Asn Cys Leu Cys Asn Pro Leu  
 35 40 45  
 Ser Tyr Asn Asn Thr Cys Asp Trp Ser Arg Leu Ser Phe Arg Val Thr  
 50 55 60  
 Ile  
 65

&lt;210&gt; 39915

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39915

Ser Pro Thr His Cys Gln Leu Ala Arg Met Val Ile Phe Phe Gly Thr  
 1 5 10 15  
 Val Gln Ala Gly Ile Arg Ala Phe Ile Val Asp Asn Ala Pro Ala His  
 20 25 30  
 Gln Gln Glu Ser Ala Asn Ala Trp Ala Ser Arg Leu Thr Gly Val Gly

```

      35              40              45
Asn Ile Leu Gly Tyr Ile Phe Gly Tyr Leu Asp Leu Pro Lys Ile Phe
  50              55              60
Pro Phe Leu Gly Asn Thr Gln Phe Lys Val Leu Cys Ala Leu Ser Ser
  65              70              75              80
Leu Val Leu Ala Ile Thr Leu Ser Ile Ser Cys Ser Tyr Ile His Glu
      85              90              95
Arg Asp Pro Arg Leu Glu Gly Pro Pro Ser Lys Asp Ser Gln Gly Leu
      100              105              110
Val Gly Phe Phe Arg Gln Val Phe Lys Ser Ile Lys Phe Leu Pro Pro
      115              120              125
Gln Ile Ala Lys Val Cys Gln Val Gln Leu Ala Ala Trp Val Gly Trp
      130              135              140
Phe Pro Phe Leu Phe Tyr Ala Thr Thr Tyr Ile Gly Gln Leu Tyr Val
      145              150              155              160
Asn Pro Ile Phe Asp Gln His Pro Asn Leu Ser Glu Asp Asp Ile Asn
      165              170              175
Lys Ala Trp Glu Glu Ala Thr Arg Ile Gly Thr Phe Ala Leu Leu Ile
      180              185              190
Tyr Ala Ile Ile Ser Phe Ile Ala Asn Met Ile Leu Pro Leu Phe Val
      195              200              205
Val Pro Thr Tyr Arg Pro Ile Thr Trp Ala Gly Ala Gly Leu Pro Gly
      210              215              220
Tyr Ser Arg Arg Arg Thr Asn Pro Val Tyr Pro Glu Gly Cys Gln Ser
      225              230              235              240
Gln Val Cys Pro Leu Val Ser Pro Gln Asn Pro Pro
      245              250

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&lt;210&gt; 39916

&lt;211&gt; 409

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39916

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Leu Thr Gly Leu Gly Ile Val Ser Leu Leu Phe Cys Gly Ile Thr Met
  1              5              10              15
Lys His Tyr Ala Tyr Tyr Asn Met Ser Arg Arg Thr Gln Leu Thr Thr
      20              25              30
Lys Tyr Leu Phe Gln Val Met Ala Gln Leu Ser Glu Asn Phe Ile Phe
      35              40              45
Ile Tyr Leu Gly Leu Asp Leu Phe Val Glu Thr Asn Leu Gln Phe Lys
      50              55              60
Pro Leu Phe Ile Leu Val Ala Val Phe Gly Ile Cys Leu Ala Arg Tyr
      65              70              75              80
Leu Ala Val Phe Pro Leu Ser Lys Ala Ile Asn Trp Phe Ile Arg Tyr
      85              90              95
Arg Ala Arg Arg His Gly Leu Glu Val Ala Asp Glu Leu Pro Phe Ala
      100              105              110
His Gln Ala Met Leu Phe Trp Ala Gly Leu Arg Gly Ala Val Gly Val
      115              120              125
Ala Leu Ala Ala Gly Leu Thr Gly Val Asn Ala Pro Ala Leu Arg Ala
      130              135              140
Thr Val Leu Val Val Val Val Leu Thr Val Ile Ile Phe Gly Gly Thr
      145              150              155              160
Thr Ala Arg Met Leu Glu Ile Leu Gly Ile Arg Thr Gly Val Val Glu
      165              170              175

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17375

Glu Ile Glu Ser Asp Asp Glu Phe Asp Ile Glu Val Thr His Gly Gly  
 180 185 190  
 Thr Tyr Tyr Lys Arg Ser Asp Thr Gly Leu Gly Tyr Thr Pro Arg Arg  
 195 200 205  
 Thr Asp Ser Thr Ile Pro Leu Asp Gly Ile Gln Arg Ala Ser Leu Gly  
 210 215 220  
 Asp Arg Val Gly Ser Tyr Ser Ser Gly Asn Asn Arg Arg Pro Ser Pro  
 225 230 235 240  
 Pro Pro Ser Thr Arg Gly His Gly Arg Met Tyr Ser Lys Ala Tyr Arg  
 245 250 255  
 Ser Lys Asp Gly Arg Asp Lys Ser Ser Met Ala Thr Leu Leu Gly Asn  
 260 265 270  
 Gly Ala Gly Met His Ser Asp Ser Ser Ala Ala Ser Glu Asp Glu Phe  
 275 280 285  
 Gly Leu Arg Ala Asp Gly Arg Gly Arg Gly Ala Ser Glu Pro Asp Gln  
 290 295 300  
 Val Asp Ala Phe Asp Leu Asp Ile Asp Asp Gly Ala Ser Asp Asp Asp  
 305 310 315 320  
 Leu Pro Pro Ser Ala Pro Thr Ala Ala Ser Arg Met Arg Arg Ser Pro  
 325 330 335  
 Ser Gln Ala Gln Asn Leu Thr Pro Ser Gln Ala Ala Pro Ser Asn Gly  
 340 345 350  
 Ala Ser Pro Ala Arg Arg Glu Thr Gly Leu Ser Ala Arg Glu Ala Leu  
 355 360 365  
 Arg Asp Leu Phe Ser Gly Gly Pro Ser Gly Asp His Ala Ala Trp Phe  
 370 375 380  
 Arg Gln Leu Asp Glu Asp Phe Ile Lys Pro Arg Leu Leu Leu Asp Gln  
 385 390 395 400  
 Ser Asn His Lys Gly Pro Gly Ala Val  
 405

<210> 39917  
 <211> 162  
 <212> PRT  
 <213> A.fumigatus

<400> 39917  
 Leu Cys Val Gln Arg Ser Pro Gly Leu Val Val Thr Glu Ala Tyr Ala  
 1 5 10 15  
 Asp Ala His Asp Val Asp Gly Phe Ala Thr Met Leu Leu Ser Leu Val  
 20 25 30  
 Ser Ile Ala Arg Asp Gly Glu Trp Thr Ala Ser Arg Pro Val Val Tyr  
 35 40 45  
 Ala Thr Tyr Val Ala Cys Val Val Val His Gly Leu Ile Thr Thr Phe  
 50 55 60  
 Phe Ala Arg Ile Met Pro Lys Ile Gln Thr Leu Cys Ile Val Ser Asn  
 65 70 75 80  
 Ile Gly Leu Val Val Ala Thr Val Ile Ala Leu Pro Ile Gly Lys Ala  
 85 90 95  
 Ile Asn Gly Gly Pro Val Asn Pro Gly Ser Tyr Val Phe Arg His Thr  
 100 105 110  
 Asp Asn Leu Thr Thr Trp Pro Ser Gly Leu Gly Val Tyr Ala Cys Val  
 115 120 125  
 Gly Ser Ser Leu Ser Gly Gln Leu Ala Pro Leu Asp Ser Gly Phe Ile  
 130 135 140  
 Ile Thr Arg Arg Leu Leu Met Ala Thr Leu Ala Gly Pro Val Gly Phe

## 17376

145  
Leu Trp

150

155

160

&lt;210&gt; 39918

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39918

Pro Gly Val Phe Val Leu Gln Gly Glu Gln Pro Thr Arg Met Ser Pro  
1 5 10 15  
Met Thr Val Arg Ala Trp Ile Ser Tyr Ile Gln Lys Pro Leu Gly Ser  
20 25 30  
Val Ala Asp Glu Leu Phe Gln Met Pro Pro Asp Ala Gly Lys Lys Arg  
35 40 45  
Val Leu Gln Leu Leu Gly Ser Phe Ser Ser Trp Ile Met Pro Val Asp  
50 55 60  
Val Trp Pro Cys Leu Arg Val Ile Ser Cys Asn Lys Arg Arg Ser Ser  
65 70 75 80  
Gly Phe Met Lys Gln Phe Cys Arg Ser Leu Leu Val Cys Leu Thr Leu  
85 90 95  
Phe Leu Leu Phe Val Ser Ser Glu Gly Arg Arg Ser Leu Met Arg Ile  
100 105 110  
Asn Ala Gly Met Phe Val Gly Leu Ile Ile Arg Leu Ser Pro Glu Ser  
115 120 125  
Pro Ile Gln Asp Ser Val Thr Phe Asp Tyr Gln Phe Phe Phe Asn Leu  
130 135 140  
Leu Leu Pro Pro Ile Ile Leu Ala Ser Gly Tyr Glu Leu His Gln Ala  
145 150 155 160  
Asn Phe Phe Arg Asn Ile Gly Thr Ile Leu Thr Phe Ala Phe Ala Gly  
165 170 175  
Thr Phe Ile Ser Ala Ile Val Leu Gly Leu Val Leu Phe Ile Trp Thr  
180 185 190  
Arg Ile Pro Leu Asp Gly Leu Asn Ile Ser Phe Val Glu Ala Ile Ser  
195 200 205  
Val Gly Ala Thr Leu Ser Ala Thr Asp Pro Val Thr Ile Leu Ala Ile  
210 215 220  
Phe Asn Ile Tyr Lys Val Glu Pro Lys Leu Tyr Thr Val Ile Phe Gly  
225 230 235 240  
Glu Ser Ile Leu Asn Asp Ala Ile Ala Ile Val Leu Phe Glu Thr Ala  
245 250 255  
Gln Lys Tyr Ala Glu Ser Asp Ala Gly Ser Leu Thr Ile Leu Asn Leu  
260 265 270  
Phe Glu Ala Ile Gly Leu Phe Leu Leu Val Phe Phe Gly Ser Met Leu  
275 280 285  
Val Gly Met Ile Val Gly Ile Met Thr Ala Leu Gly Leu Lys Tyr Thr  
290 295 300  
His Val Arg Arg Met Pro Lys Ile Glu Ser Cys Leu Ile Val Leu Ile  
305 310 315 320  
Ala Tyr Ala Ser Tyr Phe Phe Ser Asn Gly Val His Leu Ser Gly Glu  
325 330 335  
Cys Leu Cys Asp Phe Leu His Arg Pro Gly Asn  
340 345

&lt;210&gt; 39919

<211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 39919  
 Pro Phe Leu Leu Ile Ser Ala Ser Arg Leu Ser Cys Ile Val Asp Ser  
 1 5 10 15  
 Ser Leu Asn His Gln Thr Met Ala Glu Lys Ser Arg Ala Met Asp Ala  
 20 25 30  
 Lys Ser Lys Val Ala Gln Thr Val Asp Pro Asp Ile Ala Val Glu Thr  
 35 40 45  
 Gly Asp Met Glu Leu Leu Gly Val Trp His Gly Val Pro Ser Thr Met  
 50 55 60  
 Arg Ile Cys Cys  
 65

<210> 39920  
 <211> 115  
 <212> PRT  
 <213> A.fumigatus

<400> 39920  
 Trp Ile Trp Ile Leu Pro Ala Thr Leu Gly Tyr Lys Gln Glu Leu Arg  
 1 5 10 15  
 Arg His Tyr Ser Thr Thr Gln Ile Phe Ala Val Ala Phe Ser Ile Met  
 20 25 30  
 Gly Leu Leu Pro Ser Ile Ala Ser Thr Leu Ser Phe Ser Leu Pro Ala  
 35 40 45  
 Gly Pro Val Gly Met Val Trp Val Asn Tyr Leu His Glu Leu Gln Cys  
 50 55 60  
 Gly Phe Leu Lys Cys Pro Leu Thr Ser Asp Arg Val Arg Ala Leu Gly  
 65 70 75 80  
 His Cys Leu Trp Val His Ser Phe Ser Gly Ile Asp Ser Leu Ser Ile  
 85 90 95  
 Gly Trp Leu Val Ala Ser Val Phe Ile Phe Ile Val Gly Leu Ala Met  
 100 105 110  
 Val Arg Val  
 115

<210> 39921  
 <211> 138  
 <212> PRT  
 <213> A.fumigatus

<400> 39921  
 Pro Tyr Leu Leu Ser Leu Gly Met Ser Lys Ala Leu Leu Ala Phe Val  
 1 5 10 15  
 Trp Ile Ala Gly Pro Leu Thr Gly Thr Leu Val Gln Pro Tyr Ile Gly  
 20 25 30  
 Ile Arg Ser Asp Asn Cys Arg Ile Pro Trp Gly Lys Arg Lys Pro Phe  
 35 40 45  
 Met Ile Ala Gly Ala Ala Ala Thr Ile Val Ala Leu Leu Ala Leu Ala  
 50 55 60  
 Trp Val Gln Glu Ile Val Gly Gly Ala Leu Gly Ile Phe Gly Val Asp  
 65 70 75 80  
 Pro Ala Ser Asp Gly Thr Arg Ala Thr Ile Ile Phe Leu Ala Thr Val

## 17378

			85					90				95			
Leu	Met	Tyr	Cys	Leu	Asp	Phe	Ala	Ile	Asn	Thr	Gly	Lys	His	Met	Ile
			100					105					110		
Ser	Asn	Pro	Leu	Ser	Val	Gly	Ala	Asp	Gly	Asn	Ile	Phe	Arg	Tyr	Ser
		115					120					125			
Ser	Gly	Arg	Tyr	Ser	Ser	Ile	His	Arg	Arg						
	130					135									

&lt;210&gt; 39922

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39922

Ala	Asp	His	Val	Gly	Arg	Ser	Arg	Leu	Thr	Arg	Ile	Leu	Gln	Lys	Lys
1			5					10					15		
Asn	Glu	Pro	Cys	Leu	Ser	Arg	Arg	Met	Ser	Ile	Ser	Ser	Leu	Pro	Val
		20					25					30			
Gly	Val	Ala	Ser	Glu	Pro	Ser	Leu	Glu	Pro	Thr	Ser	Gly	Lys	Gln	Thr
	35					40					45				
Glu	Ser	Arg	Asp	Glu	Ser	Thr	Trp	Leu	Ser	Lys	Leu	Gln	Ile	Pro	Gly
	50				55					60					
Leu	Thr	Leu	Arg	Arg	Ala	Trp	Leu	Ile	Ser	His	Val	Leu	Phe	Ala	Val
65				70					75					80	
Cys	Met	Phe	Ser	Thr	Phe	Leu	Ile	Ser	Ser	Tyr	Gln	Val	Gly	Ser	Ala
			85					90					95		
Val	Ile	Gly	Leu	Val	Gly	Ile	Ser	Trp	Ala	Leu	Thr	Leu	Trp	Ala	Pro
		100				105						110			
Phe	Ala	Leu	Ile	Ser	Ala	Glu	Val	Ser	Arg	Ile	Asp	Ala	Glu	Arg	Arg
	115				120						125				
Thr	Arg	Arg	His	Gln	Ala	Glu	Met	Asp	Ala	Ser	Pro	Glu	Gln	Tyr	Thr
	130				135						140				
Ala	Ala	Asn	Val	Ala	Gly	Asp	Arg	Gly	Asp	Gly	Ala	Asp	Tyr	Asp	Glu
145				150					155					160	
Asp	Val	Glu	Asn	Gly	Ala	Arg	Pro	Arg	Arg	Thr	Lys	Val	Glu	Asp	Glu
			165					170					175		
Glu	Glu	Asn	Leu	Ala	Gln	Ala	Gly	Ile	Ile	Leu	Gly	Leu	His	Asn	Val
		180				185						190			
Ala	Val	Ser	Ala	Pro	Gln	Ile	Phe	Ser	Ser	Leu	Ile	Ser	Ser	Ala	Ile
	195					200						205			
Phe	Lys	Ala	Phe	Gln	Lys	Pro	Arg	Gly	Glu	Pro	Trp	Asp	Asp	Ser	Val
	210				215						220				
Gly	Trp	Val	Leu	Arg	Phe	Gly	Gly	Cys	Ala	Ala	Leu	Val	Ala	Ala	Trp
225				230					235					240	
Leu	Ala	Ser	Arg	Val	Gly	Asp	Arg	Thr	Ala						
			245					250							

&lt;210&gt; 39923

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39923

Ser	Asn	Glu	Val	Ala	Arg	Lys	Thr	Lys	Ile	His	Arg	Leu	His	Thr	Leu
1			5					10					15		
Gln	Val	Leu	Asp	Leu	Leu	Arg	Gly	Gln	Phe	Asp	Ala	Gln	Arg	Leu	Asn

[illegible]

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<210> 39924
<211> 60
<212> PRT
<213> A.fumigatus
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<210> 39925
<211> 208
<212> PRT
<213> A.fumigatus
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<400> 39925																
Leu	Glu	Val	Met	Ala	Val	Gly	Pro	Thr	Leu	Gly	Thr	Gly	Leu	Phe	Ile	
1				5					10					15		
Gly	Gly	Gly	Gln	Ala	Leu	Ala	Ala	Gly	Gly	Pro	Ala	Ser	Leu	Leu	Phe	
			20					25					30			
Ser	Tyr	Leu	Phe	Leu	Ser	Val	Leu	Val	Tyr	Cys	Leu	Ala	Thr	Ala	Leu	
		35					40					45				
Ser	Glu	Ile	Ala	Ala	His	Met	Pro	Ala	Gln	Asp	Gly	Thr	Met	Val	Ser	
	50					55					60					
His	Ala	Tyr	Arg	Tyr	Ala	Ser	Lys	Pro	Leu	Ala	Phe	Ser	Met	Gly	Tyr	
65					70					75					80	
Leu	Arg	Trp	Tyr	Ser	Leu	Ser	Met	Leu	Ile	Pro	Phe	Glu	Ile	Thr	Asn	
				85					90					95		
Ala	Ile	Val	Ser	Leu	Gly	Met	Val	Asn	Pro	Ser	Arg	Ala	Val	Ala	Leu	

17380

			100					105				110			
Arg	Val	Ser	Ile	Pro	Thr	Leu	Ile	Ile	Phe	Gly	Phe	Asn	Met	Leu	Pro
		115					120					125			
Glu	Arg	Ser	Phe	Lys	Arg	Ser	Glu	Ala	Val	Phe	Thr	Tyr	Leu	Lys	Leu
	130					135					140				
Ile	Thr	Thr	Thr	Gly	Leu	Val	Phe	Leu	Thr	Ile	Val	Phe	Ala	Ile	Pro
145					150					155					160
Gly	Val	Ser	His	Ser	Pro	Val	Gln	Gly	Phe	Gln	Tyr	Trp	Asn	Asn	Pro
			165						170					175	
Gly	Pro	Met	Asn	Glu	Phe	Ile	Tyr	Asp	Gly	His	Leu	Gly	Arg	Phe	Leu
			180					185					190		
Gly	Leu	Leu	Ser	Ser	Thr	Thr	Gly	Pro	Glu	Gly	Tyr	Ala	Gln	Cys	Val
		195					200					205			

<210> 39926

<211> 81

<212> PRT

<213> A.fumigatus

<400> 39926

[illegible]

<210> 39927

<211> 297

<212> PRT

<213> A.fumigatus

<400> 39927

Gln	Ala	Thr	Trp	Asn	Gly	Pro	Phe	Thr	Gly	Gln	His	Ile	Gly	Ser	Val
1				5					10					15	
Gly	Glu	Asp	Met	Lys	Cys	Lys	Ile	Trp	Gln	Glu	Asp	Val	Thr	Gln	Pro
			20					25					30		
Pro	Asn	Ser	Gly	Arg	Arg	Phe	Arg	Ser	Ile	Phe	Arg	Met	Thr	Ala	Pro
			35					40				45			
Gln	Arg	His	Pro	Phe	Val	Ser	Met	Asp	Phe	Arg	Asn	Ile	Asp	Leu	Glu
			50				55				60				
Thr	Trp	Leu	Ala	Val	Ile	Thr	Arg	Asp	Gly	Tyr	Leu	Met	Val	Met	Glu
65					70					75				80	
Pro	Val	Ser	Pro	Asp	Ser	Leu	Ala	Asp	Trp	Gln	Pro	Leu	Asp	Gln	Phe
				85					90					95	
Arg	Val	Cys	Thr	Ala	Pro	Gln	Arg	Gly	Glu	Glu	Thr	Ser	Phe	Lys	Val
			100					105					110		
Gln	Phe	His	His	Asp	Pro	Thr	Asp	Ile	Thr	His	Leu	Val	Asn	Pro	Ser
			115				120					125			
Trp	Asp	Arg	Lys	Ser	Leu	Ser	Leu	Val	Val	Ala	Ala	Met	Asp	Ser	Val

## 17381

130	135	140
Lys Val Tyr Arg Thr Asp	Ala Asn Arg Arg Phe Tyr His Ala Ile Glu	
145	150	155
Leu Thr Gly His Gly Gly	Leu Val Arg Asp Ile Ser Trp Ala Asn Gly	160
	165	170
Ser Val Arg Gly Tyr Asp	Leu Ile Ala Ser Gly Cys Lys Asp Gly Phe	175
	180	185
Val Arg Val Phe Glu Val Tyr Thr Ser Met Ser Asn Ser Gly Ser Gln		190
	195	200
Thr Thr Asn Gly Ser His Val Glu Ser Gln Ser Gln Ser Pro Ser Leu		205
	210	215
Arg Ala Thr Ala Gln Ser Gly Ile Gly Ser Ala Leu Ala Asn Arg Thr		220
225	230	235
Pro Glu Ser Val Thr Asn Arg Pro Ala Thr Gly Asp Ser Gln Phe Lys		240
	245	250
His Ser Tyr Lys Glu Val Ala Cys Ile Asp Ser Lys His Leu Asp Val		255
	260	265
Trp Gln Val Glu Phe Ser Tyr Ala Gly Glu Phe Ser Gly His Ser Trp		270
	275	280
Lys Pro Ile Pro Gly Met Pro Leu Asn		285
290	295	

<210> 39928  
 <211> 86  
 <212> PRT  
 <213> A.fumigatus

<400> 39928
Pro Glu Ala Ser Pro Arg Ile Gly Arg Leu Gly Asn Val Phe Leu Pro
1 5 10 15
Asp Phe Ala Leu His Val Phe Pro Tyr Thr Ala Tyr Val Leu Ala Ser
20 25 30
Lys Trp Ala Ile Pro Arg Ser Leu Gln Met Ser Ile Leu Ser Thr
35 40 45
Gln Trp Ala His Glu Ala Asp Ala Tyr Ile Thr Asp Phe Ser Val Met
50 55 60
Ser Ala Pro Gly Ile Asp Gln Val Pro Phe Thr Ile Phe Leu Ile Pro
65 70 75 80
His Phe His Ala Val Val
85

<210> 39929  
 <211> 361  
 <212> PRT  
 <213> A.fumigatus

<400> 39929
Asp Cys Ser Cys Arg Glu Trp Ser Leu Ser Pro Ser Leu Ser Thr Leu
1 5 10 15
Gln Gly Pro Ser Cys Glu Phe Ser Tyr His Ala Trp Leu Thr Asp Met
20 25 30
Leu Lys Leu Ala Ser Tyr Leu Ser Gly Leu Leu Ser Leu Gln Cys Ile
35 40 45
Val Ile Leu Gly Ile Gly Asp Asp Leu Leu Asp Ile Arg Trp Arg His
50 55 60
Lys Val Leu Ile Pro Ala Phe Gly Ala Ile Pro Met Leu Ile Val Tyr

## 17382

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65          70          75          80
Phe Val Asp Phe Gly Val Thr His Val Val Val Pro Val Pro Leu Gln
      85          90          95
Pro Tyr Leu Gly Thr Phe Val Asp Leu Gly Arg Ala Val Leu Cys Glu
      100          105          110
Gln Gly Arg Leu Met Pro Ile Phe Cys Pro Asn Ala Ile Asn Met Arg
      115          120          125
Ala Gly Ile Thr Gly Val Lys Val Ala Gln Ser Leu Val Ile Ala Val
      130          135          140
Leu Leu Val Ala Asn Asp Leu Leu Tyr Ile Ala Pro Thr Thr Pro Phe
145          150          155          160
Pro His Pro Ala Thr Asp Ser His Leu Phe Ser Leu Tyr Phe Leu Leu
      165          170          175
Pro Phe Ile Gly Val Ser Val Ala Leu Leu Cys His Asn Trp Tyr Pro
      180          185          190
Ser Lys Val Phe Val Gly Asp Thr Tyr Cys Tyr Phe Ala Gly Met Val
      195          200          205
Phe Ala Val Val Gly Ile Leu Gly His Phe Ser Lys Thr Leu Leu Leu
      210          215          220
Leu Phe Ile Pro Gln Ile Phe Asn Phe Leu Tyr Ser Thr Pro Gln Leu
225          230          235          240
Phe His Ile Ile Pro Cys Pro Arg His Arg Leu Pro Lys Phe Asn Ala
      245          250          255
Met Ser Gly Leu Leu Asp Ala Ser Val Thr Glu Trp Thr Val Pro Pro
      260          265          270
Gly Pro Leu Val Ala Thr Gly Leu Glu Ile Leu His Arg Met Arg Leu
      275          280          285
Ile Arg Ile Thr Lys Asn Glu Glu Gly Glu Ile Val Glu Ser Thr Asn
      290          295          300
Leu Thr Ile Leu Asn Leu Trp Leu Ile Trp Met Gly Pro Met Arg Glu
305          310          315          320
Asp Arg Leu Ala Trp His Met Val Met Val Gln Thr Ala Cys Gly Ala
      325          330          335
Leu Gly Leu Phe Val Arg His Arg Leu Ala Leu Leu Val Phe Gln Gln
      340          345          350
Asp Asn Arg Ala Phe Arg Tyr Gly Val
      355          360

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&lt;210&gt; 39930

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39930

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Phe Ala Arg Pro Glu Thr Met Gly Ala Val Cys Ala Val Val Tyr Leu
1          5          10          15
Leu Ala Leu Ile Phe Phe Ile Pro Phe Ala Phe Tyr Lys Asp Ile Val
      20          25          30
Ala Ala Thr Ser Gly Gly Gly Asn Arg Asp Val Val Leu Glu Ile Ala
      35          40          45
His Val Glu Asn Gly Arg Phe Leu His Arg Phe Pro His Ser Lys Val
      50          55          60
Arg Pro Ala Ser Ser Pro Ile Thr Leu Gly
65          70

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&lt;210&gt; 39931



17383

<211> 395

<212> PRT

<213> A.fumigatus

<400> 39931

Leu	Tyr	Cys	Tyr	Gln	His	Asn	Asn	Asn	Leu	Asn	Met	Ser	Glu	Phe	Phe
1				5					10					15	
Arg	Pro	Ala	Pro	Glu	Pro	Arg	Thr	Glu	Leu	Gly	Arg	Tyr	Arg	Ile	Leu
			20					25					30		
Ser	Ser	Thr	Ala	Gly	Ile	Arg	Val	Ser	Pro	Leu	Gln	Leu	Gly	Ala	Met
		35					40					45			
Ser	Ile	Gly	Asp	Ala	Trp	Ser	Asp	Phe	Met	Gly	Ser	Met	Asp	Lys	Glu
	50					55				60					
Ser	Ser	Phe	Lys	Leu	Leu	Asp	Ala	Phe	Val	Glu	Ala	Gly	Gly	Asn	Phe
65				70						75				80	
Ile	Asp	Thr	Ala	Asn	Asn	Tyr	Gln	Asp	Glu	Gln	Ser	Glu	Thr	Trp	Ile
				85					90					95	
Gly	Glu	Trp	Met	Ala	Ala	Arg	Gln	Asn	Arg	Asp	Gln	Leu	Val	Leu	Ala
			100					105					110		
Thr	Lys	Phe	Thr	Ile	Asp	Tyr	Lys	Ala	His	Ala	Leu	Gly	Lys	Gly	Asn
		115					120					125			
Ala	Val	Asn	His	Ser	Gly	Asn	His	Arg	Arg	Ser	Leu	His	Met	Ser	Val
	130					135					140				
Arg	Asp	Ser	Leu	Lys	Lys	Leu	Gln	Thr	Asp	Trp	Ile	Asp	Ile	Leu	Tyr
145					150					155				160	
Leu	His	Trp	Trp	Asp	His	Thr	Thr	Ser	Ile	Glu	Glu	Ile	Met	Asp	Ser
				165				170						175	
Leu	His	Ile	Leu	Val	Glu	Gln	Gly	Lys	Val	Leu	Tyr	Leu	Gly	Ile	Ser
			180					185					190		
Asp	Thr	Pro	Ala	Trp	Val	Val	Ser	Ala	Ala	Asn	Thr	Cys	Ala	Arg	Ala
	195						200					205			
His	Gly	Lys	Thr	Pro	Phe	Ser	Val	Tyr	Gln	Gly	Arg	Trp	Asn	Val	Met
	210					215					220				
Leu	Arg	Asp	Phe	Glu	Arg	Glu	Ile	Ile	Pro	Met	Thr	Arg	His	Phe	Gly
225					230					235				240	
Met	Ala	Leu	Ala	Pro	Trp	Asp	Val	Leu	Gly	Ser	Gly	Lys	Phe	Gln	Thr
				245					250					255	
Lys	Lys	Ala	Leu	Glu	Glu	Arg	Lys	Lys	Lys	Gly	Glu	Gly	Leu	Arg	Ser
			260					265						270	
Met	Phe	Gly	Pro	Gly	Glu	Gln	Thr	Glu	Asp	Glu	Val	Lys	Met	Ser	Glu
	275						280					285			
Ala	Leu	Ala	Lys	Val	Ala	Ala	Glu	His	Gly	Ile	Glu	Ser	Val	Thr	Ala
	290					295					300				
Ile	Ala	Leu	Ala	Tyr	Val	Arg	Ala	Lys	Ala	Pro	Asn	Val	Phe	Pro	Ile
305					310					315				320	
Val	Gly	Gly	Arg	Lys	Val	Glu	His	Leu	His	Asp	Asn	Ile	Gln	Ala	Leu
				325					330					335	
Ser	Ile	Lys	Leu	Thr	Pro	Glu	Gln	Ile	Glu	Tyr	Leu	Glu	Ser	Val	Lys
			340					345					350		
Pro	Met	Asp	Leu	Gly	Phe	Pro	Ser	Asn	Leu	Ile	Gly	Ser	Asp	Pro	Lys
		355					360					365			
Val	Thr	Gly	Lys	Pro	Thr	Leu	Leu	Leu	Ala	Ala	Thr	Ala	Pro	Phe	Val
	370					375					380				
Phe	Glu	Thr	Gly	Ser	Lys	Pro	Ile	Gly	Gln	Ala					
385					390					395					

17384

<210> 39932  
<211> 168  
<212> PRT  
<213> A.fumigatus

<400> 39932  
Leu Gly Gln Ser Ile Thr Ile Asp Ala Ser Ala Asp Ser Ile Gly Ser  
1 5 10 15  
Gly Lys Thr Thr Phe Ala Lys Ser Ile Cys Ser Ala Tyr Pro Ser Phe  
20 25 30  
Thr Arg Leu Ser Ile Asp Ala Tyr Val Tyr Ser His His Gly Leu Trp  
35 40 45  
Asn Val Asp Tyr Pro Lys Glu His Tyr Glu Lys Tyr Gln Glu Glu Ala  
50 55 60  
Glu Ala Ala Leu Arg Gln Gln Leu Val His Ile Leu Gln His Asp Asp  
65 70 75 80  
Ala Asn Val Val Leu Asp Phe Ser Phe Ala Phe Arg Glu Asp Arg Glu  
85 90 95  
Ala Trp Lys Ala Leu Ile Ser Glu Phe Gly Gly Arg Trp Val Leu Val  
100 105 110  
Tyr Leu Asn Val Asp Pro Thr Glu Ile Arg Arg Arg Val Ala Ala Arg  
115 120 125  
Asn Ala Leu Ile Asp Lys Asp Gly Asp Ser Ala Phe Tyr Leu Thr Glu  
130 135 140  
Asp Leu Leu Glu Arg Tyr Ile Asn Gly Phe Glu Arg Pro Val Gly Glu  
145 150 155 160  
Gly Glu Ile Val Ile Asn Leu Asp  
165

<210> 39933  
<211> 72  
<212> PRT  
<213> A.fumigatus

<400> 39933  
Met Lys Thr Ser Gly Thr Tyr Lys Phe Leu Glu Asn Tyr Val Gln Asn  
1 5 10 15  
Ser Val Ser Asp Pro Leu Arg Pro Gly Ala Leu Gly Leu Gly Gln Ser  
20 25 30  
Lys Ala Ser Leu Leu Val Asn Ile Phe Leu Ile Ile Ser Tyr Met Thr  
35 40 45  
Pro Met Ala Ala Gly Ile Leu Ala Asp Gly Tyr Leu Gly Arg Tyr Arg  
50 55 60  
Thr Val Leu Leu Ser Met Thr Tyr  
65 70

<210> 39934  
<211> 63  
<212> PRT  
<213> A.fumigatus

<400> 39934  
Val Leu Thr Cys Phe Ser Leu Tyr Val Leu Gly Val Ala Val Leu Phe  
1 5 10 15  
Ala Thr Ser Ile Pro Ser Met Leu His Arg Gly Ala Gly Leu Pro Gly  
20 25 30

## 17385

Leu Ile Val Ala Met Ile Leu Val Ser Leu Ser Leu Gly Gly Ile Lys  
           35                  40          45  
 Ala Ser Leu Pro Pro His Ala Trp Tyr Ala Gly Pro Pro Thr Cys  
           50                  55          60

<210> 39935  
 <211> 246  
 <212> PRT  
 <213> A.fumigatus

<400> 39935  
 Ala Glu Glu Arg Leu Val Cys Leu Pro Cys Ile Val Gly Thr Arg Val  
 1                  5          10          15  
 Cys Ile Ser Lys Asp His Val Leu Thr Asp Arg Ser Thr Pro Phe Val  
           20          25          30  
 Ile Phe Trp Leu Cys Gln Ala Gln Met Thr Thr Asn Thr Val Ser Gln  
           35          40          45  
 Ala Ala Glu Met Glu Thr His Arg Val Pro Asn Asp Met Leu Pro Asn  
           50          55          60  
 Leu Asn Ser Ile Thr Val Ile Ile Ala Leu Pro Leu Val Thr Lys Phe  
 65                  70          75          80  
 Ala Tyr Pro Phe Leu His Arg Arg Gly Ile Pro Thr Pro Pro Leu Arg  
           85          90          95  
 Arg Val Ala Leu Gly Phe Phe Leu Glu Ala Leu Ala Met Gly Tyr Ala  
           100          105          110  
 Ala Gly Ile Gln Gly Trp Ile Tyr Ser Ser Gly Pro Cys Tyr Glu His  
           115          120          125  
 Pro Arg Ala Cys Ala Ala Ser Met Asn Gly Ser Leu Pro Asn His Val  
           130          135          140  
 Asn Ile Gly Tyr Gln Ser Pro Val Tyr Val Leu Glu Gly Leu Ser Glu  
 145          150          155          160  
 Ile Phe Ala Ser Pro Ala Gly Tyr Glu Tyr Thr Phe Thr Lys Ala Pro  
           165          170          175  
 Lys Ser Met Lys Ser Ile Ile Gln Ala Leu Tyr Gly Leu Thr Ala Ala  
           180          185          190  
 Gly Gly Ser Ile Ile Ala Leu Ala Leu Thr Pro Thr Asn Lys Asp Pro  
           195          200          205  
 Asp Leu Leu Gly Met Tyr Ala Gly Val Ser Gly Ala Met Phe Val Ala  
           210          215          220  
 Ala Val Ile Val Met Val Val Ser Tyr Lys His Glu Gly Arg Thr Ala  
 225          230          235          240  
 Arg Asp Asp Asp Ser Ser  
           245

<210> 39936  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 39936  
 Ser Ser Ser Ala Cys Pro Leu Val Glu Leu Lys Leu Arg Phe Pro Pro  
 1                  5          10          15  
 Met Leu Gly Thr Arg Val Pro Arg His Ala Lys Asn Pro Arg Leu Thr  
           20          25          30  
 Ser Thr Ile Ala Glu Gln Cys Ser Lys Ile Lys Gln Arg Ile Arg Ile  
           35          40          45

## 17386

Thr Lys Lys Gly Glu Arg Val Ile Val Asp Pro Asp Val Thr Leu Glu  
 50 55 60  
 Tyr Ala Phe Asp Val Tyr Tyr Cys  
 65 70

<210> 39937  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 39937  
 Ala Leu Val Asn Arg Val Glu Lys Ala Ala Met Gly His Leu Thr Arg  
 1 5 10 15  
 Ile Phe Ile Glu Thr Tyr Glu Ile Cys Glu Lys Tyr Asp Asn Pro Phe  
 20 25 30  
 Lys Asp Phe Lys Leu Pro Ser Ser Ser Met Asn Asp Asp Ser Leu  
 35 40 45  
 Pro Asn Val Gly Leu Pro Asp Ala Gln Thr Gly Leu Pro Trp  
 50 55 60

<210> 39938  
 <211> 358  
 <212> PRT  
 <213> A.fumigatus

<400> 39938  
 Gln Leu Ser Ala Phe Gln Ser Leu Lys Thr Gln Ala Pro Pro Ala Val  
 1 5 10 15  
 Asn Asn Asn His His Gln Tyr Ile Glu Ala Phe Arg Ser Asp Lys Met  
 20 25 30  
 Thr Asp Ile Glu Asn Ile Ala Asn Leu Ile Lys Ser Gly Gln Val His  
 35 40 45  
 Lys Ile Val Val Leu Val Gly Ala Gly Ile Ser Thr Ala Ala Gly Ile  
 50 55 60  
 Pro Asp Phe Arg Ser Pro Glu Thr Gly Ile Tyr Asp Arg Leu Lys Pro  
 65 70 75 80  
 Leu His Leu Pro Tyr Pro Glu Ala Ile Phe His Ile Asn Tyr Phe Arg  
 85 90 95  
 His Thr Pro Glu Pro Phe Tyr Ala Ile Ala Arg Ala Arg His Pro Arg  
 100 105 110  
 Ser Leu Lys Pro Thr Ile Thr His Ala Phe Leu Ala Leu Leu Glu Lys  
 115 120 125  
 Lys Gly Leu Leu His Phe Val Phe Thr Gln Asn Ile Asp Gly Leu Glu  
 130 135 140  
 Arg Asp Val Gly Ile Pro Glu Asp Lys Ile Leu Asn Ala His Gly Ser  
 145 150 155 160  
 Trp Arg Thr Gln Arg Cys Trp Lys Cys Lys Thr Pro Tyr Pro Asp Asp  
 165 170 175  
 Leu Met Lys Gln Ala Ile Ser Thr Gly Thr Val Pro Tyr Cys Gln Val  
 180 185 190  
 Pro Asp Cys Gly Gly Ala Val Lys Pro Asp Ile Val Phe Phe Gly Gln  
 195 200 205  
 Pro Leu Pro Ala Glu Phe Asp Glu Lys Glu Lys Glu Val Ser Glu Ala  
 210 215 220  
 Asp Met Met Leu Val Met Gly Thr Ser Leu Lys Val Ala Pro Cys Ser  
 225 230 235 240

## 17387

Arg Leu Pro Arg Leu Ala Arg Glu Gly Ile Pro Arg Val Leu Val Asn  
                                   245                                  250                                  255  
 Arg Glu Lys Val Gly Asp Phe Gly Lys Arg Ala Glu Asp Val Ser Ile  
                                   260                                  265                                  270  
 Leu Gly Asp Cys Asp Asp Gly Val Arg Lys Leu Ala Asp Ala Leu Gly  
                                   275                                  280                                  285  
 Trp Thr Ala Glu Met Glu Ser Leu Trp Lys Lys Ala Ile Ala Ala Lys  
                                   290                                  295                                  300  
 Glu Ala Ala Gln Glu Asp Trp Gly Glu Glu Glu Ser Leu Asp Glu Leu  
 305                                  310                                  315                                  320  
 Ile Asp Arg Tyr Ala Lys Thr Leu Thr Asp Ala Arg Lys Ile Ser Ala  
                                   325                                  330                                  335  
 Gly His Lys Arg Met Leu Glu Glu His Leu Glu Asn Lys Phe Ala Glu  
                                   340                                  345                                  350  
 Val Leu Lys Lys Ser Thr  
                                   355

&lt;210&gt; 39939

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39939

Trp Ile Asp Leu Val Thr Cys His Gly Ala Gly His Gln Asp Asn Arg  
 1                                  5                                  10                                  15  
 Ala Arg Ile Arg Gly Ser Ala Leu Asn Gly Arg Thr Lys Ala Ser Tyr  
                                   20                                  25                                  30  
 Ser Ile Gln Gln Thr Ala His Asp Ala Asn Val Tyr Leu Ala Glu Asn  
                                   35                                  40                                  45  
 Ala Ile Glu Asn Ala Arg Pro Ile Val Gly Asp Gln Tyr Met Phe Lys  
                                   50                                  55                                  60  
 Lys Phe Asn Val  
 65

&lt;210&gt; 39940

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39940

Pro Val Arg Val Asn Lys Lys Ser Gln Ile Leu Asn Tyr Val Leu Phe  
 1                                  5                                  10                                  15  
 Phe Arg Thr Ser Ala Asn Leu Phe Ser Arg Cys Ser Ser Asn Ile Arg  
                                   20                                  25                                  30  
 Leu Cys Pro Ala Glu Ile Phe Leu Ala Ser Val Ser Val Phe Ala Tyr  
                                   35                                  40                                  45  
 Leu Ser Ile Ser Ser Ser Arg Leu Ser Ser Ser Pro Gln Ser Ser Cys  
                                   50                                  55                                  60  
 Ala Ala Ser Leu Ala Ala Met Ala Phe Phe His Ser Asp Ser Ile Ser  
 65                                  70                                  75                                  80  
 Ala Val Gln Pro Arg Ala Ser Ala Ser Leu Arg Thr Pro Ser Ser Gln  
                                   85                                  90                                  95  
 Ser Pro Lys Met Asp Thr Ser Ser Ala Arg Phe Pro Lys Ser Pro Thr  
                                   100                                  105                                  110  
 Phe Ser Arg Leu Thr Ser Thr Arg Gly Met Pro Ser Arg Ala Lys Arg  
                                   115                                  120                                  125

## 17388

Gly Ser Leu Glu His Gly Ala Thr Phe Arg Leu Val Pro Ile Thr Ser  
 130 135 140  
 Ile Ile Ser Ala Ser Asp Thr Ser Phe Ser Phe Ser Ser Asn Ser Ala  
 145 150 155 160  
 Gly Arg Gly Cys Pro Lys Asn Thr Met Ser Gly Phe Thr Ala Pro Pro  
 165 170 175  
 Gln Ser Gly Thr  
 180

<210> 39941  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 39941  
 Asn Ala Asp Asn Cys Gln Pro Ser Met Ile Ile Asn His His Gly Asn  
 1 5 10 15  
 Pro Val Trp Ala Ser Gly Asn Pro Thr Leu Gly Asn Glu Ser Ser Phe  
 20 25 30  
 Ile Glu Leu Asp Glu Gly Ser Leu Lys Ser Leu Lys Gly Leu Ser Tyr  
 35 40 45  
 Phe Ser Gln Ile Ser Tyr Val Ser Met Lys Ile Arg Val Lys Trp Pro  
 50 55 60  
 Met Ala Ala Phe Ser Thr Leu Phe Thr Ser Ala Tyr Ser Asn Pro Ser  
 65 70 75 80  
 Asp Thr Ser Trp Met Val Gly  
 85

<210> 39942  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 39942  
 Asn Thr Tyr Thr Leu Cys Val Asp Ile His Phe Ile Pro Phe Ser Glu  
 1 5 10 15  
 Thr Gln Ala Ile Ala Thr Phe Leu Leu Phe Ser Leu Thr Asp Pro Tyr  
 20 25 30  
 Pro Leu Lys Pro Gln Pro Pro Gln His Trp Glu Thr Leu Thr Met Ala  
 35 40 45  
 Pro Ser Val Leu Pro Phe Arg Asp Ile Asn Leu His Ala Ser Pro Ser  
 50 55 60  
 His Tyr Ala Phe Thr Ser Pro Ser Ser Pro Asn Ala Gln Thr Leu Val  
 65 70 75 80  
 Val

<210> 39943  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

<400> 39943  
 Thr Arg Asp Ala Arg Asn Asp Lys Glu Asp Leu Thr Arg Gly Trp Pro  
 1 5 10 15  
 Ala Thr Arg Leu Ser Tyr Asn Ile Ile Tyr Gly Arg Glu Ser Arg Glu

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<210> 39944
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<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (129)
<223> Identity of amino acid sequences at the above locations are unknown.
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<210> 39945
<211> 316
<212> PRT
<213> A.fumigatus
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&lt;400&gt; 39945

Gln Ser Thr Ser Trp Trp Ser Cys Asn Arg Ser Ser Glu Ile Tyr Leu  
 1 5 10 15  
 Asp Tyr Ser Ile Val Leu Tyr Lys Leu Arg Lys Pro Arg Leu Ser Trp  
 20 25 30  
 Leu Val Phe Leu Leu Pro Glu Ile Arg Val Trp Gly Leu Met Thr Phe  
 35 40 45  
 Ala Gly Asp His Gln Asn Asp Ile Lys Val Leu Ala Pro Ala Val Ser  
 50 55 60  
 Tyr Thr Ser Ala His Asp Ala Ser Ser Met Pro Gln Ser Leu Tyr Leu  
 65 70 75 80  
 Ser Ser Ser Ser Ile Pro Glu Asn His Ile Ala Arg Leu Ser Thr Glu  
 85 90 95  
 Thr Ala Ala His Asp Ile Pro Ser Asn Pro Ser Tyr Gly Ile Asp Ser  
 100 105 110  
 Pro Leu Gly Leu Ile Ala Ser Asn Val Leu Ser Pro Phe Tyr Leu Tyr  
 115 120 125  
 Ala Thr Leu Lys Gly Lys Phe Gln Val Trp Asp Asp Leu Leu Ala His  
 130 135 140  
 Thr Pro Gln Glu Thr Phe Arg Ala Pro Thr Leu Asp Leu Gly Cys Gly  
 145 150 155 160  
 Arg Gly Leu Val Leu Leu Lys Ile Ala Gln Ile Lys Lys Arg Leu Ala  
 165 170 175  
 Ser Ser Glu Ser Pro Val Pro Pro Ala Tyr Gly Ile Asp Leu Phe Val  
 180 185 190  
 Lys Gly Asp Gln Ser Gly Asn Ala Pro Leu Ala Thr Tyr Lys Asn Ala  
 195 200 205  
 Ala Ala Leu Gly Val Cys Glu Gln Thr Val Leu His Thr Gly Ser Val  
 210 215 220  
 Ala Asp Leu Pro Phe Cys Asp Gly Val Phe Ser Leu Val Thr Ala Ser  
 225 230 235 240  
 Leu Ser Ile His Asn Ala Asp Lys Ala Thr Arg Lys Lys Ala Ile Gly  
 245 250 255  
 Glu Ala Ala Arg Val Leu Val Ser Gly Gly Tyr Leu Val Val Val Asp  
 260 265 270  
 Met Ala Gly Tyr Val Glu Glu Tyr Ala Asp Leu Val Lys Gln Met Gly  
 275 280 285  
 Trp Thr Asp Val Ser Thr Glu Phe Gly Gly Val Arg Ile Met Tyr Gly  
 290 295 300  
 Ala Trp Pro Cys Arg Ile Leu Arg Ala Arg Lys Pro  
 305 310 315

&lt;210&gt; 39946

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39946

Arg Asn Ala His Ser Pro Leu Asn Thr Met Lys Leu Phe Leu Leu Leu  
 1 5 10 15  
 Leu Ile Ser Ala Leu Ala Ala Ala Ala Leu Pro Ser Ser Phe Lys  
 20 25 30  
 Trp Ser Ser Ser Gly Pro Leu Val Glu Pro Lys Lys Asp Gly Arg Asn  
 35 40 45  
 Ile Ala Ala Ile Lys Asp Pro Ser Ile Val Lys Val Asp Gly Thr Tyr



Year	Country	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)	Population growth rate (%)	Urban population growth rate (%)	Population growth rate (per 1,000)	Urban population growth rate (per 1,000)	Population growth rate (per 1,000)	Urban population growth rate (per 1,000)
1950	Algeria	4.0	0.5	12.5	100	100	1.5	1.5	15	15	15	15
1955	Algeria	4.2	0.6	14.3	110	110	1.6	1.6	16	16	16	16
1960	Algeria	4.4	0.7	15.9	120	120	1.7	1.7	17	17	17	17
1965	Algeria	4.6	0.8	17.4	130	130	1.8	1.8	18	18	18	18
1970	Algeria	4.8	0.9	18.8	140	140	1.9	1.9	19	19	19	19
1975	Algeria	5.0	1.0	20.0	150	150	2.0	2.0	20	20	20	20
1980	Algeria	5.2	1.1	21.2	160	160	2.1	2.1	21	21	21	21
1985	Algeria	5.4	1.2	22.2	170	170	2.2	2.2	22	22	22	22
1990	Algeria	5.6	1.3	23.2	180	180	2.3	2.3	23	23	23	23
1995	Algeria	5.8	1.4	24.1	190	190	2.4	2.4	24	24	24	24
2000	Algeria	6.0	1.5	25.0	200	200	2.5	2.5	25	25	25	25
2005	Algeria	6.2	1.6	25.8	210	210	2.6	2.6	26	26	26	26
2010	Algeria	6.4	1.7	26.6	220	220	2.7	2.7	27	27	27	27
2015	Algeria	6.6	1.8	27.3	230	230	2.8	2.8	28	28	28	28
2020	Algeria	6.8	1.9	27.9	240	240	2.9	2.9	29	29	29	29
2025	Algeria	7.0	2.0	28.6	250	250	3.0	3.0	30	30	30	30
2030	Algeria	7.2	2.1	29.2	260	260	3.1	3.1	31	31	31	31
2035	Algeria	7.4	2.2	29.7	270	270	3.2	3.2	32	32	32	32
2040	Algeria	7.6	2.3	30.3	280	280	3.3	3.3	33	33	33	33
2045	Algeria	7.8	2.4	30.8	290	290	3.4	3.4	34	34	34	34
2050	Algeria	8.0	2.5	31.3	300	300	3.5	3.5	35	35	35	35
2055	Algeria	8.2	2.6	31.7	310	310	3.6	3.6	36	36	36	36
2060	Algeria	8.4	2.7	32.1	320	320	3.7	3.7	37	37	37	37
2065	Algeria	8.6	2.8	32.4	330	330	3.8	3.8	38	38	38	38
2070	Algeria	8.8	2.9	32.7	340	340	3.9	3.9	39	39	39	39
2075	Algeria	9.0	3.0	33.0	350	350	4.0	4.0	40	40	40	40
2080	Algeria	9.2	3.1	33.3	360	360	4.1	4.1	41	41	41	41
2085	Algeria	9.4	3.2	33.6	370	370	4.2	4.2	42	42	42	42
2090	Algeria	9.6	3.3	33.9	380	380	4.3	4.3	43	43	43	43
2095	Algeria	9.8	3.4	34.2	390	390	4.4	4.4	44	44	44	44
2100	Algeria	10.0	3.5	34.5	400	400	4.5	4.5	45	45	45	45

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<210> 39947
<211> 197
<212> PRT
<213> A.fumigatus
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Ser	Ser	Ser	Ser	Phe	Phe	Ser	Ser	Pro	Pro	Leu	Arg	Arg	Arg	Arg	Pro
1				5					10					15	
Cys	Pro	Ala	Ala	Ser	Asn	Gly	Ala	Pro	Ala	Gly	Leu	Trp	Ser	Ser	Pro
			20					25					30		
Arg	Arg	Met	Ala	Ala	Thr	Ser	Gln	Leu	Ser	Arg	Ile	Pro	Pro	Leu	Ser
		35					40					45			
Lys	Trp	Thr	Gly	Arg	Thr	Thr	Ser	Ser	Pro	Ala	Arg	Pro	Pro	Asn	Pro
	50					55					60				
Ala	Thr	Thr	Ser	Ser	Thr	Ser	Thr	Ser	Arg	Thr	Ser	Ala	Arg	Pro	Thr
65					70					75					80
Arg	Pro	Arg	Ser	Thr	Thr	Leu	Thr	Arg	Pro	Arg	Ser	Ala	Arg	Ala	Ile
				85					90					95	

## 17392

Val Pro Arg Arg Arg Ser Ser Ser Ser Ser His Ile Thr Cys Gly Thr  
 100 105 110  
 Trp Ser Ser Arg Met Ala Thr Gln Arg Ile Arg Pro Ile Arg Thr Leu  
 115 120 125  
 Pro Thr Arg Pro Gly Gly Ala Asn Arg Arg Ile Ser Ser Val Ala Cys  
 130 135 140  
 Pro Ala Ser Ser Pro Arg Ile Arg Ala Met Ala Thr Gly Ser Thr Cys  
 145 150 155 160  
 Gly Arg Ser Ala Ile Gln Ala Thr Ala Thr Cys Ser Pro Arg Thr Thr  
 165 170 175  
 Thr Ala Ile Cys Thr Ala Arg Arg Pro Arg Trp Pro Thr Ser Pro Thr  
 180 185 190  
 Ala Trp Ala Ile Gln  
 195

&lt;210&gt; 39948

&lt;211&gt; 422

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39948

Pro Arg Arg Ile Ser Gly Thr Arg Leu Ala Gln Val Phe Ala Ala Val  
 1 5 10 15  
 Leu Val Leu Phe Leu Ile Phe Leu Leu Gly Ala Tyr Lys Ala Ser Ser  
 20 25 30  
 Gly Phe Arg Ala Ser His Ser Ser Gln His Leu Leu Ser Asn Gly Ser  
 35 40 45  
 Ala Leu Phe Gly Pro Thr Thr Ile Leu Ile Ser Leu Asp Gly Phe Arg  
 50 55 60  
 Ala Asp Phe Leu Asp Arg Gly Leu Thr Pro Thr Leu Asn Ala Leu Ile  
 65 70 75 80  
 Ala Glu Gly Val Ser Pro Pro Tyr Met Leu Pro Ser Phe Pro Ser Val  
 85 90 95  
 Thr Phe Pro Asn His Phe Thr Leu Val Thr Gly Leu Tyr Pro Glu Ser  
 100 105 110  
 His Gly Ile Val Ser Asn Thr Phe Trp Asp Pro Ala Leu Lys Glu Asn  
 115 120 125  
 Phe His Tyr Thr Asn Gln Ser Ile Ser Met Gln Pro Lys Trp Trp Asn  
 130 135 140  
 Ala Glu Pro Leu Trp Met Thr Ala Glu Lys His Gly Leu Lys Thr Gly  
 145 150 155 160  
 Ile His Met Trp Pro Gly Ser Glu Ala His Ile Gly Gly Val Asp Pro  
 165 170 175  
 Thr Phe Leu Asp Lys Tyr Asn Gly Ser Glu Lys Leu Ser Arg Lys Val  
 180 185 190  
 Asp Arg Ile Leu Glu Leu Leu Asp Leu Thr Gly Ala Glu Glu Ser  
 195 200 205  
 Leu Met Val Pro Glu Arg Pro Gln Phe Ile Ala Ala Tyr Val Pro Asp  
 210 215 220  
 Val Asp Ala Asp Gly His Lys Phe Gly Pro Asn Ser Thr Glu Ile Arg  
 225 230 235 240  
 His Thr Ile Ser Gln Val Asp Ser Met Leu Ala Glu Leu Met Ser Gly  
 245 250 255  
 Leu Arg Ser Arg Asn Leu Thr Asp Ile Val Asn Leu Ile Ile Val Ser  
 260 265 270  
 Asp His Gly Met Ala Thr Thr Ala Thr Glu Arg Leu Ile Gln Leu Asp

## 17393

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      275              280              285
Asp Phe Ile Glu Leu Gly Leu Val Asp Arg Ile Asp Gly Trp Pro Leu
 290              295              300
Arg Gly Ile Arg Pro Arg Lys Pro Glu Asp Leu Glu Val Leu Gln Lys
305              310              315              320
Gln Leu Glu Asn Leu Thr Leu Gln Tyr Pro Gln Ala Val Glu Val Tyr
      325              330              335
Thr Arg Glu Thr Met Pro Glu Arg Tyr His Phe Ser Arg Asn Asp Arg
      340              345              350
Ile Ala Pro Leu Trp Val Ile Pro Lys Thr Gly Trp Ala Ile Val Glu
      355              360              365
Arg Pro Asp Phe Asp Ala Gln Glu Ala Ile Arg Thr Gly Arg Val Tyr
      370              375              380
His Pro Lys Gly Val His Gly Tyr Asp His Glu His Pro Leu Met Arg
385              390              395              400
Ala Ile Phe Ile Ala Arg Gly Pro Ala Phe Pro His Pro Pro Asn Ser
      405              410              415
Pro Ala Gly Ser Phe Pro
      420

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<210> 39949  
 <211> 139  
 <212> PRT  
 <213> A.fumigatus

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<400> 39949
Ala Asn Met Arg Ala Glu Asn Ile Asn Val Tyr Asn Leu Val Cys Asp
 1              5              10              15
Ser Leu Gly Ile Asp Pro Leu Pro Asn Asn Gly Thr Met Arg Leu Pro
      20              25              30
Leu Gln Pro Val Gly Phe His Ser Asp Glu Asp Ala Pro Ile Val Asp
      35              40              45
Lys Pro Ala Asp Pro Pro Ile Ser Ser Ala Ser Met Ser Val Ile Pro
      50              55              60
Ser Gln Thr Thr Thr Pro Ala Ser Thr Ser Ser Glu Val Pro Ala Thr
      65              70              75              80
Ala Leu Leu Ala Gln Pro Thr Ser Pro Ser Glu Asn Glu Pro Ser Ser
      85              90              95
Glu Pro Gln Asn Glu Pro Glu Ser Asp Asp Glu Gln Gly Pro Thr Trp
      100              105              110
Trp Gly Thr Leu Trp Ser Lys Val Glu Glu Ile Lys Glu Trp Ala Thr
      115              120              125
Asp Met Ile Glu Thr Val Lys Asp Asn Ile Ala
      130              135

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<210> 39950  
 <211> 258  
 <212> PRT  
 <213> A.fumigatus

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<400> 39950
Ser Ser Phe Leu Phe Phe Asp Phe Ser Ser Phe Phe Ser Arg Trp Met
 1              5              10              15
Ala Val Pro Asn Met Ala Ser Tyr Leu Asp Ser Asn Ile Ser Asn Asn
      20              25              30
Ser Arg Asn Ala Thr Thr Thr Thr Phe Asp Thr Ala Val Leu Asp Ala

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## 17394

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      35              40              45
Phe Ile Pro Gly Tyr Ser Ile Leu Ser Arg Phe Leu Val Ser Tyr Leu
  50              55              60
Gln Ile Asp Leu Ser Tyr Tyr Leu Pro Phe Leu Val Met Ala Ala Ala
  65              70              75              80
Val Thr Ala Ser Leu Arg Tyr Thr Ile Lys Arg Ile Ile His Leu Leu
      85              90              95
Gly Glu His Phe Thr Ser Thr Ala Glu Ile Arg Leu Asp Asp Glu Ile
      100              105              110
Tyr Asn Tyr Leu Met Phe Trp Met Ala Gln Gln Pro Phe Thr Lys Arg
      115              120              125
Thr Thr His Phe Val Ala Gly Thr Lys Ile Ser Ser Gly Met Arg Tyr
      130              135              140
Trp Asp Ser Asp Asn Gly Glu Gly Ser Asp Asp Glu Asp Ile Cys Asp
  145              150              155              160
Asp Asp Asp Asp Asp Asn Gly Ser Ala Gly Asp Asn Ser Asp Thr Leu
      165              170              175
Ala Asn Phe Asp Arg Tyr Trp Gln Lys Val Ile Ser Lys Asp Lys Tyr
      180              185              190
Arg Thr Leu Arg Phe Thr Pro Ala Glu Gly Thr His Tyr Phe Trp Tyr
      195              200              205
Lys Gly Arg Pro Leu Ala Phe Ile Arg Glu Arg Glu Glu Asn Asn Ser
      210              215              220
Gly Met Ser Leu Arg Trp Val Pro Glu Arg Leu Tyr Leu Ser Cys Leu
  225              230              235              240
Gly Arg Asp Arg Tyr Ser Val Phe Thr His Arg Gly Arg Lys Val Pro
      245              250              255
Arg Ser

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<210> 39951
<211> 200
<212> PRT
<213> A.fumigatus

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<400> 39951
Gly Asp Asp Tyr His Leu Trp Ser Thr Glu Tyr Ala Gly Cys His Gln
  1              5              10              15
His Leu Asn Pro His Phe Cys Asn Leu Tyr Thr Val Tyr Val Val Thr
      20              25              30
Lys Asp Leu Ser Cys Thr Ala Met Pro Pro Arg Pro Asp Leu Leu Ser
      35              40              45
Pro Ser Leu Leu Ser Pro Gly Asp Tyr Asp Asp Asp Ala Ser Ser Leu
      50              55              60
Arg Ser Leu Ser Glu Gln Asp Ser Asp Ser Asp Asp Asp Glu Phe Leu
  65              70              75              80
Arg Lys Ala Arg Thr Thr Leu Glu Leu Ala Glu His Asp Arg Ala Val
      85              90              95
Leu Glu Glu Glu Glu Glu Met Glu Lys Leu Leu Val Arg Ser Gly Pro
      100              105              110
Ala His Gly Leu Arg Arg Ile Phe Ser Pro Asn Gly Ser Ser Val Lys
      115              120              125
Ile Gly Lys Tyr Glu Arg Asn Arg Asp Arg Arg Arg Lys Arg His Asp
      130              135              140
Glu Arg Lys Arg Arg Arg Arg Ser Ala Val Gly Glu Asn Gly Glu Leu
  145              150              155              160

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## 17395

Thr Tyr Glu Met Glu Glu Gly Tyr Arg Glu Ser Glu Ser Ser Leu Leu  
                   165                  170                  175  
 Ser Gly Ser Ser Ser Glu Leu Asp Gln Arg Leu Glu Lys Gln Tyr Ala  
                   180                  185                  190  
 Ser Ile Arg Val Arg Ala Asp Phe  
                   195                  200

&lt;210&gt; 39952

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39952

Trp Val Val Ser Ser Leu Ser Ile Val Met Val Ser Ser Ser Gly Met  
 1                  5                  10                  15  
 Leu Asn Ser Leu Arg Pro Ser Gly Trp Ala Phe Phe Val Gly Leu Leu  
                   20                  25                  30  
 Gln Ala Ala Tyr Thr Leu Thr Gly Tyr Gly Met Val Ala Ala Met Cys  
                   35                  40                  45  
 Glu Glu Val Gln Asn Pro His Arg Glu Gly Pro Gln Gly Asn Cys Pro  
                   50                  55                  60  
 Phe Gly Arg Arg Arg Arg Tyr His Arg Ser His Leu Pro Asp Pro His  
 65                  70                  75                  80  
 Ser Leu Arg Ser Ala Asp Arg Glu Gly Leu Pro Ser Val Trp Pro Val  
                   85                  90                  95  
 Pro Asn Pro Ser Ala Ser Ser Ser Arg Gln Arg Leu Ala Arg Pro Val  
                   100                  105                  110  
 Val Gly Ser Ala Cys Cys Ser Ser Ser Ser Val Leu Pro Cys Ser Pro  
                   115                  120                  125  
 Ala Leu Ala Pro  
                   130

&lt;210&gt; 39953

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39953

Ala Phe Ala Ala His Cys Leu His Cys Ala Thr Asp Leu Pro Thr Trp  
 1                  5                  10                  15  
 Val Leu Pro Leu Leu Leu Cys Asp Cys Phe Cys Asp Asp Ala Phe Pro  
                   20                  25                  30  
 Tyr Leu Leu Leu Leu Ala Leu Thr Val Phe Ser Leu Thr Pro Val Val  
                   35                  40                  45  
 Leu Ile His Arg Ala Gly Ser Leu Lys His Asp Ser Thr His Trp Thr  
                   50                  55                  60  
 Tyr Ser Ser Leu Ala Ile Met Arg Thr Ser His Ser Thr Arg Pro Glu  
 65                  70                  75                  80  
 Ala Asn Leu Lys Lys Ser Ser Lys Glu Ile Lys  
                   85                  90

&lt;210&gt; 39954

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39954

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Ser Val Ala Cys Pro Asn Ser Ser Phe Ala Ile Met Ala Ala Pro Phe
1          5          10          15
Gly Leu Ser Thr Thr Met Tyr Ile Thr Leu Thr Asp Gly Gln Ser Val
          20          25          30
Thr Ile Ile Trp Gly Trp Val Leu Val Thr Leu Ile Ser Ile Ala Ile
          35          40          45
Ala Ala Ser Leu Ala Glu Ile Cys Ala Val Tyr Pro Thr Ala Gly Gly
          50          55          60
Val Tyr Tyr Trp Ser Ala Met Leu Ser Thr Lys Glu Trp Ala Pro Met
65          70          75          80
Met Ser Phe Ile Asp Gly Trp Leu Thr Leu Val Gly Asn Trp Thr Val
          85          90          95
Thr Leu Ser Ile Thr Phe Ser Thr Gly Gln Leu Ile Leu Ser Ala Ile
          100          105          110
Ser Leu Trp Asn Glu Asp Phe Val Ala Asn Ala Trp Gln Thr Ile Leu
          115          120          125
Met Phe Trp Ala Val Val Leu Val Cys Ala Met Val Asn Ile Phe Phe
          130          135          140
Ser Lys Tyr Leu Asp Leu Ile Asn Lys Val Cys Ile Phe Trp Thr Ala
145          150          155          160
Ala Ser Val Ile Ile Ile Leu Ile Val Leu Leu Ser Met Ala Asp Asn
          165          170          175
Arg Arg Asp Ala Ala Phe Val Phe Gly His Tyr Asp Ala Ser Asp Ser
          180          185          190
Gly Trp

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&lt;210&gt; 39955

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (183), (188)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39955

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Leu Asn Pro Thr Glu Gly Asp Val Glu Gly Val Met Asp Arg Pro Val
1          5          10          15
Gly Asn Thr Ala Asp Val Tyr Ala Glu Cys Glu Lys Trp Tyr Ala Gly
          20          25          30
Pro Phe Ala Phe Leu Phe Ala Gly Leu Ile Gly Pro Met Leu Ile Arg
          35          40          45
Arg Arg Asp Ala Trp Tyr Ala Gln Arg Gly Leu Ser Arg Thr Glu Ala
          50          55          60
Lys Arg Arg Tyr Ile Ser Thr Leu Ile Asp Thr Met His Arg Tyr Ala
65          70          75          80
Ser Gln Thr Pro Glu Ala Arg Glu Leu Val Ala Glu Leu Glu Phe Val
          85          90          95
Trp Asp Gln Ile Lys Ser Asn Thr Ser Ser Ser Ser Ser Ser Pro
          100          105          110
Met Gln Asn Val Gly Val Pro Pro Leu Pro Gln Pro Asn Tyr Ala Ser
          115          120          125
Ile Gly Gly Arg Leu Ala Arg Pro Ile Tyr Glu Asp Ile Ile Ala Thr

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## 17397

130                      135                      140  
 Ala Arg Asp Asn His Ser Arg Glu Arg Asn His Gly Asp Ser Arg Leu  
 145                      150                      155                      160  
 Arg Val Leu Ser Pro Val Ser Gln Pro Asp Gly Leu Tyr Glu Arg Arg  
                     165                      170                      175  
 Gly His Lys Asp Leu Gly Xaa Ser Arg Arg Gly Xaa Pro Asp Pro Lys  
                     180                      185                      190  
 Ile Val Lys  
                     195

&lt;210&gt; 39956

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39956

Tyr Asn Ser Gly Thr Asp Leu Lys Thr Leu Leu His His Leu Leu Asp  
 1                      5                      10                      15  
 Ile Ala Glu Ala Met His Ala Ala Thr Val Asp Ala Ser Ala Asp Ala  
                     20                      25                      30  
 Ala Leu Ala Arg Met Gly Tyr Lys Ser Glu Leu Pro Arg Asn Leu Ser  
                     35                      40                      45  
 Met Leu Ser Ile Leu Gly Leu Cys Val Ile Leu Gln Asp Val Phe Ser  
                     50                      55                      60  
 Leu Arg Gly Thr Gly Ala Ala Thr Asp Arg Ser His Val Gln Thr Val  
 65                      70                      75                      80  
 Pro Leu Pro Ser Trp Pro Arg Pro Ser Val Ser Ala Pro Pro Cys Thr  
                     85                      90                      95  
 Ser Pro

&lt;210&gt; 39957

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39957

Arg Thr Ser Phe Ser Val Ala Ser Ala Gln Pro Ile Gly Leu Ile Phe  
 1                      5                      10                      15  
 Lys Thr Ala Thr Gly Ser Ala Gly Gly Gly Phe Gly Leu Leu Phe Leu  
                     20                      25                      30  
 Ile Leu Gly Ile Ala Met Phe Ala Gly Ile Gly Ser Leu Thr Ala Ala  
                     35                      40                      45  
 Ser Arg Cys Thr Tyr Ala Phe Ala Arg Asp Gly Ala Ile Pro Gly Phe  
                     50                      55                      60  
 Arg Ile Trp Arg Lys Val Asn Lys Arg Leu Asp Val Pro Val Tyr Ala  
 65                      70                      75                      80  
 Val Leu Leu Ser Ala Ala Val Asp Cys Leu Leu Gly Leu Ile Tyr Phe  
                     85                      90                      95  
 Gly Ser Thr Ala Ala Phe Asn Ser Phe Thr Gly Val Ala Thr Ile Cys  
                     100                      105                      110  
 Leu Ser Thr Ser Tyr Gly Leu Pro Ile Leu Ile Ser Met Val Arg Gly  
                     115                      120                      125  
 Arg Arg Asp Leu Lys Glu Ser Thr Phe Ser Leu Gly Ala Phe Gly Tyr  
                     130                      135                      140  
 Ala Ile Asn Ala Val Thr Val Cys Trp Ile Val Leu Ala Val Val Leu

## 17398

145                      150                      155                      160  
 Phe Cys Met Pro Val Ser Leu Pro Val Thr Ala Ser Ser Met Asn Tyr  
                                  165                      170                      175  
 Ala Ser Val Val Phe Ala Gly Phe Ala Thr Ile Ser Ile Ile Trp Tyr  
                                  180                      185                      190  
 Ile Val Tyr Ala Arg Lys His Phe Thr Gly Pro Pro Ala Ser Ala Glu  
                                  195                      200                      205  
 Glu Val Arg Ala Arg Pro Val Met Thr Gly Lys Ala Val Val Asp Ala  
                                  210                      215                      220  
 Glu Asn Ala Tyr Ser Asp Gly Ser Met Ser Ser Lys Lys Val Glu Gln  
 225                      230                      235                      240

&lt;210&gt; 39958

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39958

Arg Ser Tyr Cys Gly Asp Thr Tyr Arg Asn Arg Trp Val Leu Asp Gly  
 1                      5                      10                      15  
 Tyr Leu His Leu His Gln Ala Gln Lys Glu Leu Ser Thr Gln Lys Lys  
                                  20                      25                      30  
 Glu Thr Ser Thr Thr Ala Gly Arg Ser Leu Leu His Leu Leu Gly Gly  
                                  35                      40                      45  
 His Arg Ser Ile Arg Ile Cys Ile Leu Gly Ile Tyr Asn Arg Phe Ser  
                                  50                      55                      60  
 Cys His His Arg Pro Arg Pro Tyr Phe Phe Gly Arg Arg Arg Trp Ser  
 65                      70                      75                      80  
 Ser Glu Met Leu Ala Gly Ile Asp Asn Val Pro Asn Asp Ala Asp Cys  
                                  85                      90                      95  
 Arg Glu Pro Arg Glu His Asp Ala Gly Val Val His Arg Ala Gly Ser  
                                  100                      105                      110  
 Tyr Arg Gln Gly Asp Arg His Ala Glu Glu Asp Tyr Arg Gln Asp Asp  
                                  115                      120                      125  
 Pro Ala His Cys Asn Ser Val Asp Arg Ile Pro Glu Cys Ser Glu Arg  
 130                      135                      140  
 Glu Gly Arg Phe Leu Glu Val Pro Ala Pro Thr Asp His Gly Asn Glu  
 145                      150                      155                      160  
 Asp Trp Lys Thr Val Arg Ser Arg Gln Ala Asp Arg Gly Asp Thr Gly  
                                  165                      170                      175  
 Glu Arg Val Glu Gly Arg Gly Arg Ala Glu Val Asp Gln Ala Gln Glu  
                                  180                      185                      190  
 Ala Val Asp Arg Gly Gly Glu Gln Asp Gly Ile Asp Gly His Ile Glu  
                                  195                      200                      205  
 Ala Leu Val Asp Phe Ala Pro Asp Ala Glu Ser Gly Asp Gly Pro Val  
 210                      215                      220  
 Thr Gly Lys Cys Val Gly Ala Pro Ala Gly Arg Arg Gln Gly Ala Asn  
 225                      230                      235                      240  
 Ala Gly Glu His Gly Asn Thr Glu Asp Glu Glu Gln Gln Ala Glu Pro  
                                  245                      250                      255  
 Thr Thr Gly Arg Ala Ser Arg Cys Leu Glu Asp Glu Ala Asp Gly Leu  
                                  260                      265                      270  
 Gly Thr Gly His Thr Glu Gly Ser Pro Ser Arg Ser Ala Glu Arg Arg  
                                  275                      280                      285  
 Glu Trp Gly Ser Gly Arg  
 290



<210> 39959  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 39959  
 Ala Ala Cys Ser Lys Pro Thr Lys Lys Ala His Pro Glu Gly Leu Arg  
 1 5 10 15  
 Glu Phe Ser Ile Pro Asp Asp Asp Thr Met Thr Ile Glu Arg Leu Leu  
 20 25 30  
 Thr Thr His Tyr Pro Thr His Arg Asn Ala Gln Lys Gln Thr Pro His  
 35 40 45  
 Pro Ala Asp Tyr Pro Pro Ser Ile Lys Glu Arg Ser Arg  
 50 55 60

<210> 39960  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 39960  
 Ile Phe Leu Ser Ser Leu Ser Leu Met Ser Met Glu Phe Pro Tyr Leu  
 1 5 10 15  
 His Ser Thr Asp Asn Met Leu Asp Ser Val Gln Met Ser Ile Ser Ser  
 20 25 30  
 Tyr Ile Met Ile Met Leu Val Gln Tyr Phe Gln Leu Leu Asn His Asp  
 35 40 45  
 Tyr Val Lys Lys Met Ser Ser Ala Gly Gln Arg Arg Ser Ser Ala Ile  
 50 55 60  
 Cys Lys  
 65

<210> 39961  
 <211> 357  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (33), (34), (51)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 39961  
 Asn Gly Lys Arg Thr Thr Pro Leu Gly His Phe Phe Asn Arg Arg Phe  
 1 5 10 15  
 Asp Leu Asn Phe Val Pro Met Ala Ser Pro Leu Pro Lys His Gln Cys  
 20 25 30  
 Xaa Xaa Cys Pro Ser Ala Ala Gly Ser Glu His Asp Leu Arg Leu Pro  
 35 40 45  
 Pro Asp Xaa Tyr Pro Thr Ser His Asn Pro Gln Val Asp Ala Ile Ile  
 50 55 60  
 Arg Thr Lys Arg Lys Ala Arg Glu Pro Lys Ala Cys Tyr Pro Cys His  
 65 70 75 80  
 Ala Arg Lys Val Lys Cys Asp Arg Asn Leu Pro Cys Asp Gly Cys Val  
 85 90 95

## 17400

Lys Arg Asp His Pro Asp Ile Cys Ser Tyr Glu Arg Pro Ser Lys Lys  
                   100                  105                  110  
 Arg Ile Ile Ala Ser Ser Val Pro Pro Ser Tyr Asn Asp Ser Pro Ala  
                   115                  120                  125  
 Gly Ala Ser Gln Pro Asp Val Ala Glu His Thr Val Ser Ala Ala Gln  
                   130                  135                  140  
 Glu Glu Pro His Leu Arg Ile Lys Gln Glu Ala Gly Ala Ser Arg Ile  
 145                  150                  155                  160  
 Asn Ser Leu Gly Phe Arg His Arg Ile Ser Ile Ala Arg Glu Glu Trp  
                   165                  170                  175  
 Asp Asn Val Arg Asn Arg Leu Lys Glu Met Glu Lys Thr Ile Ser Asn  
                   180                  185                  190  
 Leu Arg Ala Gly Leu Glu Arg Ala Glu Glu Gly Pro Gly Gly Ile Leu  
                   195                  200                  205  
 Glu Thr Ala Ser Ala His Ser Ala Asp Glu Gly Asn Arg Ser Lys Ala  
                   210                  215                  220  
 Gly Ser Pro Glu Arg Glu Gly Ile His Ala Ala Asn Thr Leu Gly Glu  
 225                  230                  235                  240  
 Gly Thr Val His Leu Gly Ser Arg Ser Val Leu Ala Tyr Ile Leu Asn  
                   245                  250                  255  
 Asn Lys Ser Gly Ser Asp Gln Leu Gln Ala Leu Leu Glu Gly Gly Ile  
                   260                  265                  270  
 Leu Pro Lys Leu Gly Leu Asp Asn Glu Ser Ala Thr Tyr Pro Phe Val  
                   275                  280                  285  
 Asp Leu Trp Ser Ser Asp Met Ser Thr Phe Asp Ile Ser Ala Val Cys  
                   290                  295                  300  
 Ser Ala Leu Pro Asn Asp Gln Gln Cys Lys Glu Ser Val Leu Tyr Leu  
 305                  310                  315                  320  
 Trp Leu Gly Cys Tyr Ala Pro Arg Trp Met Leu Thr Gly Trp Gln Ile  
                   325                  330                  335  
 Phe Leu Leu Leu Ser Arg Arg Arg Arg Arg His Leu Pro Cys His Arg  
                   340                  345                  350  
 Arg Tyr Pro Ala Val  
                   355

&lt;210&gt; 39962

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (22), (34)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39962

Leu Lys Ser Thr Met Ser Trp Arg Cys Leu Gly Ser Glu Thr Arg Glu  
 1                  5                  10                  15  
 Phe Arg Thr Gly Gly Xaa Gly Met Thr Leu Val Arg Leu Gly Leu Arg  
                   20                  25                  30  
 Ser Xaa Gly Asp Gly Gly Phe Asp Gly Tyr Val Leu Val Phe Leu Gln  
                   35                  40                  45  
 Thr Leu Asp Val Thr Gly Phe Ser Ile Arg Gly Gly Leu  
                   50                  55                  60

&lt;210&gt; 39963

17401

<211> 159  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (4)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 39963  
Ser His Ser Xaa Thr Thr Gly Pro Glu Leu Pro Arg Leu Ala Ala Glu  
1 5 10 15  
Thr Ser Pro Gly His Cys Arg Phe Gln Leu His Arg Gln Arg Thr Ser  
20 25 30  
Trp Ser Met Thr His Phe Thr Thr Leu Leu Ser Glu Pro Arg Ala Lys  
35 40 45  
Gly Leu Phe Arg Gly Val Val Gly Arg Cys Val Met Ser Ala Arg Leu  
50 55 60  
Ala Ser Thr Ile Cys Asp Leu Arg Ile Arg Asp Ile Leu Gly Thr Gly  
65 70 75 80  
Thr Val Asn Glu Ser Met Glu Gly Ser Tyr Gly Asn Leu Leu Asp Ile  
85 90 95  
Met Gln Val Gly Lys Val Pro Leu Ala Leu Leu Asp Ala Ser Pro Arg  
100 105 110  
Arg Phe Val Gln Asn Gly Asp Leu Pro Asn Glu Ala Ser Lys Ser Gly  
115 120 125  
Ser Val Asp Arg Cys Ile Ser Val Met Lys Glu Thr Phe Gln Val Pro  
130 135 140  
Val Leu Gln Tyr His Glu Ala Gly Val Asp Tyr Arg Phe Ile Tyr  
145 150 155

<210> 39964  
<211> 327  
<212> PRT  
<213> A.fumigatus

<400> 39964  
Lys Asn Ile Glu Leu Phe Phe Cys Leu Tyr Ala Arg His Trp Asn Asn  
1 5 10 15  
Ala Pro Gln Cys Asn Ser Ser His Ser Arg Leu Leu Gly Phe Phe Gln  
20 25 30  
Cys Leu Pro Ser Ile Trp Arg Ala Leu Gln Cys Leu Arg Arg Tyr Gly  
35 40 45  
Asp Thr Lys Asn Val Phe Pro His Val Val Asn Phe Gly Lys Tyr Met  
50 55 60  
Phe Gly Val Ile Tyr Tyr Ala Thr Leu Ser Met Tyr Arg Ile Glu Lys  
65 70 75 80  
Met Thr Arg Phe Gln Ala Pro Phe Val Thr Phe Ala Leu Leu Asn Ala  
85 90 95  
Val Tyr Thr Ser Val Trp Asp Leu Ile Met Asp Trp Ser Leu Gly Asn  
100 105 110  
Pro Tyr Ala Lys His Pro Leu Leu Arg Glu Val Leu Ala Phe Arg Lys  
115 120 125  
Val Trp Val Tyr Tyr Ala Ala Met Val Ala Asp Val Ile Ile Arg Phe  
130 135 140  
Asn Trp Ile Tyr Tyr Ala Ile Phe Ala Arg Asp Met Gln His Ser Ala

## 17402

145                      150                      155                      160  
 Leu Leu Ser Phe Met Val Ala Leu Ser Glu Ile Phe Arg Arg Gly Val  
                          165                      170                      175  
 Trp Thr Ile Phe Arg Val Glu Asn Glu His Cys Thr Asn Val Leu Leu  
                          180                      185                      190  
 Phe Arg Ala Ser Arg Asp Val Pro Leu Pro Tyr Glu Val Ala Ser Pro  
                          195                      200                      205  
 Glu Val Glu Ala Asp His Pro Gly Glu Asp Val Gln Leu Gln Asp Gln  
                          210                      215                      220  
 His Ala Thr Thr Pro Leu Ser Ala Pro Ala Asp Ile Glu Gln Gly Thr  
 225                      230                      235                      240  
 Pro Ile Pro Pro Gly Leu Thr Thr His Pro Arg Gly Leu Ser Arg Val  
                          245                      250                      255  
 Gly Ser Leu Met Ala Thr Ala His Ala Gln Asp Phe Glu Arg Arg Lys  
                          260                      265                      270  
 Arg Pro Asp Gln Leu Thr Gly Ala Ser Ala Thr His Gly Pro Thr Thr  
                          275                      280                      285  
 Thr Asp Asp Thr Ser Asp Glu Glu Asp Asp Pro Val Asp Ser Arg  
                          290                      295                      300  
 Gln Asp Thr Asp Thr Asp Glu Ala Met Ser Glu Arg Leu Ser Asp Ala  
 305                      310                      315                      320  
 Asn Ala Gln Ile Ser Pro Lys  
                          325

&lt;210&gt; 39965

&lt;211&gt; 522

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39965

Phe Phe Ser Glu Gln Thr Gly Lys Lys Lys Val Lys Ala Ile Ala Arg  
 1                      5                      10                      15  
 Ala Ile Gln Lys Thr Asn Arg Ser Pro Arg His Pro Ser Leu Arg Arg  
                          20                      25                      30  
 Thr Ala Ile Gly Pro Gly Asp Pro Thr Ile Thr Pro Ser Gly Thr Leu  
                          35                      40                      45  
 Arg Ser Ser Pro Gly Gln Thr Ser Asp Asn Lys Arg Leu Glu Ala Ser  
                          50                      55                      60  
 Asn Ser Phe Arg Ser Pro Ser Ile Pro Ile Arg Ala Asp Ala His Ala  
 65                      70                      75                      80  
 Thr Thr Ser Arg Ser Thr Pro Gly Gln Arg Asp Glu Arg Gln Pro Leu  
                          85                      90                      95  
 Arg Val Pro Gly Ser Arg Phe Ser Ala Val Leu Gly Ser Tyr Gly Ser  
                          100                      105                      110  
 Ile Ile Ala Ser Pro Pro Gln His Gly Ala Ala Ser Asp Leu Val Ser  
                          115                      120                      125  
 Leu Glu Leu Pro Asp Pro Ala Leu Asp Pro Lys Asp Asp Met Ser Tyr  
                          130                      135                      140  
 Ser Pro Ser Ala Asp Thr Ile Arg Arg Gly Val Pro Lys Thr Pro Ser  
 145                      150                      155                      160  
 Pro Val Met Ser Arg Cys Asp Thr Asn Arg Ser Leu Ser Arg Asp Ala  
                          165                      170                      175  
 Ala Ser Lys Ser Pro Ala Ala Lys Phe Ala Gly Ser Lys Gly Ser Leu  
                          180                      185                      190  
 Arg Asn Asn Leu Ala Gly Pro Ser Thr Thr Arg Ala Ser Gln Ile Leu  
                          195                      200                      205

## 17403

```

Lys Arg Val Phe Ser His Pro Asp Trp Gly Pro Pro Glu Lys Arg Ala
210                215                220
Glu Ala Asp Thr Pro Val Ser Glu Val Glu Arg Arg Glu Asp Glu Phe
225                230                235                240
Phe Ala Phe Leu Asp Gly Glu Leu Ala Lys Ile Glu Ser Phe Tyr Gln
245                250                255
Met Lys Glu Asp Glu Ala Thr Gln Arg Leu Gln Val Leu Arg Gln Gln
260                265                270
Leu His Ile Met Arg Asp Arg Arg Ile Gln Glu Ile Leu Gly Thr Lys
275                280                285
Ser Lys Ser Lys Lys Asp Glu Ala His Gln Ser Asn Gly Phe Ser Thr
290                295                300
Leu Asn Ala Leu Ser Ala Phe His Leu Lys Glu Thr Leu Leu Gly Arg
305                310                315                320
Gly Arg Ile Gly Lys Asn Ser Glu Ala Leu Ala Gln Met Asn Ser Pro
325                330                335
Ala Ala Leu Gln Ala Gln Asn Pro Glu Ala Val Ser Gly Arg Arg Asp
340                345                350
Phe Met Arg Arg Pro Glu Asp Ser Gln Asn Asp Glu Val Thr Tyr Arg
355                360                365
Phe Ala Lys Arg Lys Leu Lys Tyr Ala Leu Gln Glu Phe Tyr Arg Gly
370                375                380
Leu Glu Leu Leu Lys Ala Tyr Ala Tyr Leu Asn Arg Thr Ala Phe Arg
385                390                395                400
Lys Ile Asn Lys Lys Tyr Asp Lys Leu Val Asn Ala Arg Pro Thr Met
405                410                415
Arg Tyr Met Ser Glu Arg Val Asn Lys Ala Trp Phe Val Gln Ser Glu
420                425                430
Val Val Glu Asn Leu Met Ala Ala Thr Glu Asp Leu Tyr Ala Arg Tyr
435                440                445
Leu Glu His Gly Asn Arg Lys Ile Thr Ile Ser Lys Leu Arg His Thr
450                455                460
Thr Asn Lys Ser Gly Asp Tyr Ser Pro Asn Thr Phe Arg Ala Gly Leu
465                470                475                480
Leu Ser Met Ala Gly Val Leu Phe Gly Val Gln Ser Leu Ile Tyr Ala
485                490                495
Thr Arg His Leu Glu His Ser Asp Pro Ser Val Gln Val Gln Thr Ser
500                505                510
Tyr Leu Leu Gln Val Ser Val Ala Ser Gln
515                520

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&lt;210&gt; 39966

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39966

```

Trp Arg Leu Leu Ala Gly Leu Tyr Pro Val Glu Phe Arg Asp Phe
1          5          10          15
Phe Leu Gly Asp Met Tyr Cys Ser Gln Thr Tyr Ala Met Gly Val Ser
20          25          30
Ser Ile Gln Cys Ile Ser Lys Asp Ser Leu Leu Met Phe Glu Arg Thr
35          40          45
Ser Ser Tyr Ser Ser Ala Phe Met His Val Thr Gly Thr Met Arg His
50          55          60
Asn Ala Ile His Pro Thr Pro Gly Ser Trp Asp Ser Ser Ser Ala Tyr

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## 17404

65                      70                      75                      80  
 His Arg Phe Gly Glu Arg Cys Asn Ala Ser Asp Val Met Glu Ile Arg  
                          85                      90                      95  
 Lys Thr Tyr Phe His Met Ser  
                          100

<210> 39967  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 39967  
 Gln Phe His Leu Pro Leu Cys Ile Thr Met Asn Ser Leu Thr Val Ser  
 1                      5                      10                      15  
 Pro Asn Ala Leu Ser Ala Glu Ile Glu Leu Tyr Arg Leu Glu Gln Arg  
                          20                      25                      30  
 Tyr Ala Arg Arg Lys His Arg Ser Thr Phe Ser Gly Val Gln Tyr Val  
                          35                      40                      45  
 Asp Gly Glu Tyr Val Tyr Ser Asn Gly Ser Asn Ser Pro Thr Gly Thr  
                          50                      55                      60  
 Val Ser Lys His Ser Thr Gly Ser Tyr Trp Lys Thr Pro Thr Trp Gly  
 65                      70                      75                      80  
 Gly Ser Gly Ser Glu Ser Arg Trp Arg  
                          85

<210> 39968  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus

<400> 39968  
 Ala Ile Ala Pro Trp Arg Leu Asn Ile Gln Glu Thr Leu Thr Asn Met  
 1                      5                      10                      15  
 Leu Leu Asp Gly Val Thr Arg Ile Gly Ala Thr Leu Phe Gln Glu Leu  
                          20                      25                      30  
 Arg Asn Ala Val Phe Ala Ser Val Ala Gln Lys Ala Ile Arg Arg Val  
                          35                      40                      45  
 Ala Arg Asn Val Phe Glu His Leu Leu Arg Leu Asp Leu Asn Phe His  
                          50                      55                      60  
 Leu Ser Arg Gln Thr Gly Gly Leu Thr Arg Ala Ile Asp Arg Gly Thr  
 65                      70                      75                      80  
 Lys Gly Ile Ser Phe Leu Leu Thr Ser Met Val Phe His Val Val Pro  
                          85                      90                      95  
 Thr Ala Leu Glu Ile Ser Leu Val Cys Gly Ile Leu Val Ser Arg Ser  
                          100                      105                      110  
 Asn

<210> 39969  
 <211> 350  
 <212> PRT  
 <213> A.fumigatus

<400> 39969  
 Thr Tyr Gln Tyr Gly Phe Gln Phe Ala Ala Ile Thr Ala Ala Thr Met  
 1                      5                      10                      15

## 17405

Val Ala Tyr Thr Ala Phe Thr Ile Thr Thr Thr Ala Trp Arg Thr Lys  
                   20                                  25                                  30  
 Phe Arg Lys Gln Ala Asn Ala Ala Asp Asn Arg Gly Ala Thr Val Ala  
                   35                                  40                                  45  
 Val Asp Ser Leu Ile Asn Tyr Glu Ala Val Lys Tyr Phe Asn Asn Glu  
                   50                                  55                                  60  
 Gln Tyr Gln Val Ala Arg Tyr Asp Lys Ala Leu Lys Ala Tyr Glu Asp  
                   65                                  70                                  75                                  80  
 Ala Ser Ile Lys Val Thr Thr Ser Leu Ala Phe Leu Asn Ser Gly Gln  
                                   85                                  90                                  95  
 Asn Met Ile Phe Ser Ser Ala Leu Ala Ala Met Met Tyr Leu Ala Ala  
                                   100                                  105                                  110  
 Asn Gly Val Ala Asn Gly Asn Leu Thr Val Gly Asp Leu Val Met Val  
                                   115                                  120                                  125  
 Asn Gln Leu Val Phe Gln Leu Ser Val Pro Leu Asn Phe Leu Gly Ser  
                                   130                                  135                                  140  
 Val Tyr Arg Glu Leu Arg Gln Ser Leu Leu Asp Met Glu Thr Leu Phe  
                                   145                                  150                                  155                                  160  
 Asn Leu Gln Lys Val Asn Val Asn Ile Lys Glu Lys Pro Asp Ala Lys  
                                   165                                  170                                  175  
 Pro Leu Gln Leu His Lys Gly Gly Glu Ile Arg Phe Glu Asn Val Thr  
                                   180                                  185                                  190  
 Phe Gly Tyr His Pro Asp Arg Pro Ile Leu Lys Asn Ala Ser Phe Thr  
                                   195                                  200                                  205  
 Ile Pro Ala Gly Gln Lys Phe Ala Ile Val Gly Pro Ser Gly Cys Gly  
                                   210                                  215                                  220  
 Lys Ser Thr Ile Leu Arg Leu Leu Phe Arg Phe Tyr Asp Val Gln Glu  
                                   225                                  230                                  235                                  240  
 Gly Arg Ile Leu Ile Asp Asp Gln Asp Val Arg Asp Val Ser Leu Glu  
                                   245                                  250                                  255  
 Ser Leu Arg Lys Ala Ile Gly Val Val Pro Gln Asp Thr Pro Leu Phe  
                                   260                                  265                                  270  
 Asn Asp Thr Ile Ala His Asn Ile Arg Tyr Gly Arg Ile Asp Ala Thr  
                                   275                                  280                                  285  
 Asp Glu Glu Val His Lys Ala Ala Gln Arg Ala Arg Ile Asp Ala Leu  
                                   290                                  295                                  300  
 Ile Gln Lys Leu Pro Glu Gly Tyr Gln Thr Ala Val Gly Glu Arg Gly  
                                   305                                  310                                  315                                  320  
 Met Met Ile Ser Gly Gly Glu Lys Gln Arg Leu Ala Ile Ser Arg Leu  
                                   325                                  330                                  335  
 Ile Leu Lys Asp Pro Glu Leu Leu Phe Phe Asp Glu Ala Val  
                                   340                                  345                                  350

&lt;210&gt; 39970

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39970

Thr Ser Ala Leu Asp Thr Tyr Thr Glu Gln Ala Leu Leu Gln Asn Ile  
 1                                  5                                  10                                  15  
 Asn Ser Ile Leu Lys Glu Lys Lys Arg Thr Ser Val Phe Val Ala His  
                                   20                                  25                                  30  
 Arg Leu Arg Thr Ile Tyr Asp Ser Asp Gln Ile Leu Val Leu Lys Asp  
                                   35                                  40                                  45  
 Gly Arg Val Ala Glu Met Gly Ser His Arg Glu Leu Leu Asp Leu Asn

17406

50		55		60															
Gly	Ile	Tyr	Ala	Glu	Leu	Trp	Asn	Gly	Glu	Cys	Thr	Pro	Gln	Glu	Tyr				
65					70					75					80				
Glu	Gly	Thr	Asp	Trp	Thr	Gly	Ala	Asn	Asp	Arg	Leu	Cys	Ser	Ala	Arg				
				85					90					95					
Asn	Val	Ser	Ser	Thr	Arg	Ser	Arg	Val											
			100					105											

<210> 39971  
 <211> 156  
 <212> PRT  
 <213> A.fumigatus

<400> 39971																			
Thr	Pro	Leu	His	Phe	Val	Thr	Ser	Ser	Leu	Gln	Thr	Ile	Gln	Tyr	Asp				
1			5						10					15					
Thr	Ser	Gly	Lys	Leu	Ala	Gly	Ser	Thr	Pro	Glu	Glu	Arg	Ala	Thr	Val				
			20					25					30						
Asn	Lys	Trp	Leu	Ala	Trp	Gln	Val	Ser	Gly	Leu	Gly	Pro	Tyr	Gln	Gly				
		35					40					45							
Gln	Leu	Val	Trp	Phe	Leu	Ala	Phe	His	Glu	Gly	Ala	His	Gly	Glu	Lys				
		50				55					60								
Pro	Asn	Gly	Ser	Val	Ile	Ala	Arg	Tyr	Gln	Ala	Glu	Val	Glu	Arg	Leu				
65					70					75					80				
Arg	Ser	Val	Leu	Glu	Lys	His	Leu	Ala	Ser	Ala	Glu	Asn	Gly	Phe	Val				
				85					90					95					
Ala	Leu	Gly	Arg	Leu	Thr	Ile	Ala	Asp	Phe	Ala	Ile	Leu	Pro	Trp	Leu				
			100					105					110						
Lys	Ile	Ser	Val	Leu	Ala	Gly	Ser	Ala	Leu	Lys	Ser	Phe	Glu	Glu	Tyr				
		115					120					125							
Pro	Ala	Ile	Asn	Ala	Tyr	Ile	Lys	Lys	Leu	Asp	Ala	Leu	Pro	Glu	Val				
		130				135					140								
Gln	Ala	Ala	Tyr	Lys	Lys	Ala	Val	Pro	Pro	Met	Gln								
145					150					155									

<210> 39972  
 <211> 570  
 <212> PRT  
 <213> A.fumigatus

<400> 39972																			
Ala	Phe	Thr	Asn	Cys	Tyr	Cys	Ala	Cys	Thr	Gly	Ser	Pro	Asp	His	Ser				
1				5					10					15					
Leu	Pro	Pro	Ser	Ser	Ile	Ala	Lys	Met	Leu	Ser	Asn	Thr	Ile	Thr	Ile				
			20					25					30						
Val	Pro	Ser	Ile	Glu	Thr	Arg	Val	Val	Glu	Pro	Leu	Pro	Gln	Phe	Asp				
		35					40					45							
Thr	Ser	Arg	Arg	Leu	Ser	Phe	Pro	Val	Ser	Leu	Pro	Leu	Asp	Ser	Leu				
		50				55				60									
Ala	Gly	Ala	Arg	Lys	Lys	Ala	Ala	Asn	Glu	Ala	Leu	Val	Glu	Arg	Ile				
65					70					75					80				
Ala	Glu	Ile	Ile	Ala	Ser	Tyr	Arg	Ile	Ser	Gly	Pro	Asp	Asp	Arg	Tyr				
				85					90					95					
Glu	Val	Val	Tyr	Lys	Pro	Lys	Leu	Leu	Asp	Thr	Leu	Arg	Tyr	Phe	Val				
			100					105					110						
Ser	Lys	Gln	Glu	Pro	Val	Asn	Met	Val	Val	Pro	Ala	Tyr	Pro	Phe	Lys				





17408

565

570

<210> 39973  
<211> 70  
<212> PRT  
<213> A.fumigatus

<400> 39973  
Tyr Ser Cys Ala Gly Asp Gly Leu Ala Pro Gly Ser Glu Val Ser Ala  
1 5 10 15  
Leu Ser Leu Ile Asn Ala Ala Ala Ala Pro Met Tyr Val Gln His  
20 25 30  
Thr Gly Leu Arg Pro Ser Ser Thr Asn His Trp Arg Tyr Ser Thr His  
35 40 45  
Gly Ile Arg Pro Pro Arg Lys Gly Leu Ala Pro Lys His Arg Arg Thr  
50 55 60  
Ser Leu Arg Pro Ser Arg  
65 70

<210> 39974  
<211> 116  
<212> PRT  
<213> A.fumigatus

<400> 39974  
Glu Pro Met Thr Arg Tyr Glu Tyr Pro Arg Leu Ala Leu Ile Ser Thr  
1 5 10 15  
Ile Ser Gly Ile Cys Ile Ser Ser Ala Lys Ser Ser Met Gln Gly Ser  
20 25 30  
Ile Arg Leu Pro Pro Glu Arg Thr Gly Ser Ser Cys Arg Asp Val Gly  
35 40 45  
Met Leu Gly Val Leu Leu His Val Ile Gly Asp Ala Val Asn Asn Leu  
50 55 60  
Gly Val Met Ile Ala Ala Leu Val Ile Trp Phe Thr Glu Tyr Glu Gly  
65 70 75 80  
Arg Tyr Tyr Ala Asp Pro Gly Ala Ser Leu Trp Ile Gly Val Ile Ile  
85 90 95  
Ile Leu Ser Ser Leu Pro Leu Arg Met Leu Ser Ser Ile Arg Gly Val  
100 105 110  
Val Arg Trp Cys  
115

<210> 39975  
<211> 102  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (80)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 39975  
Thr Ser Ile Thr Ile Leu Leu Leu Asp Asn Asn Thr Asn Arg Met His  
1 5 10 15  
Arg Cys Val Arg Pro His Pro Pro Val Thr Arg Ala Leu Arg His Ala

17409

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                20                25                30
Lys Glu Lys Leu Leu Ala Ala Gly Leu Lys Val Val Asp Trp Glu Pro
      35                40                45
Tyr Arg His Asp His Gly Trp Glu Val Ile Val Arg Pro Ser Ser Phe
      50                55                60
Ser Pro His Pro Leu His Leu Leu Thr Asn Lys Ser Ser His Pro Xaa
65                70                75                80
Thr Ser Pro Thr Pro Pro Thr Ala Asn Ala Pro Ser Ser Pro Lys Ala
      85                90                95
Ala Ser Pro Ser Ser Pro
      100

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<210> 39976  
 <211> 202  
 <212> PRT  
 <213> A.fumigatus

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<400> 39976
Glu Glu Glu Ala Thr Ala Thr Ile Asp Arg Asp Trp Gly Gly Val Arg
1                5                10                15
Arg Pro Tyr Ser Arg Lys Phe Gln Trp Leu Pro Cys Asp Val His Phe
      20                25                30
Thr Asp Asn Gly Glu Cys Arg Ile Ala Ser Tyr Ile Asn Asn Leu His
      35                40                45
Pro Asn Lys His Arg Gln Leu Tyr Gln Val Ile Glu Lys Ile Leu Glu
      50                55                60
His Thr Ile Pro Leu Trp Asn Thr Thr Leu Thr Leu Val Arg Asp Lys
65                70                75                80
Tyr Lys Arg Ile Pro Tyr Asn Glu Val Gln Tyr Asp Glu His Pro Glu
      85                90                95
Pro Glu Pro Gln Pro Glu Asn Glu Glu Asp Glu His Ser Asp Glu Tyr
      100                105                110
Tyr Gln Arg Tyr Asp Glu Trp Gln Lys Arg Glu Pro Ile Arg Arg Pro
      115                120                125
Glu Pro Gly Glu Phe Ala Pro His Val Thr Glu Ala Lys Lys Gln Val
      130                135                140
Asn Leu His Lys Asp Phe Ala Glu Arg Gly Leu Gln Val Ile Ile Lys
145                150                155                160
Leu Ala Asn Ile Glu Leu Thr Pro Glu Lys Pro Glu Tyr Glu Gly Gly
      165                170                175
Ser Trp His Val Glu Gly Gln Leu Val Cys Cys Phe Ala Gly Ala His
      180                185                190
Lys His Thr His Thr His Thr His Thr His
      195                200

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<210> 39977  
 <211> 202  
 <212> PRT  
 <213> A.fumigatus

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<400> 39977
Leu Ser Gln Asn Glu His Ile Cys Ala Ser Ala Ile Tyr Tyr Tyr Asp
1                5                10                15
Ser Gln Asn Ile Thr Asp Ser Arg Leu Ala Phe Arg Gln Arg Ala Asp
      20                25                30
Thr Glu Glu Val Ser His Ile Ser Tyr Asp Gln Ser Arg His Glu Phe

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## 17410

35 40 45  
 Leu His Glu Ile Phe Gly Leu Asp Asn Glu Ala Gly Trp Asn Glu Gly  
 50 55 60  
 Asn Val Thr Gln Phe Leu Gly Gly Val Asp Thr Arg Gln Gly Arg Leu  
 65 70 75 80  
 Leu Thr Phe Pro Asn Ser Leu Gln His Gln Val Ser Pro Phe Ala Leu  
 85 90 95  
 Ala Asp Arg Ser Lys Pro Gly His Arg Lys Ile Leu Ala Phe Phe Leu  
 100 105 110  
 Val Asp Pro His Leu Ser Ile Ile Ser Ser Ala Asn Val Pro Pro Gln  
 115 120 125  
 Gln Glu Asp Trp Trp Lys Glu Arg Gln Glu Val Val Gly Lys Leu Leu  
 130 135 140  
 Ser Glu Arg Leu Pro Ala Glu Leu Gln Asn Met Val Asn Glu Gly Leu  
 145 150 155 160  
 Asp Ala Thr Pro Ile Thr Leu Glu Glu Ala Lys Gln Tyr Arg Lys Glu  
 165 170 175  
 Leu Met Glu Glu Arg Ser Asn Lys Ala Gln Glu Gln Asn Arg Asp Phe  
 180 185 190  
 Glu Arg Gly Glu Phe Asn Leu Cys Glu His  
 195 200

&lt;210&gt; 39978

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39978

Tyr Ile Met Ser Val Gln Asn Trp Glu Ile Arg Ala Arg Arg Ala Lys  
 1 5 10 15  
 Asp Val Leu Leu Asn Ser Val Pro Lys Gln Trp Ile Leu Pro Ala His  
 20 25 30  
 Lys Leu Pro Pro Ala His Gln Lys Asn Val Glu Asp Phe Pro Arg Lys  
 35 40 45  
 Ser Gly Ile Leu Ser Asp Arg Glu Val Ser Ile Thr Glu Met Ser Ala  
 50 55 60  
 Thr Ala Leu Val Ala Gly Met Gly Ala Gly Leu Leu Ser Ala Glu Glu  
 65 70 75 80  
 Val Val Val Ala Phe Leu Lys Arg Ala Val Leu Gly His Gln Leu Val  
 85 90 95  
 Cys Cys Ala Thr Arg Ser Asp Val  
 100

&lt;210&gt; 39979

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39979

Leu Asn Phe Ala Thr Glu Phe Met Ala Glu Arg Ala Ile Ser Arg Ala  
 1 5 10 15  
 Lys Lys Leu Asp Glu Tyr Phe Lys Arg Thr Gly Lys Leu Val Gly Pro  
 20 25 30  
 Leu Val Gly Trp Pro Ile Met Ser Lys Arg Ala Asn Ala Pro Asn Gly  
 35 40 45  
 Glu Ser Thr Val Ala Trp Arg Pro His Gln Arg Glu Arg Ala Tyr Arg

## 17411

50					55					60					
Asp	Gln	Arg	Ser	Asn	Leu	Gln	Cys	Arg	Leu	Cys	Gly	Met	Val	Arg	Phe
65					70					75					80

<210> 39980  
 <211> 166  
 <212> PRT  
 <213> A.fumigatus

<400> 39980  
 Gly Thr Gln Ser Ile Glu Ala Leu Thr Gln Gln Thr Lys Leu Ser Glu  
 1 5 10 15  
 Ile Asp Asp Pro Pro Lys Ile Leu Ala Phe Gly Trp Gln Arg Ala Pro  
 20 25 30  
 Val Leu Gly Ala Phe Phe Asn Gly Ala Leu Leu Phe Ala Leu Gly Ile  
 35 40 45  
 Ser Ile Leu Leu Gln Ala Val Glu Arg Phe Ile Ser Leu His Ser Ser  
 50 55 60  
 Cys Leu Pro Ser Thr Cys Arg Arg Leu Thr Asp Ile Leu Gln Arg Ser  
 65 70 75 80  
 Arg Ile Pro Asp Ser Cys Ser Leu Leu Asp Ala Leu Ala Trp Val Leu  
 85 90 95  
 Ile Ser Ser Ala Leu Leu Phe Phe Met Ala Gly Leu Ser Phe Trp Met  
 100 105 110  
 Cys Ser Pro Val Ala Asn Val Lys Ala Leu Glu Lys Ser Ser His Thr  
 115 120 125  
 His Arg His Ala Leu Asp Thr Ser Thr Asp Ser Ser Ile Gly Ala His  
 130 135 140  
 Asp Glu Val Arg Ile Pro Glu Thr Cys Pro His Phe His Asn Phe Trp  
 145 150 155 160  
 Asp Leu His Lys Leu Ser  
 165

<210> 39981  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 39981  
 Ile Gln Gly Val Leu Ser Ile His Glu Ile Asn Val Trp His Ile Ser  
 1 5 10 15  
 Gln His Lys Ser Leu Ala Val Ile Gly Val Leu Leu Thr Asp Gln Gln  
 20 25 30  
 Val Pro Gly Ser Thr Lys Val Ile Ser Met Val Asn Glu Cys Cys Gln  
 35 40 45  
 Lys Tyr Gly Ile Gln Ser Val Ala Leu Arg Gln Lys Leu His Ser Gln  
 50 55 60  
 Glu Leu Ser Leu Ala Ala Leu Asp Arg Ile  
 65 70

<210> 39982  
 <211> 153  
 <212> PRT  
 <213> A.fumigatus

<220>

&lt;221&gt; UNSURE

&lt;222&gt; (144)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39982

His	Leu	Cys	Cys	Asp	Asn	Asn	Leu	Thr	Gly	Pro	Thr	Arg	Asn	Pro	Tyr
1				5					10					15	
Asn	Arg	Thr	Leu	Thr	Pro	Gly	Gly	Ser	Ser	Gly	Gly	Glu	Gly	Ala	Ser
			20					25						30	
Met	Gly	Phe	Lys	Cys	Ala	Ala	Leu	Gly	Val	Gly	Thr	Asp	Ile	Gly	Gly
		35					40					45			
Ser	Ile	Arg	Ala	Pro	Ala	Gly	Phe	Cys	Gly	Ala	Tyr	Gly	Phe	Arg	Pro
	50					55					60				
Thr	Ala	Leu	Arg	Met	Pro	Ala	Thr	Gly	Ile	Lys	Val	Pro	Gly	Pro	Gly
65					70				75						80
Gln	Glu	Ser	Ile	His	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Ser	Gln	Ser	Val
			85						90					95	
Glu	Asp	Leu	Asn	Leu	Phe	Gln	Arg	Ala	Val	Ile	Asp	Gln	Glu	Pro	Trp
		100						105					110		
Glu	Thr	Glu	Thr	Ser	Leu	Val	Pro	Leu	Pro	Trp	Arg	Gln	Val	Lys	Ala
		115					120					125			
Thr	Lys	Asn	Met	Thr	Val	Gly	Ile	Met	Trp	Asp	Asp	Gly	Tyr	Ser	Xaa
	130					135						140			
Asn	Leu	Asn	His	Tyr	Ser	Pro	Leu	Arg							
145						150									

&lt;210&gt; 39983

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (6), (96)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39983

Gln	Val	Lys	Ser	Ser	Xaa	Tyr	Phe	Pro	Asp	Ala	Ala	Asn	Ser	Gln	Arg
1				5					10					15	
Thr	Val	Leu	Ser	Gln	Ser	Gly	Glu	Pro	Leu	Leu	Pro	Leu	Thr	Glu	Trp
			20					25						30	
Ala	Phe	Ala	Tyr	Ser	Arg	Ala	Ser	Pro	Leu	Ser	Ile	Pro	Glu	Asn	Trp
		35					40					45			
Ala	Leu	Asn	Cys	Lys	Arg	Asp	Ala	Tyr	Arg	Asp	Thr	Tyr	His	Ala	Leu
	50					55					60				
Met	Lys	Ser	Arg	Asp	Val	Asp	Phe	Ile	Leu	Cys	Pro	Val	Tyr	Val	Gly
65					70					75					80
Ala	Ala	Gly	Leu	Asn	Gln	Arg	Ala	Gly	Thr	Lys	Cys	Val	Gln	Ile	Xaa
				85					90					95	
Ala															

&lt;210&gt; 39984

&lt;211&gt; 451

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (390)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 39984

Asp	His	Pro	Asn	Asn	Ile	Leu	Leu	Thr	Asp	Ser	Ser	Phe	Ile	Gly	Leu
1				5					10					15	
Leu	Val	Phe	Trp	His	Ser	Tyr	Arg	Leu	Leu	Phe	Leu	Val	Ala	Leu	Ser
			20					25					30		
Thr	Val	Phe	Val	Gly	Leu	Arg	Phe	Tyr	Arg	Lys	Leu	Gln	Ser	Arg	Thr
		35					40					45			
Lys	Thr	Thr	Ala	Ser	Ser	Ser	Val	Pro	Pro	Ser	Pro	Arg	Ser	Gln	Ser
	50					55					60				
Pro	Glu	Lys	Thr	Glu	Lys	Gly	Val	Ser	Arg	Glu	Ser	Ser	Asn	Lys	Ala
65					70					75				80	
Thr	Ala	Gln	Lys	Ala	Glu	Gln	Gln	Pro	Ala	Leu	Ala	Asn	Gly	Ser	Ala
				85					90					95	
Lys	Pro	Thr	Ser	Gly	Pro	Lys	Arg	Val	Thr	Gly	Lys	Lys	Pro	Ser	Lys
			100					105					110		
Val	Ala	Gly	Arg	Arg	Gly	Gln	Thr	Glu	Asp	Ala	Glu	Pro	Leu	Ala	Phe
		115					120					125			
Ile	Gln	Pro	Ile	Ile	Phe	Tyr	Ala	Ser	Leu	Thr	Gly	Asn	Thr	Glu	Arg
	130					135					140				
Tyr	Ala	Lys	Val	Leu	Leu	Asp	Glu	Leu	Arg	Val	Ala	Ala	Gln	Lys	Arg
145					150					155				160	
Ala	Asp	Leu	Arg	Asp	Arg	Glu	Arg	Gly	Leu	Leu	Pro	Pro	Gln	Ile	Tyr
				165					170					175	
Asp	Leu	Ser	Tyr	Val	Asp	Leu	Asp	Asp	Tyr	Phe	Thr	Ser	Ala	Pro	Lys
			180					185					190		
Pro	Pro	Pro	Thr	Ser	Pro	Gly	Thr	Arg	Tyr	Val	Tyr	Cys	Leu	Leu	Ile
		195					200					205			
Pro	Thr	Tyr	Asn	Ile	Asp	Ser	Ile	Leu	Asn	Thr	Phe	Leu	Asp	His	Leu
		210				215					220				
Asn	Glu	Thr	His	Asn	Asp	Phe	Arg	Ile	Asp	Thr	Gly	Pro	Leu	Ser	Ser
225					230					235				240	
Leu	Ala	Gly	Tyr	Ser	Val	Phe	Gly	Phe	Gly	Asp	Lys	Glu	Gly	Trp	Pro
				245					250					255	
Thr	Glu	Glu	Glu	Gly	Phe	Cys	Ser	Gln	Ala	Lys	Glu	Leu	Asp	Lys	Trp
			260					265					270		
Met	Ala	Lys	Leu	Thr	Gly	Arg	Lys	Arg	Ala	Tyr	Pro	Leu	Gly	Leu	Gly
			275				280					285			
Asp	Val	Lys	Ser	Asp	Ala	Glu	Thr	Ser	Leu	Lys	Glu	Trp	Ser	Leu	Gly
	290					295					300				
Leu	Gln	Asp	Ile	Leu	Phe	Asp	Ile	Leu	Glu	Asn	Gly	Gly	Leu	Gly	Glu
305					310					315				320	
Gly	Val	Pro	Gly	Ser	Gly	Asp	Pro	Val	Glu	Ser	Asp	Glu	Glu	Leu	Asn
				325					330					335	
Asp	Glu	Asp	Thr	Asp	Lys	Asp	Asn	Thr	Gln	Asn	Val	Met	Asp	Leu	Glu
			340					345				350			
Asp	Ile	Lys	Phe	Gly	Gly	Asp	Gln	Asn	Ala	Ala	Gly	Ser	Pro	Ile	Pro
		355					360					365			
Val	Asp	Phe	Thr	Thr	Thr	Gly	Lys	Ser	Ser	Ser	Val	Gln	Ser	Thr	Glu
	370					375					380				
Lys	Glu	Met	Val	Pro	Xaa	Thr	Ser	Thr	Thr	Tyr	Ala	Ala	Leu	Thr	Lys

## 17414

385                      390                      395                      400  
 Gln Gly Tyr Thr Ile Gly Gly Ser His Ser Gly Val Lys Ile Cys Arg  
                                  405                      410                      415  
 Trp Thr Lys Ser Ala Leu Arg Ala Pro Arg Phe Met Leu Gln Ile Leu  
                                  420                      425                      430  
 Leu Val Arg Tyr Pro Ile Thr Ser Leu His Gly Gly Tyr Thr Val Ala  
                                  435                      440                      445  
 Val Leu Gln  
                                  450

&lt;210&gt; 39985

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39985

Gln Asn Lys Ala Thr Arg Ser Val Gly Leu Ile Leu Glu Ser Lys Ser  
 1                      5                      10                      15  
 Ala Ala Gly Leu Asn Leu Arg Cys Val Pro Arg Gly Ser Cys Tyr Lys  
                                  20                      25                      30  
 Phe Ser Leu Tyr Gly Ile Arg Ser His Leu Cys Met Glu Ala Thr Pro  
                                  35                      40                      45  
 Ser Leu Ser Cys Ser Asn Lys Cys Val Phe Cys Trp Arg His Gly Thr  
                                  50                      55                      60  
 Asn Pro Val Gly Thr Thr Trp Arg Trp Lys Val Asp Ser Pro Glu Leu  
 65                      70                      75                      80  
 Ile Phe Gln Gly Val Lys Glu Gly His Tyr Lys Lys Ile Lys Met Met  
                                  85                      90                      95  
 Arg Gly Val Pro Gly Val Arg Ala Glu Arg Phe Ala Glu Ala Met Arg  
                                  100                      105                      110  
 Ile Arg His Cys Ala Leu Ser Leu Val Gly Glu Pro Ile Phe Tyr Pro  
                                  115                      120                      125  
 His Ile Asn Glu Phe Leu Asp Leu Leu His Gly Glu His Ile Ser Ser  
                                  130                      135                      140  
 Phe Leu Val Cys Asn Ala Gln His Pro Asp Gln Leu His Ala Leu Arg  
 145                      150                      155                      160  
 Arg Val Thr Gln Leu Tyr Val Ser Ile Asp Ala Ser Asn Arg Glu Ser  
                                  165                      170                      175  
 Leu Arg Lys Ile Asp Arg Pro Leu His Arg Asp Phe Trp Glu Arg Phe  
                                  180                      185                      190  
 Gln Arg Cys Leu Asp Ile Leu Arg Glu Lys Arg His Val Gln Arg Thr  
                                  195                      200                      205  
 Val Phe Arg Leu Thr Leu Val Lys Gly Phe Asn Ile Asp Asp Glu Val  
                                  210                      215                      220  
 Ile Gly Tyr Ala Asp Leu Val Glu Lys Ala Leu Pro Cys Phe Val Glu  
 225                      230                      235                      240  
 Ile Lys Gly Val Thr Phe Cys Gly Thr Ser Thr Thr Ala Gly Val Gly  
                                  245                      250                      255  
 Leu Thr Met Gln Asn Val Pro Phe Tyr Glu Glu Val Ala Gln Phe Val  
                                  260                      265                      270  
 Thr Ala Leu Asn Ala Glu Leu Gln Arg Arg Gly Leu Lys Tyr Gly Ile  
                                  275                      280                      285  
 Ala Ala Glu His Ala His Ser Cys Cys Val Leu Ile Ala Ser Glu Arg  
                                  290                      295                      300  
 Phe Tyr Val Asn Gly Lys Trp His Thr Arg Ile Asp Tyr Asp Arg Phe  
 305                      310                      315                      320



17415

Phe Glu Leu Leu Glu Arg Glu Lys Ala Asp Gly Thr Ser Phe Thr Pro  
 325 330 335  
 Glu Asp Tyr Met Arg Glu Thr Glu Asp Trp Ala Leu Trp Gly Asn Gly  
 340 345 350  
 Gly Phe Asp Pro Asn Asp Gln Arg Val Tyr Thr Lys Gly Lys Lys Lys  
 355 360 365  
 His Met Gln Ile Thr Ala Glu Pro  
 370 375

<210> 39986  
 <211> 703  
 <212> PRT  
 <213> A.fumigatus

<400> 39986  
 Leu Leu Leu Asp Arg Met Ser Ser Ser Leu Ser Ser Cys Thr Thr Ala  
 1 5 10 15  
 Glu Ser Pro Ala Lys Tyr Ile Ala Tyr His Val Pro Arg Ile Ala Asn  
 20 25 30  
 Pro Ser Gln Thr Thr Pro His Pro Pro Phe Gly Cys Cys His Gly Ser  
 35 40 45  
 Gly Cys Val Val Val Phe Ser Ser Lys Met Ser Ser Ser Arg Pro Ser  
 50 55 60  
 Lys Arg Gln Arg Ile Cys Arg Ala Cys Asp Gln Cys Arg Arg Arg Lys  
 65 70 75 80  
 Ser Lys Cys Asp Gly Ala Gln Pro Val Cys Gly Ile Cys Arg Ser Ala  
 85 90 95  
 Gly Arg Thr Cys Thr Tyr Glu Ala Gly Gly Gly Arg Arg Gly Leu Pro  
 100 105 110  
 Ser Gly Tyr Val Arg Lys Leu Glu Thr Ala Leu Gly Leu Val Phe Ile  
 115 120 125  
 Asn Ile Pro Asn Ser Glu Gly Ile Leu Arg Gly Leu Leu Ala Glu Cys  
 130 135 140  
 Gly Asp Ala Lys Ala Thr Asp Arg Ala Val Ala Trp Arg Asn Ser  
 145 150 155 160  
 Gln Val Asn Arg Gly Ile Ser Gln Met Leu Val Pro Gly Cys Lys Glu  
 165 170 175  
 Thr Ser Met Glu Asp Ser Val Glu Asp Glu Ala Glu Trp Glu Asp Leu  
 180 185 190  
 Glu Asn Arg Asp Ile Ile Pro Thr Ile Glu Ser Ser Glu Pro Phe Ile  
 195 200 205  
 Pro Thr Glu Glu Ile Pro Leu Gln Ala Gln Pro Ile Ile Ala Ala Glu  
 210 215 220  
 Pro Lys Asp Val Leu Asp Val Pro Ile Pro Asn Asn Thr Ser Asp Leu  
 225 230 235 240  
 Leu Glu Leu Tyr Phe Thr Tyr Thr His Cys Trp Phe Pro Ile Leu Glu  
 245 250 255  
 Arg Arg Asp Leu Arg Ala Met Tyr Thr Tyr Pro Leu Arg Ser Thr  
 260 265 270  
 Pro Arg Asp Glu Thr Cys His Leu Val Leu Trp Ala Val Ile Ala Tyr  
 275 280 285  
 Ser Ser Val Ile His Pro Asp His Asn His Gly Arg Pro Asn Ser Met  
 290 295 300  
 Gln Ile Val His Ser Ile Gln Arg Arg Ile Pro Ser Gln Leu Asp Lys  
 305 310 315 320  
 Leu Glu Leu Gly His Ile Gln Ala Leu Leu Ile Leu Val Leu Leu His

Variable	Mean	SD	Min	Max	Median	Q1	Q3	Mode	Skewness	Kurtosis	Shapiro-Wilk	Normality
Age	35.2	12.5	18	65	32	28	38	30	0.15	2.1	0.98	Normal
Gender	1.2	0.4	1	2	1	1	1	1	0.05	0.1	0.99	Normal
Marital Status	2.1	0.8	1	3	2	1	3	2	0.12	1.8	0.97	Normal
Education	15.8	2.1	10	20	16	15	17	16	0.08	0.5	0.99	Normal
Income	1200	300	500	2500	1100	800	1400	1000	0.25	3.5	0.95	Normal
Occupation	1.5	0.5	1	3	2	1	3	2	0.10	1.5	0.98	Normal
Health Status	2.5	0.6	1	3	2	2	2	2	0.02	0.2	0.99	Normal
Stress Level	3.2	1.1	1	5	3	2	4	3	0.18	2.5	0.96	Normal
Life Satisfaction	4.1	0.9	3	5	4	4	4	4	0.01	0.1	0.99	Normal
Resilience	2.8	0.7	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Optimism	3.5	1.0	1	5	3	2	4	3	0.15	2.2	0.97	Normal
Emotional Stability	2.2	0.5	1	3	2	2	2	2	0.03	0.3	0.99	Normal
Self-Esteem	3.8	0.8	2	5	4	3	4	4	0.02	0.1	0.99	Normal
Life Purpose	2.9	0.6	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Gratitude	3.1	0.9	1	5	3	2	4	3	0.12	1.8	0.97	Normal
Forgiveness	2.7	0.7	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Empathy	3.3	1.0	1	5	3	2	4	3	0.15	2.2	0.97	Normal
Compassion	2.6	0.6	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Kindness	3.0	0.8	1	5	3	2	4	3	0.12	1.8	0.97	Normal
Generosity	2.4	0.5	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Patience	3.6	0.9	1	5	3	2	4	3	0.15	2.2	0.97	Normal
Humility	2.3	0.6	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Modesty	2.1	0.5	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Openness	3.4	1.0	1	5	3	2	4	3	0.15	2.2	0.97	Normal
Conscientiousness	2.8	0.7	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Agreeableness	3.2	0.9	1	5	3	2	4	3	0.12	1.8	0.97	Normal
Neuroticism	2.5	0.6	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Extraversion	3.1	0.8	1	5	3	2	4	3	0.12	1.8	0.97	Normal
Introversion	2.7	0.7	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Sensitivity	3.5	1.0	1	5	3	2	4	3	0.15	2.2	0.97	Normal
Emotionality	2.9	0.6	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Stability	3.3	0.9	1	5	3	2	4	3	0.12	1.8	0.97	Normal
Control	2.6	0.5	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Order	3.0	0.8	1	5	3	2	4	3	0.12	1.8	0.97	Normal
Structure	2.4	0.6	1	4	3	2	3	3	0.05	0.8	0.99	Normal
Planning	3.2	0.9	1	5	3							

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<210> 39987
<211> 169
<212> PRT
<213> A.fumigatus
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1

17417

Thr Ala Ala Met Pro Ser Ile Leu Leu Ile Asn Gly Pro Asn Leu Asn  
 20 25 30  
 Leu Leu Gly Thr Arg Glu Pro His Leu Tyr Gly Arg Thr Thr Leu Pro  
 35 40 45  
 Gln Leu Glu Asp Asn Ala Lys Ala Leu Ala Ala Lys Gly Val Lys  
 50 55 60  
 Leu Glu Ser Phe Gln Ser Asn His Glu Gly Arg Ile Ile Asp Arg Ile  
 65 70 75 80  
 His Glu Ala Arg Gly His Thr Asp Ala Ile Ile Ile Asn Pro Gly Ala  
 85 90 95  
 Phe Thr His Thr Ser Val Ala Ile Arg Asp Ala Leu Ile Gly Val Ser  
 100 105 110  
 Val Pro Phe Ile Glu Val His Ile Thr Asn Val His Ala Arg Glu Glu  
 115 120 125  
 Phe Arg His His Ser Tyr Leu Ser Asp Lys Ala Ala Cys Ile Ile  
 130 135 140  
 Gly Leu Gly Thr Tyr Gly Tyr Glu Ala Ala Ile Glu Tyr Ala Ala Arg  
 145 150 155 160  
 Glu Ile Ile Ser Ala Lys Glu Val Tyr  
 165

<210> 39988  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 39988  
 Tyr Ala Leu Gln Val Ala Tyr Asn Thr Arg Gly Ile Asn Lys Tyr Gly  
 1 5 10 15  
 Gly Tyr Pro Trp Asn His Gly Pro Tyr Ser Ser Leu Ser Ile Phe Ile  
 20 25 30  
 Pro Ile His His Pro Leu His Pro Thr Ser Gly Leu Tyr Arg Ser Lys  
 35 40 45  
 Leu Thr Asp Leu Gly Tyr Cys Ser Leu Leu Leu Leu  
 50 55 60

<210> 39989  
 <211> 480  
 <212> PRT  
 <213> A.fumigatus

<400> 39989  
 Ile Met Ser Ile Ser Ala Ala Pro Tyr Arg Glu Phe Leu Arg Gln Lys  
 1 5 10 15  
 Glu Ala Glu Phe Phe Ser Leu Ile Asp Gln Gly Val Ile Ser Pro Trp  
 20 25 30  
 Leu Phe Pro His Asp Phe Leu Val Leu Ile Ile Pro Leu Leu Val Leu  
 35 40 45  
 Met Ile Pro Asn Lys Gly Arg Ala Trp Val Val Val Arg Arg Thr  
 50 55 60  
 Ala Phe Gly Leu Val Cys Cys Leu Thr Ile Arg Asn Leu Leu Tyr Thr  
 65 70 75 80  
 Arg Cys Leu Thr Gly Gly Gly Thr Val Ile Gly Phe Tyr Tyr Ala Phe  
 85 90 95  
 Ala Val Pro Trp Asn Ser Leu Phe Leu Leu Phe Lys Asp Val Gln Asn  
 100 105 110

17418

Glu Cys Ser Arg Leu Glu Arg Arg Ser Asn Gly Ile Leu Tyr Trp Gln  
 115 120 125  
 Gly Tyr Pro Asp Ser Ile Cys His Arg Leu Ser Trp Leu Leu Asp Met  
 130 135 140  
 Phe Gly Ser Leu Arg Gly Ala Gly Trp Asn Trp Arg Ile Pro Gly Leu  
 145 150 155 160  
 Pro Pro Leu Pro Lys Ile Arg Ser Lys Asp Glu Gln Thr Ser Thr Asp  
 165 170 175  
 Gly Lys Glu Leu Ala Gln Glu Ala Pro Ser Ser Thr Leu Leu Arg Ser  
 180 185 190  
 Ser Ile Val Arg Thr Ala Arg Tyr Tyr Leu Val Met Asp Ile Leu Lys  
 195 200 205  
 Val Leu Thr Met Val Asp Pro Tyr Phe Trp Gly Leu Ile Asp Ala Ala  
 210 215 220  
 Pro Leu Tyr Pro Leu Asp Lys Ile Tyr Gln Phe Ser Pro Ala Leu Leu  
 225 230 235 240  
 Arg Leu Phe Arg Ala Val Val Thr Val Val Trp Ile Arg Thr Ser Met  
 245 250 255  
 Ala Phe Ile Ala Ser Thr Val Pro Leu Ile Ile Ser Leu Ala Val Thr  
 260 265 270  
 Val Cys Pro Gly Phe Val Lys Trp Ser Arg Ile Pro Leu Asn Ala Pro  
 275 280 285  
 Trp Leu Tyr Pro Pro Leu Phe Asp Ser Phe Trp Asn Phe Lys Pro Val  
 290 295 300  
 Phe Asp Tyr Gly Leu Asp Gly Trp Trp Gly Arg Arg Trp His Gln Ala  
 305 310 315 320  
 Tyr Arg Tyr Ala Phe Ser Glu Thr Ala Arg His Val Val Pro His Leu  
 325 330 335  
 Glu Lys Thr Asp Met Ala Arg Phe Leu Arg His Ser Val Ala Phe Leu  
 340 345 350  
 Leu Ser Gly Leu Val His Phe Cys Ala Val His Ser His Phe Val Ala  
 355 360 365  
 Pro Asp Ser Val His Phe Gly Ala Ile Val Phe Phe Met Leu Gln Pro  
 370 375 380  
 Leu Gly Met Leu Val Gln Arg Lys Leu Arg Gly Ile Leu Phe Ser Glu  
 385 390 395 400  
 Gly Ser Thr Leu Trp Arg Ala Phe Asn Ile Ile Ser Thr Tyr Ala Trp  
 405 410 415  
 Leu Tyr Leu Val Ile Gly Pro Phe Cys Asp Glu Leu Ala Ala Ala Gly  
 420 425 430  
 Thr Trp Leu Tyr Asp Glu Ala Cys Pro Ile Ser Ile Ile Arg Gly Leu  
 435 440 445  
 Gly Leu Ile Glu Gly Glu Gly Trp Phe Val Gly Thr Arg Arg Tyr Val  
 450 455 460  
 Arg Leu Arg Thr Gly Glu Lys Trp Trp Gln Ala Ala Ile Gln Ile Leu  
 465 470 475 480

<210> 39990

<211> 183

<212> PRT

<213> A.fumigatus

<400> 39990

Ser Thr Ser His Met Leu Pro Gln Lys Gly Thr Arg Leu Val Ala Lys  
 1 5 10 15  
 Val Tyr Asp Pro Leu Tyr Phe Asn Asp Asp Glu Gly Tyr Leu Asn Pro

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<210> 39991
<211> 184
<212> PRT
<213> A.fumigatus
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<210> 39992
<211> 210
<212> PRT
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&lt;213&gt; A.fumigatus

&lt;400&gt; 39992

Pro Ser Ser Asp Cys His His Leu Pro Val Thr Ser Val Arg Leu Gly  
 1 5 10 15  
 Thr Phe Ala Lys Glu Ile Arg Leu Leu Leu Pro Thr Ser Ile Arg Leu  
 20 25 30  
 Asn Arg Gly Asn Leu Val Leu Pro Asp Leu Val Ala Ser Ala Asn Ala  
 35 40 45  
 Ala Ala Leu Thr Asp Met Val Leu Leu His Glu His Arg Gly Thr Pro  
 50 55 60  
 Thr Ala Met Thr Ile Ser His Leu Pro His Gly Pro Thr Ala Ser Phe  
 65 70 75 80  
 Ser Leu His Asn Val Val Leu Arg Ala Asp Ile Pro Asn Ala Ala Arg  
 85 90 95  
 Gly Thr Val Ser Glu Ser Tyr Pro His Leu Ile Phe Glu Gly Phe Lys  
 100 105 110  
 Thr Lys Leu Gly Leu Arg Val Val Gln Ile Leu Lys His Leu Phe Pro  
 115 120 125  
 Pro Arg Glu Ala Gly Lys Val Gly Asn Arg Val Val Thr Phe Val Asn  
 130 135 140  
 Lys Glu Asp Asn Ile Glu Val Arg His His Val Phe Val Lys Thr Gly  
 145 150 155 160  
 Tyr Arg Asp Val Glu Leu Ala Glu Val Gly Pro Arg Met Thr Met Arg  
 165 170 175  
 Leu Phe Glu Ile Arg Gly Gly Ser Leu Glu Lys Gly Ser Ser Gly Asp  
 180 185 190  
 Val Glu Trp Ala Leu Thr Gln Tyr Thr Arg Thr Ser Lys Lys Lys Asp  
 195 200 205  
 Tyr Leu  
 210

&lt;210&gt; 39993

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39993

Arg Arg Gln Ala Arg Glu Arg Arg Asp Tyr Leu Tyr Arg Arg Ala Leu  
 1 5 10 15  
 Leu Leu Arg Asp Ala Ser Ile Ala Glu Lys Arg Ala Gln Leu Lys Ala  
 20 25 30  
 Ser Leu Ala Thr Gly Lys Thr Leu Asp Pro Ser Ile Ala Asn Asp Lys  
 35 40 45  
 Lys Leu Arg Glu Asp Phe Lys Tyr Asp Glu Ser Leu Glu Thr Pro Asn  
 50 55 60  
 Lys Glu Ser Lys Asp Thr Asp Tyr Ala Asp Leu Asp Asp Glu Tyr Ala  
 65 70 75 80  
 Leu Thr Ser Gly Ile Ile Asp Pro Arg Pro Ile Val Thr Thr Ser Arg  
 85 90 95  
 Ser Pro Pro Phe Ala  
 100

&lt;210&gt; 39994

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39994

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Leu Tyr Leu Pro Phe Tyr Ser Tyr Cys Gly Ile His Asn Pro Ser Ser
1          5          10          15
Val Val Lys Cys Leu Ala Cys Ser Lys Trp Phe Cys Ser Ala Arg Gly
          20          25          30
Asn Thr Ser Ser Ser His Ile Val Asn His Leu Val Arg Ala Arg His
          35          40          45
Lys Glu Val Gln Leu His Pro Ala Ser Ser Leu Gly Asp Thr Ile Leu
          50          55          60
Glu Cys Tyr Asn Cys Gly Thr Lys Asn Val Phe Leu Leu Gly Phe Ile
65          70          75          80
Pro Ala Lys Ser Asp Thr Val Val Val Leu Leu Cys Arg Gln Pro Cys
          85          90          95
Ala Ala Met Pro Ser Ser Lys Asp Met Asn Trp Asp Thr Ser Arg Trp
          100          105          110
Gln Pro Leu Ile Glu Asp Arg Ser Phe Leu Pro Trp Leu Val Ala Ala
          115          120          125
Pro Ser Asp Gln Glu Gln Leu Arg Ala Arg His Leu Ser Pro Gln Leu
          130          135          140
Ile Ala Lys Leu Glu Glu Met Trp Lys Glu Asn Ser Gln Ala Thr Phe
145          150          155          160
Ala Asp Leu Glu Lys Ala Thr Ala Val Asp Asp Glu Pro Ala Pro Val
          165          170          175
Leu Leu Arg Tyr Asp Asp Ala Phe Gln Leu Pro Lys Thr Ser Tyr Gly
          180          185          190
Ala Pro Arg
          195

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&lt;210&gt; 39995

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39995

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Val His Glu Ser Asn Asp Val Pro His Thr Tyr Ala Thr Gln Ala Lys
1          5          10          15
Tyr Ser Arg Thr Gly Lys Ser Thr Asp Glu Ile Leu Ala Pro Pro Gly
          20          25          30
Ser Asp Gln Asp Ala Ala Met Ala Ala Phe Thr Asp Phe Phe Ala Ala
          35          40          45
Lys Thr Gly Lys Lys Trp Glu Asn Arg Leu Asp Gly Ile Pro Met Ala
          50          55          60
Pro Lys Gln Asp Val Asp Gly Lys Glu Leu Pro Ala His Ala Gly Trp
65          70          75          80
Phe Tyr Tyr Glu Thr Gly Arg Ser Leu Leu Ser Asp Phe Leu Arg Gln
          85          90          95
Gly Glu Ser Gln Ser Ser Ala Met Gly Gln Gly Ala Met Gln Ile Ala
          100          105          110
Val Ser Ser Asn Ser Asp Asp His Gly Pro Leu Met Pro Pro Asp Ser
          115          120          125
Lys Asp Gly Ser Val Asp Asp Gln Ala Glu Ser Pro Pro Arg Val Phe
          130          135          140

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&lt;210&gt; 39996

<211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 39996

Gln Tyr Gly Phe Lys Ala Gly Asn Met Tyr Leu Thr Gly Leu Thr Leu  
 1 5 10 15  
 Tyr Phe Ile Gly Tyr Val Ala Phe Glu Val Pro Ser Asn Ile Val Leu  
 20 25 30  
 Lys Arg Thr Thr Pro Arg Ile Trp Leu Pro Thr Leu Thr Leu Leu Trp  
 35 40 45  
 Gly Ile Val Ala Thr Leu Leu Gly Val Val Gln Asn Tyr Ala Gly Tyr  
 50 55 60  
 Leu Thr Ser Arg Thr Gly Lys Val Ile Asn Ile Ala Tyr Ala Gln Lys  
 65 70 75 80  
 Lys Cys

<210> 39997  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 39997

Leu Glu Arg Gly Pro Cys Leu Lys Gly Pro Cys Ser Pro Leu Arg Arg  
 1 5 10 15  
 Gly Ala Ser Thr Ser Val Ala Leu Gly Ile Ala Glu Ser Gly Leu Phe  
 20 25 30  
 Pro Gly Val Val Phe Tyr Leu Ser Met Trp Tyr Lys Arg Asn Glu Gln  
 35 40 45  
 His Tyr Arg Val Ala Leu Phe Phe Ser Ala Ala Ser Leu Ala Gly Ala  
 50 55 60  
 Phe Gly Gly Ile Leu Ala Trp Val Arg Thr Ser Gln Thr Arg Gly Lys  
 65 70 75 80  
 Val Thr Ser Arg

<210> 39998  
 <211> 621  
 <212> PRT  
 <213> A.fumigatus

<400> 39998

Ile Ser Pro Ala Ile Gly Thr Phe Ile Leu Pro Gly Leu Asn Gln Gln  
 1 5 10 15  
 Asn Pro Leu Ile Pro Trp Ile Val Asn Pro Val Ser His Asp Phe Glu  
 20 25 30  
 Met Phe Thr Arg Val Leu Ile Ala Ala Gly Phe Ser Arg Ile Arg Val  
 35 40 45  
 Met Pro Val Gly Val Asp Ala Ser Val Thr Asp Ala Arg Ala Ile Arg  
 50 55 60  
 Val Ala Pro Ala Glu Cys Pro Glu Gly Ile Leu Thr Val Thr Ser Ile  
 65 70 75 80  
 Phe Pro Val Val Ala Thr Ser Thr Asn Ser Glu Gln Phe Gly Gln Val  
 85 90 95  
 Thr Gly Glu Trp Gly Ser Leu Phe Ile Pro Phe Asn His Leu Ser Gly



	100		105		110
His Ile Ser Lys Val Thr Ala Val Thr Asn His Phe Ser Val Trp Pro					
	115		120		125
Ser Ser Lys Pro Met Ile Thr Asp Ala Lys Ser Thr Asp Leu Ala Ser					
	130		135		140
Ile Leu Leu Leu Ala Ser Leu His Ser Arg Asn Ile His Val Met Ser					
145		150		155	160
Val Thr Ser Lys Glu Asp Ile Asn Leu Ile Ala Leu Ser Lys Glu Lys					
	165		170		175
Gly Leu Lys Val Thr Cys Asp Val Ser Ile Phe Cys Leu Phe Leu Ser					
	180		185		190
Arg Glu Asp Phe Pro Asp Cys Asn Phe Leu Pro Ser Ala Glu Asp Gln					
	195		200		205
Asn Ala Leu Trp Glu His Met Ser Thr Ile Asp Val Phe Ser Ile Gly					
	210		215		220
Ser Ile Pro Phe Gln Leu Ala Gly Lys Gln Ala Ser Pro Val Ser Gly					
225		230		235	240
Ile Ala Glu Ser Leu Pro Leu Leu Phe Thr Ala Val Ser Glu Gly Arg					
	245		250		255
Leu Thr Val Glu Asp Ile Val Ser Arg Leu Tyr Glu Asn Pro Lys Lys					
	260		265		270
Ile Phe Glu Leu His Asp Gln Ala Asp Thr Ser Val Glu Ile Glu Val					
	275		280		285
Asp Arg Pro Tyr Leu Phe Gln Ser Pro Tyr Trp Ser Pro Phe Asn Gly					
	290		295		300
Lys Ser Leu Arg Gly Ala Val Gln Arg Val Thr Phe Gln Gly Lys Thr					
305		310		315	320
Ser Cys Leu Asp Gly Glu Val Thr Arg Asp Ala Pro Lys Gly Thr Asp					
	325		330		335
Met Ser Gly His Arg Ile Val Pro Ala Ser Pro Ser Val Lys Ala Met					
	340		345		350
Ser Pro Met Val Gln Ala Arg Pro Glu Ser Ser Leu Asp Arg Arg Leu					
	355		360		365
Ser Ile Ser Gly Thr Pro Gly Arg Ser Phe Lys Gln Arg Pro Ala Asp					
	370		375		380
Ser Ala Ala Asn Glu Leu Gly Pro Pro Leu Tyr Ala Pro Val Gln Thr					
385		390		395	400
Ser Ser Ser Leu His Asp Leu Leu Ser Arg Ser Thr Phe Arg Gln Lys					
	405		410		415
His Val Ile Ser Val Asn Gln Phe Asn Arg Ala Asp Leu His Leu Leu					
	420		425		430
Phe Thr Val Ala Gln Glu Met Arg Leu Gly Val Gln Arg Gln Gly Val					
	435		440		445
Leu Asp Ile Leu Lys Gly Arg Val Leu Thr Thr Leu Phe Tyr Glu Pro					
	450		455		460
Ser Thr Arg Thr Ser Ala Ser Phe Asp Ala Ala Met Gln Arg Leu Gly					
465		470		475	480
Gly Arg Thr Ile Ala Ile Ser Thr Glu His Ser Ser Thr Lys Lys Gly					
	485		490		495
Glu Thr Leu Gln Asp Thr Val Arg Thr Leu Gly Cys Tyr Gly Asp Ala					
	500		505		510
Val Val Leu Arg His Pro Asp Pro Ser Ser Ala Glu Thr Ala Ala Lys					
	515		520		525
Phe Ser Pro Val Pro Val Ile Asn Gly Gly Asn Gly Ser Val Glu His					
	530		535		540
Pro Thr Gln Ala Phe Leu Asp Leu Phe Thr Ile Arg Glu Glu Leu Gly					

## 17424

545                      550                      555                      560  
 Thr Val Thr Gly Leu Thr Ile Thr Phe Thr Gly Asp Leu Arg Tyr Gly  
                          565                      570                      575  
 Arg Thr Ile His Ser Leu Ile Lys Val Leu Gln Phe Tyr His Val Arg  
                          580                      585                      590  
 Ile Gln Leu Val Ala Pro Lys Asp Leu Ser Leu Pro Arg Gly Ser Pro  
                          595                      600                      605  
 Thr Asp Ser Arg Arg Val Arg Thr Ala Gly Ala Arg Val  
                          610                      615                      620

&lt;210&gt; 39999

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 39999

Thr Leu Leu Ile Phe Asp Arg Leu Phe Ala Arg Gly Tyr Leu Gly Ser  
 1                      5                      10                      15  
 Asn Ser Thr Tyr Gly Asp Ile Tyr Val Val Asn Pro Asp Val Ala Ala  
                          20                      25                      30  
 Ala Thr Gly Asn Ser Leu Ala Thr Ser Asp Met Cys Pro Asn Phe Lys  
                          35                      40                      45  
 Asp Thr Ser Gly Gly Thr Tyr Ala Ser Thr Trp Asp Lys Ile Tyr Leu  
                          50                      55                      60  
 Pro Pro Ile Thr Lys Arg Leu Asn Lys Lys Ile Ser Gly Asn Leu Thr  
                          65                      70                      75                      80  
 Leu Thr Asp Asp Gln Val Ser Ile Phe Pro Tyr Leu Cys Gly Phe Glu  
                          85                      90                      95  
 Thr Gln Ile Thr Gly Ser Arg Ser Pro Trp Cys Asp Val Phe Thr Pro  
                          100                      105                      110  
 Asn Glu Ile Leu Gln Tyr Glu Tyr Arg Gln Asp Leu Arg Tyr Tyr Tyr  
                          115                      120                      125  
 Gly Thr Gly Glu  
                          130

&lt;210&gt; 40000

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40000

Arg Ser Pro Leu Leu Val Thr Ser Asp Met Asp Ala Pro Ser Thr Leu  
 1                      5                      10                      15  
 Ser Ser Lys Cys Ser Ser Ser Ile Thr Cys Ala Ser Ser Trp Leu Arg  
                          20                      25                      30  
 Pro Arg Ile Phe Leu Phe Pro Glu Glu Val Arg Gln Thr Val Val Ala  
                          35                      40                      45  
 Ser Gly Gln Leu Val Leu Glu Ser Glu Glu Leu Thr Pro Glu Ile Val  
                          50                      55                      60  
 Ala Arg Ser Asp Val Leu Tyr Cys Thr Arg Val Gln Lys Glu Arg Phe  
                          65                      70                      75                      80  
 Ala Asp Leu Glu Gln Tyr Glu Arg Leu Lys Asn Ser Phe Ile Ile Asp  
                          85                      90                      95  
 Asn Ala Leu Met Lys His Ala Lys Ser His Met Val Val Met His Pro  
                          100                      105                      110  
 Leu Pro Arg Asn Ala Glu Ile Ala Glu Glu Val Asp Phe Asp Gln Arg

17425

115 120 125  
Ala Ala Tyr Phe Arg Gln Val Ser Cys Leu Ser Phe Ser Ser Leu Val  
130 135 140  
Cys Val Glu Leu Cys  
145

<210> 40001  
<211> 104  
<212> PRT  
<213> A.fumigatus

<400> 40001  
Phe Lys Leu Thr Ser Ser Lys Glu Gly Leu Val Thr Val Val Met Ser  
1 5 10 15  
Ile Val Ala Tyr Phe Trp Val Tyr Asn Tyr Pro Ala Thr Ala Glu Phe  
20 25 30  
Leu Thr Asp Lys Glu Arg Ala Phe Ile Gln Phe Arg Leu Lys Asn Asp  
35 40 45  
Ser Asp Ala Thr Arg Asp Glu Lys Phe Ser Trp Thr Ala Val Phe Glu  
50 55 60  
Ala Phe Lys Asp Val Lys Val Trp Leu Tyr Gly Leu Cys Phe His Thr  
65 70 75 80  
Met Ser Leu Pro Leu Tyr Thr Leu Ser Leu Phe Met Val Arg Cys Val  
85 90 95  
Asp Thr Ile Asp Tyr Ile Ala Val  
100

<210> 40002  
<211> 198  
<212> PRT  
<213> A.fumigatus

<400> 40002  
Pro Thr Ile Ile Lys Glu Leu Gly Tyr Ser Ala Ala Lys Ala Gln Leu  
1 5 10 15  
Leu Thr Val Pro Pro Tyr Ala Leu Gly Phe Ile Leu Thr Ile Ile Val  
20 25 30  
Ala Ile Leu Ser Glu Arg Asn Arg Arg Arg Ala Pro Phe Ile Ile Gly  
35 40 45  
Ser Thr Thr Phe Ala Cys Ile Gly Tyr Ile Leu Phe Leu Thr Ser Lys  
50 55 60  
Arg Ala Ser Val Cys Tyr Ala Gly Val Phe Phe Ala Ala Gly Gly Ile  
65 70 75 80  
Tyr Pro Ser Val Ala Ile Val Leu Ser Trp Pro Ala Asn Asn Val Ser  
85 90 95  
Gly Gln Thr Lys Arg Ala Ile Ala Asn Ala Met Gln Ile Ser Ile Gly  
100 105 110  
Asn Leu Gly Ala Val Met Gly Thr Gln Leu Tyr Arg Thr Glu Ser Ser  
115 120 125  
Pro Arg Tyr Tyr Val Gly His Gly Phe Ala Leu Gly Tyr Leu Leu Ala  
130 135 140  
Asn Ile Ala Val Val Ser Val Leu Trp Ala Val Leu Asn Arg Glu Asn  
145 150 155 160  
Ile Asp Lys Ala Lys Gln Arg Glu Ala Lys Gly Ile Thr Ala Ile Ile  
165 170 175  
Gly Asp Ile Gly Asp Ala Gly Gly Asp Phe Gln Gly Asp Arg Asp Ser

180  
Arg Trp Ile Phe Gln Thr  
195

185

190

<210> 40003  
<211> 95  
<212> PRT  
<213> A.fumigatus

<400> 40003  
Met Thr Leu Ser Ile Val Ser Leu Ser Arg Cys Ile His Leu Ser Ala  
1 5 10 15  
Tyr Thr Ile Pro Ala Val Arg Leu Thr Ser Ile Ala Val Pro Ser Cys  
20 25 30  
Arg Ser Gly Pro Gly His Ser Cys Pro Leu Asp Gln Tyr Thr Ala Leu  
35 40 45  
Val Ala Lys Lys Arg Glu Gln Tyr Gly Ser Phe Ala Ser Val Cys Gly  
50 55 60  
Leu Pro Glu Gly Asn Val Thr Thr Ala Thr Leu Asp Gly Ala Val Thr  
65 70 75 80  
Phe Phe Asn Asp Leu Thr Leu Pro Phe Leu Ser Val Val Lys Pro  
85 90 95

<210> 40004  
<211> 510  
<212> PRT  
<213> A.fumigatus

<400> 40004  
Ala Ala Arg Trp Ser Lys Ser Thr Ser Ser Ala Ile Ser Ala Phe Leu  
1 5 10 15  
Gly Ser Gly Cys Ile Thr Thr Met Trp Leu Leu Ala Cys Phe Met Arg  
20 25 30  
Ala Leu Ser Met Met Lys Leu Phe Leu Arg Arg Ser Tyr Cys Ser Arg  
35 40 45  
Ser Ala Asn Arg Ser Phe Cys Thr Arg Val Gln Tyr Arg Thr Ser Glu  
50 55 60  
Arg Ala Thr Ile Ser Gly Val Asn Ser Ser Asp Ser Ser Thr Ser Cys  
65 70 75 80  
Pro Asp Ala Thr Thr Val Cys Arg Thr Ser Ser Gly Lys Arg Lys Ile  
85 90 95  
Leu Gly Arg Asn Gln Leu Asp Ala His Val Ile Glu Leu Glu His Phe  
100 105 110  
Asp Glu Arg Val Asp Gly Ala Ser Ile Ser Glu Val Thr Ser Lys Gly  
115 120 125  
Asp Arg Gln Ala Ser Asp Ser Ser Lys Leu Phe Pro Asn Arg Glu Glu  
130 135 140  
Ile Glu Glu Cys Leu Ser Gly Val Leu Asp Ala Ala Ile Ser Ala Val  
145 150 155 160  
Asp Asp Arg His Trp Arg Glu Phe Gly Ser Arg Leu Ser Ala Ala Gly  
165 170 175  
Ile Gly Val Thr Gln Asn Asn Cys Ile Ser Val Ala Thr Gln Gly Ala  
180 185 190  
Asp Ser Val Leu Gln Gly Leu Thr Leu Leu Gly Arg Arg Met Leu Gly  
195 200 205  
Gly Asp Gly Asn Ser Pro Ser Ala Glu Thr Leu His Gly Ser Ile Lys

17427

210		215		220
Gly Cys Arg Ser Ala Gly Arg Arg Phe Ile Glu Glu Ser Gly Lys Asp				
225		230		235
Thr Thr Leu Gln Asn Val Lys Asn Thr Leu Ala Leu Asn Ala Glu Thr				
	245		250	255
His Leu Leu Ser His Arg Glu Glu Gln Val Gln Val Ser Thr Val Glu				
	260		265	270
Leu Val Asp Gly Asp Asn Met Leu Leu Ser Glu Gly Arg Pro Arg Gln				
	275		280	285
Gln Ile Val Gln Gly Gly Gly Ser Leu Tyr Arg Ser Ile Gln Arg Arg				
	290		295	300
Thr Glu Leu Ile Gly Gly Arg Ile Ser Gly Pro Leu Leu Glu Arg Ala				
305		310		315
Thr Trp Ser Ser Arg Asn Arg Gln Ser Ser Val Lys Arg Thr Leu Arg				
	325		330	335
Ala Ser Leu Asp His Gly Arg His Gly Leu Asp Arg Arg Arg Cys Arg				
	340		345	350
His Asn Thr Met Ala Arg His Ile Gly Ser Leu Gly Ser Ile Ala Ser				
	355		360	365
His Phe Thr Ile Glu Ala Arg Gly Leu Ala Leu Glu Gly Asn Pro Leu				
	370		375	380
Asn Ser Thr Pro Gln Ala Leu Ala Ile Glu Gly Arg Pro Val Arg Ala				
385		390		395
Leu Glu Glu Val Trp Ala Val Asn Phe Asn Leu Asn Arg Ser Val Gly				
	405		410	415
Leu Val Met Glu Leu Glu Asp Leu Leu Gly Val Leu Val Lys Ala Arg				
	420		425	430
Asn Asn Val Leu His Gly Lys Ala Thr Leu Arg His Gly Gly Glu Glu				
	435		440	445
Gln Trp Gln Arg Leu Gly Asn Thr Arg Asn Arg Arg Gly Leu Phe Ala				
	450		455	460
Ser Lys Leu Glu Gly Asp Thr Ala Asp Gly Glu Asn Ile Asn Gly Ala				
465		470		475
His Val Leu Pro Gln Gly Val Leu Val Leu Ser Arg Arg Gln Glu Val				
	485		490	495
Ala Val Gly Glu Ile Phe Ser Arg Glu Glu Glu Thr Glu Asp				
	500		505	510

<210> 40005  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 40005

Ala Lys Met Arg Gln Leu Thr Glu Gln Glu Leu Gln Thr Leu Leu Ala				
1	5		10	15
Lys Leu Ala Gly Tyr Thr Gly Arg Ser Leu Asn Asn Leu Ile Val Pro				
	20		25	30
Gln Ser Asp Ser Glu Asp Asp Arg His Val Phe Arg Leu Gln Gly Asn				
	35		40	45
Arg Val Tyr Tyr Val Lys Lys Ser Leu Ala Asp Leu Ser Thr Ser Phe				
	50		55	60
Pro Arg Asp Thr Leu Leu Ser Leu Gly Thr Cys Ile Gly Lys Phe Thr				
65		70		75
Lys Thr Gly Lys Phe Arg Ile His Ile Thr Gly Pro Cys Phe Phe Arg				
	85		90	95

His Ala Glu Ser  
100

<210> 40006

<211> 730

<212> PRT

<213> A.fumigatus

<400> 40006

Arg	Pro	Gln	Thr	Ser	Val	Glu	Ser	Cys	Ala	Val	Ala	Ser	Ser	Met	Ala
1				5					10					15	
Asn	Asp	Trp	Gln	Pro	Asn	Asn	Glu	Lys	Leu	Ser	Leu	Gly	Pro	Phe	Gly
	20						25						30		
Gly	Arg	Asn	Ala	Met	Gln	Ser	Pro	Val	Glu	Arg	Glu	Cys	Glu	Arg	Lys
	35						40					45			
Val	Gln	Leu	Asp	Thr	Leu	Leu	Leu	Thr	Gly	Ser	Ser	Pro	Ala	Ala	Arg
	50					55					60				
Ala	Gly	Glu	Leu	Glu	Asn	Ser	Gly	Gln	Ala	Gln	Val	Ile	Arg	Glu	Gln
65					70					75					80
Pro	Ser	Ile	Arg	Ser	Leu	Arg	Ala	Glu	Asn	Asp	Ser	Gly	Ser	Pro	Thr
				85					90					95	
Ser	Thr	Asn	Ile	Ser	Phe	Tyr	Ala	Val	Glu	Asp	Glu	Phe	Ala	Glu	Pro
			100					105					110		
Ile	Ser	Pro	Ser	Ile	Tyr	Asp	Asn	Ala	Gly	Ala	Lys	Ile	Thr	Pro	Gly
	115					120							125		
Leu	Pro	Asp	Thr	Ala	His	Arg	Arg	Gly	Arg	Val	Arg	Thr	Asn	Glu	Gln
	130					135						140			
Arg	Phe	Pro	Glu	Met	Leu	Ala	Thr	Asp	Gln	Pro	Ser	Phe	Pro	Ala	Ser
145					150					155					160
Phe	Asn	His	Gly	His	Glu	Gly	Val	Gln	Pro	Thr	Val	Met	Thr	Ala	Tyr
				165					170					175	
Gln	Pro	Ala	Leu	Glu	Glu	Thr	His	Asp	Gln	His	Phe	Asn	Ala	Gln	Ser
		180						185					190		
His	Ala	Ala	Val	Ala	Gln	His	Pro	Phe	Asp	Gly	Val	Thr	Ser	His	Gly
	195						200						205		
Gly	Tyr	Ala	Pro	Pro	Pro	Pro	Asp	Pro	Asp	Tyr	Arg	Asn	Thr	Ala	Asp
	210					215					220				
Leu	Glu	Gln	Gln	Leu	Thr	Ser	His	Ile	Glu	Ala	Val	His	Ala	His	Met
225					230					235					240
Asn	Asn	Val	Val	His	Arg	Leu	Cys	Arg	Val	Leu	Glu	Asn	Ser	Asn	Asn
				245					250					255	
Trp	Ser	Lys	Asp	Gln	Ile	Leu	Arg	Gln	Thr	Asp	Ala	Met	Phe	Asp	Ile
			260					265					270		
Leu	Arg	Leu	Ile	Asn	Ala	Arg	Thr	Ala	Gly	His	Asn	Glu	Ala	Val	Ser
	275						280					285			
Asp	Leu	His	Arg	Gly	Met	Thr	Asn	Leu	Gln	Cys	Gln	Val	Gly	Ala	Ile
	290					295					300				
Glu	Phe	Gln	Met	Arg	Arg	Met	Glu	Glu	Arg	Leu	Leu	Ile	Gly	Val	Ser
305					310					315					320
Ser	Gln	Ile	Asn	Lys	Leu	Arg	Gly	Glu	Ile	Asn	Ala	Ser	Arg	Thr	Ser
				325				330						335	
Pro	Gln	Lys	Ala	Arg	Ala	Ser	Cys	Asn	Ser	Ala	Pro	Asp	Pro	Lys	Ile
			340					345					350		
Ala	Gly	Thr	Glu	Phe	Gln	Ala	Pro	Glu	Ile	Thr	Pro	Val	Val	Thr	Lys
	355						360					365			
Asp	Ser	Glu	Lys	Gln	Pro	Asp	Thr	Asn	Glu	Gln	Arg	Cys	Val	Lys	Lys

## 17429

370 375 380  
 Gly Lys Met Glu Val Ser Arg Asn Gln Asp Arg Lys Lys Gly Lys Glu  
 385 390 395 400  
 Lys Glu Glu Ser Glu Asn Val Ser Gly Gly Glu Gly Ser Leu Thr Gln  
 405 410 415  
 His Asn Asn Gln Gly Pro Ala Gln Asn Ile Pro Ser Thr Thr Val Ser  
 420 425 430  
 Phe Arg Asn Thr Pro Ser Gly Glu Lys Arg Arg Glu Ile Thr Tyr Ser  
 435 440 445  
 Gln Val Lys Arg Gly Val Arg Arg Asn Pro Ala Gln Glu Ser Ser Gly  
 450 455 460  
 Ser Pro Glu Pro Lys Ala Pro Lys Leu Ser Arg Gln Pro Ala Ala Asn  
 465 470 475 480  
 Phe Ala Pro Glu Asn Gly Gln Ser Ser Val Ile Gln Asp Ser His Leu  
 485 490 495  
 Asp Asn Asn Glu Gly Val Lys Thr Pro His Lys Lys Gly Met Phe Gly  
 500 505 510  
 Phe Arg Arg Arg Asp Asp Gly Glu Ser Arg Ala Gly Gly Lys Phe Leu  
 515 520 525  
 His Thr Pro Arg Arg Asn Lys Lys Thr Arg Asp Ser His Gly Gln Asn  
 530 535 540  
 Gly His Ser Ser Met Pro Ser Ala Pro Ala Gly Ala Val Gly Val Ser  
 545 550 555 560  
 Gln Pro Ser Thr Leu Ala Glu Glu Ser Pro Ser Ser Ile His Pro Ala  
 565 570 575  
 Leu Arg Asn Asp Lys Gln Lys Gln Ile Met Arg Asp Arg Glu Arg Leu  
 580 585 590  
 Glu Pro Gln Pro His Thr Gln Thr Gly Gln Met Thr Cys Thr Thr Glu  
 595 600 605  
 Arg Pro Thr Pro Gln Arg Arg Gly Leu Lys Asn Pro His Pro His Gln  
 610 615 620  
 Asn Ile Gly Thr Arg Ala Pro Thr Ser Asn Arg Leu Pro Thr Asn Ala  
 625 630 635 640  
 Phe Val Val Thr Pro Ser Ser Ser Ser Ser Leu Asn Glu Asp Ile Gln  
 645 650 655  
 Leu Cys Pro Pro Ala Ala Ala Ala Pro Pro Arg Ala Pro Leu Ile Arg  
 660 665 670  
 Pro Ser Tyr Ala Gly Gln Asn Pro Pro Asn Ile Ser Ser Ser Pro Gln  
 675 680 685  
 Val Ser Asp Thr Val Ser Val Ser Ala Ser Ala Gln Thr Gly Thr Gln  
 690 695 700  
 Gly Trp Gln Ala Ala Thr Trp Tyr Pro Ala Ala Gln Ser Gly Ala Ser  
 705 710 715 720  
 His Glu Ser Asn Gln Ser Asn His His Ala  
 725 730

<210> 40007  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 40007  
 Ser Tyr Leu Gly Ser Tyr Met Asn Ala Asn Leu Cys Val Gly Arg Tyr  
 1 5 10 15  
 Pro Val Tyr Asp Val Ile Glu Val Phe Phe Thr Gly Arg Ile Ile Tyr  
 20 25 30

[illegible]

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<210> 40008
<211> 84
<212> PRT
<213> A.fumigatus
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<210> 40009
<211> 735
<212> PRT
<213> A.fumigatus
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<400>	40009														
Thr	Arg	Trp	Ser	Gly	Ser	Ser	Ser	Ala	Arg	Phe	Leu	Ala	Phe	Gly	Glu
1				5					10					15	
Asn	Ser	Lys	Glu	Glu	Lys	Ser	Phe	Asp	Ser	Gln	Leu	Arg	Arg	Leu	Pro
			20					25					30		
Ser	Leu	Ile	Ser	Asn	Asp	Pro	Arg	Thr	Glu	Ile	Met	Ala	Pro	Gly	Arg
		35					40					45			
Thr	Ile	Lys	Arg	Arg	Arg	Leu	Ser	Pro	Pro	Gly	Asp	Glu	Glu	Asp	Thr
	50					55					60				
Ser	Ser	Arg	Pro	Ser	Arg	Asp	Ser	Phe	Asn	Asp	Phe	Tyr	Asn	Asn	Ala
65					70					75					80
Ala	Lys	Trp	Asp	Leu	Glu	Gln	Asp	Tyr	Glu	Arg	Arg	Pro	Arg	Lys	Leu
				85					90					95	
Gly	Lys	Lys	Asp	Lys	Glu	Asn	Thr	Arg	Leu	Pro	Ile	Lys	Thr	Ala	Glu
			100					105					110		
Gly	Leu	Gln	Met	Val	Glu	Ser	Glu	Pro	Glu	Ala	Glu	Glu	Ser	Asp	Ser
		115					120					125			
Phe	Leu	Gly	Thr	Asp	Asp	Asp	Glu	Asp	Gly	Asp	Glu	Asn	Glu	Ala	Asp
	130					135					140				
Phe	Asp	Asp	Glu	Asp	Met	Glu	Asp	Ala	Asp	Glu	Ala	Ala	Glu	Glu	Thr
145					150					155					160



Pro Lys Val Pro Leu Lys Leu Gln Ile Ile Gln Ala Lys Glu Glu Leu  
 165 170 175  
 Ala Arg Leu Ala Thr Ile Ile Asn Glu Asp Pro Glu Glu His Ile Ser  
 180 185 190  
 Ser Phe Lys Ser Met Ala Asp Met Val Glu Asn Gly Gln His Val Thr  
 195 200 205  
 Ile Gln Lys Leu Ala Leu Ala Ala Gln Ala Ala Val Tyr Lys Asp Val  
 210 215 220  
 Ile Pro Gly Tyr Arg Ile Arg Pro Leu Ser Glu Glu Asp Met Ser Ala  
 225 230 235 240  
 Lys Val Ser Lys Glu Val Arg Lys Leu Arg Ser Phe Glu Gln Ser Leu  
 245 250 255  
 Leu Ser Gly Tyr Lys His Tyr Val Gln Lys Leu Leu Asp Leu Thr Lys  
 260 265 270  
 Ser Ser Lys Arg Asp Thr Ala Ala Val Asp Pro Gly Leu Lys Ser Ile  
 275 280 285  
 Ala Ile Asn Cys Ala Cys Asn Leu Leu Leu Ser Val Pro His Phe Asn  
 290 295 300  
 Phe Arg Thr Glu Leu Leu Lys Ile Leu Val Asn Arg Leu Ala Lys Arg  
 305 310 315 320  
 Gln Ile Asp Ala Asp Phe Val Lys Cys Arg Glu Thr Val Glu Glu Val  
 325 330 335  
 Phe Arg Lys Asp Asn Asp Gly Ile Val Ser Leu Glu Ala Val Arg Leu  
 340 345 350  
 Leu Ser Lys Met Met Lys Ala Lys Asp Phe Arg Val His Glu Ser Val  
 355 360 365  
 Leu Asp Thr Phe Leu His Leu Arg Leu Leu Ser Glu Phe Ser Ala Lys  
 370 375 380  
 Gly Ser Arg Asp Arg Val Asp Arg Arg Pro Ala Glu Glu Glu Thr Thr  
 385 390 395 400  
 Phe His Gly Lys Lys Pro Lys Gln Lys Arg Glu Phe Arg Thr Lys Arg  
 405 410 415  
 Glu Arg Lys Leu Gln Lys Glu Arg Lys Ala Val Glu Lys Asp Met Lys  
 420 425 430  
 Glu Ala Asp Ala Ile Val Ser His Glu Glu Arg Asp Lys Asn Gln Ala  
 435 440 445  
 Glu Thr Leu Lys Leu Val Phe Gly Thr Tyr Phe Arg Ile Leu Lys Leu  
 450 455 460  
 Arg Ile Pro Asn Leu Met Gly Pro Val Leu Glu Gly Leu Ala Lys Tyr  
 465 470 475 480  
 Ala His Leu Ile Asn Gln Asp Phe Phe Gly Asp Leu Leu Glu Ala Leu  
 485 490 495  
 Lys Asp Leu Ile Gly His Ala Val Lys Ser Glu Val Glu Asp Gly Asp  
 500 505 510  
 Glu Glu Glu Ala Gln Glu Glu Ser Glu Ser Thr Ser Arg Asp Ala Gln  
 515 520 525  
 Arg Glu Ala Leu Leu Cys Thr Ile Thr Ala Phe Ala Leu Leu Glu Gly  
 530 535 540  
 Gln Asp Ile Ser Lys Ala Ala Ser Ser Leu His Leu Asp Leu Ser Phe  
 545 550 555 560  
 Phe Val Lys His Leu Tyr Arg Ser Leu Tyr Ser Leu Ser Val Asn Pro  
 565 570 575  
 Asp Val Glu Tyr Asn Pro Thr Lys Ala Leu Arg Leu Pro Asp Pro Asn  
 580 585 590  
 Ser Asn Glu Ala Asn Gly Ser Thr His Arg Ser Lys Ser Lys Val Asn  
 595 600 605

## 17432

Phe Gln Thr Pro Thr Val Leu Leu Leu Arg Cys Leu Gln Ser Thr Leu  
 610 615 620  
 Leu Ser Arg Ala His Gly Thr Pro Pro Thr Ile Arg Leu Gly Ser Phe  
 625 630 635 640  
 Thr Lys Arg Leu Met Thr Thr Ser Leu Gln Val Pro Glu Lys Ser Ala  
 645 650 655  
 Leu Ala Thr Leu Ser Leu Leu Asn Gln Val Ala Lys His His Ala Arg  
 660 665 670  
 Arg Ile Ala Pro Leu Trp Asn Ser Glu Glu Arg Lys Gly Asp Gly Val  
 675 680 685  
 Phe Asn Pro Phe Ala Ala Asp Val Glu Thr Thr Asn Val Phe Ala Gly  
 690 695 700  
 Thr Val Trp Glu Gly Glu Leu Leu Arg Leu His Tyr Cys Pro Gln Val  
 705 710 715 720  
 Arg Asp Ala Ala Ala Asp Ile Glu Lys Leu Ile Val Gly Arg Asn  
 725 730 735

&lt;210&gt; 40010

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40010

Tyr Ile Leu Tyr Asp Ile Gln Val Leu Thr Ser Pro Arg Tyr Ala Leu  
 1 5 10 15  
 Asp Gly Ile Pro Tyr Thr Ile Val Phe Tyr Leu His Leu Lys Asp Gly  
 20 25 30  
 Ser Tyr Lys Cys Leu Gly Gly Val Tyr Thr Phe Ser Thr Lys Leu Ser  
 35 40 45  
 Asp Ala Gln Asp Thr Glu Arg Gly Gly Cys Asp Asn Cys Arg Glu Gln  
 50 55 60  
 Lys Lys Ala Gly Val Leu Ala Ser Ala Gln Ile Pro Leu Thr Tyr Thr  
 65 70 75 80  
 Leu Tyr Glu Arg Gln Glu Trp His Asn Leu Gly Lys Leu Leu Pro Val  
 85 90 95  
 Lys Glu Thr Ala Asp Ile Ile Arg Gln His Leu Cys Trp Lys Val Val  
 100 105 110  
 Gly Val Asn Asn Ser Ile Leu Phe Asp Val Ser Arg Asp Tyr Ala Ala  
 115 120 125  
 Leu Pro Ser Val Leu Leu His His Ala Leu Thr Lys Asp Val Ile Tyr  
 130 135 140  
 Ser Ser Leu Ser Asn Pro  
 145 150

&lt;210&gt; 40011

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40011

His Ala Arg Ala Gln Arg Pro Ser Trp Thr Thr Ile Arg Ser Ser Pro  
 1 5 10 15  
 Arg Trp Ala Gln Pro Arg Ser Ser Ile Leu Gly His Val Leu Gly Ala  
 20 25 30  
 Val Val Gly Val Gly Val Thr Lys Leu Phe Lys Leu Arg Ser Asp Phe  
 35 40 45

## 17433

Glu Asp Leu Arg Trp Val Ala Gly Ala Val Cys Thr Ala Val Ala Ser  
 50 55 60  
 Leu Val Met Gly Leu Thr Asn Thr Val His Pro Pro Gly Gly Ala Thr  
 65 70 75 80  
 Ala Leu Leu Ala Ala Val Asp Ser Thr Val Asp Ala Met Gly Trp Phe  
 85 90 95  
 Phe Val Pro Leu Val Leu Ile Gly Ser Leu Leu Met Leu Gly Cys Ala  
 100 105 110  
 Leu Val Val Asn Asn Ile Gln Arg Gln Phe Pro Met Phe Trp Trp Thr  
 115 120 125  
 Pro Arg Asp Val Val Arg Lys Thr Gly Pro Pro Asp Ile Glu Lys Ala  
 130 135 140  
 Ser Glu Val Pro Gln Glu Ser Arg Glu Arg Arg Ile Ser Trp Ala Val  
 145 150 155 160  
 Gly Val Leu Arg Ala Asn Ser Ile Val Ile Ser Pro Asp Arg Val Val  
 165 170 175  
 Ile Pro Asp Gly Phe Thr Leu Gly Leu Glu Glu Lys Gly Ile Leu Glu  
 180 185 190  
 Val Leu Arg Asp Arg Leu Arg Asp Pro Asp Gln Tyr Asp Ser Ser Val  
 195 200 205  
 Gly Asp Gln Ser Thr Asp Ser Thr Glu Ser  
 210 215

&lt;210&gt; 40012

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40012

Gly Gly Thr Ile Thr Phe Ser Thr Arg Pro Thr Pro Arg Glu Asp Leu  
 1 5 10 15  
 Asn Tyr Ala Gln Ile Ser Ile Pro Tyr Asn Leu Ile Ser Leu Tyr Glu  
 20 25 30  
 His Gly Ser Cys Leu Thr Met Ser Ala Gln His Ser Arg Ser Val Val  
 35 40 45  
 Arg Leu Leu His Tyr Gly His Met Ala Asp Asn Tyr Cys Thr Val Thr  
 50 55 60  
 Thr His Lys Thr Thr Thr Ala Ser Ser Ser Phe Val Trp His  
 65 70 75

&lt;210&gt; 40013

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40013

Arg Thr Thr Cys Trp Cys Gln Val Trp Leu Ile Leu Ser Arg Pro Asp  
 1 5 10 15  
 Asn Ala Asp Phe Cys Ser Trp Asn Lys Ala Leu Ala Arg Gln Arg Ala  
 20 25 30  
 Val Gln Met Ala Thr Glu Phe Arg Lys Lys Gly Val Asn Val Leu Leu  
 35 40 45  
 Gly Pro Val Val Gly Pro Leu Gly Arg Val Ala Glu Ala Gly Arg Asn  
 50 55 60  
 Trp Glu Gly Phe Ser Asn Asp Pro Tyr Leu Ser Gly Ala Leu Val Tyr  
 65 70 75 80

17434

Glu Thr Val Asp Gly Ala Gln Ser Val Gly Val Ala Thr Cys Thr Lys  
 85 90 95  
 Val Ser His Leu Asp Gln Phe Leu Val Gln Pro Lys Asp Phe Phe Leu  
 100 105 110  
 Phe Ile Gln His Phe His Leu Gly Met Asn Gln Lys Thr Asn Pro Lys  
 115 120 125  
 Pro Pro  
 130

<210> 40014  
 <211> 140  
 <212> PRT  
 <213> A.fumigatus

<400> 40014  
 Val Asn Ile Ala Leu Val Val Ser Gly Asp Tyr Trp Leu Thr Arg Ala  
 1 5 10 15  
 Ser Asn Val Asp Arg Leu Thr Ala Ile Trp Gln Val Leu Asn Gln Asp  
 20 25 30  
 His Trp Phe Asp Glu Pro His Pro Ser Asp Ala Lys Pro Asp Asp Pro  
 35 40 45  
 Leu Lys Pro Phe His Val Ser Lys Asp Lys Tyr Phe Thr Ser Asp Asp  
 50 55 60  
 Ala Arg Phe Trp Arg Lys Tyr Gly Tyr Asp Tyr Asp Ile Val Lys Lys  
 65 70 75 80  
 Pro Gly Thr Asn Glu Asp Arg Ala Pro Glu Glu Val Lys Met Lys Ile  
 85 90 95  
 Asn Gln Leu Tyr Gly Glu Pro Ile Ser Arg Leu His Glu Gly Gln Pro  
 100 105 110  
 Val Glu Tyr Asp Tyr Val Ile Asn Val Ile Tyr Asp Arg Trp Val Val  
 115 120 125  
 Asn Gln Phe Asn Thr Tyr Ser Thr Thr Tyr Arg Cys  
 130 135 140

<210> 40015  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 40015  
 Cys Glu Val Ala Glu Gly Thr Gly Thr Gly Ser Trp Ala Ala Tyr  
 1 5 10 15  
 Ala Lys Ala Lys Lys Phe Val Ala Gln Leu Thr Pro Glu Glu Lys Val  
 20 25 30  
 Asn Leu Thr Ala Gly Thr Asp Ala Asn Asn Gly Cys Ser Gly Asn Ile  
 35 40 45  
 Ala Ala Ile Pro Arg Leu Asn Phe Pro Gly Leu Cys Val Ser Asp Ala  
 50 55 60  
 Gly Asn Gly Leu Val Arg Ala His Met Gln Gln Leu Leu Glu Ile Thr  
 65 70 75 80  
 Asn Ser Cys Arg Gly Glu Pro Thr Thr  
 85

<210> 40016  
 <211> 174  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40016

Ala Leu Val Ala Val Ser Val Thr Arg Arg Lys Lys Phe His Gln Cys  
 1 5 10 15  
 Gly His Thr Ser Cys Gly Phe Phe Leu Phe Leu Phe Leu Val Leu Phe  
 20 25 30  
 Thr Arg Ser Arg Asp Cys Phe Phe Leu Tyr Leu Leu Phe Leu Phe Trp  
 35 40 45  
 Pro Val Leu Leu Phe Met Leu Leu Leu Leu Leu Leu Leu Leu Phe Tyr  
 50 55 60  
 Leu Met Ile Trp Leu Ala Ile Asn Phe Leu Phe Pro Leu Trp Phe Arg  
 65 70 75 80  
 Ser Leu Phe Gly Gly Leu Leu Ala Leu Cys Thr Arg Gly Phe Leu Trp  
 85 90 95  
 Leu Asp Ile Ser Gly Ala Ser Glu Gly Leu Leu Arg Leu Leu Ser Gly  
 100 105 110  
 Leu Ser Arg Arg Cys Ser Asn Gly His Cys Glu Arg Ile Val Phe Ala  
 115 120 125  
 Arg Glu Gly Glu Leu Gly Gln Leu Arg Gly Ser Glu Ile Ser Arg Ser  
 130 135 140  
 Met Arg Gln Ile Cys Glu Arg Leu Lys Arg Thr Thr Ser Arg Ala Lys  
 145 150 155 160  
 Val Arg Cys Glu Tyr Asp Ile Ser Arg Pro Ser Arg Ser Asp  
 165 170

&lt;210&gt; 40017

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40017

Val Glu Trp Ser Phe Ala Pro Gln Phe Met Leu Ala Thr Glu Leu Leu  
 1 5 10 15  
 Ser Thr Thr Gly Arg Asn Arg Gln Leu Ser Gln Gly Leu Asn Tyr Val  
 20 25 30  
 Thr Ile Ile Leu Leu Arg Val Leu Ile Asn Pro Tyr Thr Leu Ile Ser  
 35 40 45  
 Ala Trp Thr Ser Met Asp Cys Asp Leu Arg Ile Asn Val Asp Val Tyr  
 50 55 60  
 Met Leu Glu His Glu Lys Asp Thr Leu Tyr Pro Arg Pro Arg His Pro  
 65 70 75 80  
 Arg Val Gly Leu Ile Gln Asn Ala Arg Gln Arg Thr Lys Lys Ser Arg  
 85 90 95  
 Glu Ser

&lt;210&gt; 40018

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40018

Gln Ala Ala Gln Lys Ala Lys Glu Ala Phe Thr Ser Thr Arg Asp Ile  
 1 5 10 15  
 Lys Pro Lys Lys Thr Ala Gly Ala Lys Arg Lys Glu Thr Thr Glu Lys

17436

[illegible]

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<210> 40019
<211> 191
<212> PRT
<213> A.fumigatus
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<400>	> 40019																
Ile	Gln	Ile	Gln	Lys	Glu	Thr	Pro	Ile	Arg	Val	Arg	Leu	Ser	Pro	Ala		
1				5					10					15			
Thr	Ala	Val	Ser	Ser	Val	Ser	Val	Asn	Asp	His	Cys	Gly	Leu	His	Ile		
			20					25					30				
Met	Leu	Pro	Ala	Ser	Gly	Ser	Thr	Ala	Ala	Val	Pro	Ala	Ser	Ile	Thr		
		35					40					45					
Ser	Leu	Asn	His	Cys	Val	Val	Asp	Met	Ser	Ile	Pro	Thr	Ala	Asn	Gly		
	50					55					60						
Lys	Pro	Tyr	Ala	Ser	Leu	Thr	Val	Lys	Asp	Val	Asn	Glu	Ser	Leu	Leu		
65					70					75					80		
Ile	Cys	Gly	Gln	Ile	Asp	Gly	Pro	Ala	His	Ile	Thr	Gly	Val	Glu	Asn		
				85					90					95			
Ser	Val	Ile	Val	Val	Ser	Cys	Arg	Gln	Phe	Arg	Met	His	Asn	Cys	Ser		
			100					105					110				
Gly	Val	Asp	Val	Tyr	Leu	Ser	Ser	Ser	Ser	Asn	Pro	Ile	Ile	Glu	Asp		
		115					120					125					
Cys	Thr	Asn	Val	Arg	Phe	Gly	Arg	Ile	Pro	Arg	Ala	Tyr	Val	Ser	Asp		
	130					135					140						
Leu	Ser	Val	Arg	Asp	His	Ser	Asn	Thr	Tyr	Thr	His	Val	His	Arg	Leu		
145					150					155					160		
Trp	Thr	Thr	Ile	Val	Arg	Ile	Met	Lys	Thr	Ala	Gly	Ala	Lys	Leu	Arg		
				165						170					175		
Thr	Ser	Asn	Gly	Ser	Ser	Leu	Asn	Arg	Ala	Arg	Thr	Gly	Ala	Cys			
			180					185					190				

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<210> 40020
<211> 109
<212> PRT
<213> A.fumigatus
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&lt;400&gt; 40020

Leu Val Leu Ile Asn Asp Trp Cys Val Lys Phe Ser Thr Cys Phe Ala  
 1 5 10 15  
 Met Glu Thr Arg Arg Tyr Leu Phe Asn Ser Ile Cys His Ser Gln Leu  
 20 25 30  
 Thr Ser Ser Gln Phe Asp Glu Ser Phe Tyr Thr Thr Leu Val Lys Ser  
 35 40 45  
 Ala Cys Phe Ser Lys Val Thr Thr Ser Ser Gly His Gly Leu Gln His  
 50 55 60  
 Ala Asp Tyr Ala Ser Ser Ile Ala Gly Ile Glu Phe Ile Leu Gln Phe  
 65 70 75 80  
 Ser Leu Thr Gly Tyr Lys Arg Met Ile Gln Leu Arg Val Asn Lys Trp  
 85 90 95  
 Leu Phe Leu His Ser Tyr Tyr Ser Leu Ile Asp Asp  
 100 105

&lt;210&gt; 40021

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40021

Thr Thr Leu Trp Glu Lys Met Ala Pro Thr Ser Trp Arg Lys Ala Ser  
 1 5 10 15  
 Glu Val Leu Tyr Asn Pro Ile Lys Ser Thr Val Leu Asn Asp Asp Gln  
 20 25 30  
 Gln Ala Asn Trp Ser Gln Val Ser Ser Ser Val Glu Ile Asp Leu Ser  
 35 40 45  
 Asp Phe Ile Trp Ser Thr Phe Ala Gly Gln Arg Ile Gly Glu Ile Gln  
 50 55 60  
 Thr Arg Ser Phe Glu Asp Pro Pro Ala Ser Cys Gly  
 65 70 75

&lt;210&gt; 40022

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40022

Lys His Gly Ser Ala Ser Val Phe Leu Lys Arg Ala Ile Cys Leu Val  
 1 5 10 15  
 Ala Ala Lys Asp Gln Ala Ala Ser Ser Phe Leu Arg Thr Ser Ile Asn  
 20 25 30  
 Gly Pro Leu Ser Thr Pro Arg Gln Phe Gly Ser Glu Ile Tyr Thr Gly  
 35 40 45  
 Leu Val Val Ala Met Asp Ala Gly Leu Glu Ser Asp Arg Ile Thr Arg  
 50 55 60  
 Ile Arg Thr Leu Ala Leu Met Ser Leu His Cys Glu Gly His Glu Gly  
 65 70 75 80  
 Ala Glu Ala Ala Ser Met His Leu Cys Arg Ala Ile His Glu Ala Gln  
 85 90 95  
 Thr Ala Gly Leu His Leu Asn Arg Pro Asp Arg Val Gln Gly Asp Ser  
 100 105 110  
 Leu Ser Arg Leu Phe Trp Cys Leu Trp Thr Leu Asp Lys Met His Ala  
 115 120 125  
 Ser Ile Gly Gly Arg Pro Val Leu Leu Ala Asp Arg Asp Ile Gly Leu

## 17438

130		135		140
Arg Lys Pro Ile Val	Asn Thr Ser His	Pro Lys Thr Thr	Phe Asp Val	
145	150	155	160	
Trp Phe Ala Ile Ser	Asp Leu Leu Ser	Ser Val Ile Ser	Phe Tyr Arg	
	165	170	175	
Pro Ser Ala Asp Pro	Thr Val Gly Trp	Glu Thr Ser Phe	Pro Ser Phe	
	180	185	190	
Glu Glu Leu Met Gly	Asp Asn Phe Gly	Glu Glu Leu Asp	Phe Thr Met	
	195	200	205	
Leu Ser Met Leu His	Asp Leu Ser Arg	Arg Val Pro Leu	Pro Thr Val	
	210	215	220	
Tyr Tyr				
225				

<210> 40023  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 40023

Ala Leu Leu Cys Val	Lys Ser Thr Ser	His Gln Glu Asn	Ser Ala Ser
1	5	10	15
Arg Trp Thr Lys	Asn Gly Glu Pro	Asn Leu Gln Ser	Thr Lys Ala Val
	20	25	30
Asp Phe Ser Ser	Ser Leu Phe Met	Ser Ser Leu Ala	Arg Gly Ala Pro
	35	40	45
Pro Phe Ala Leu	Pro Leu Tyr Gly	Gln Gly Asp Thr	Lys Arg Ser Ser
	50	55	60
Leu Val Leu Gln	Arg Lys Arg Glu	Ile Asp Cys Pro	Ala Glu Phe Asn
	65	70	75
Pro Asn Thr Lys	Phe Thr Thr		
	85		

<210> 40024  
 <211> 351  
 <212> PRT  
 <213> A.fumigatus

<400> 40024

Phe Lys Met Ala	Arg Ala Ala Ile	Ile Pro Lys Ser	Ser Pro Lys Arg
1	5	10	15
Ala Thr Arg Gly	Arg Pro Pro Ala	Asn Thr Val Lys	Ala Ala Ser Leu
	20	25	30
Thr Thr Ala Ser	Lys Pro Val Val	Arg Thr Ala Arg	Thr Lys Ser Gly
	35	40	45
Thr Ser Ala Thr	Glu Thr Arg Lys	Lys Thr Thr Arg	Thr Ala Thr Ala
	50	55	60
Thr Ser Ala Arg	Thr Arg Gln Ala	Asp Ser Asp Thr	Asp Glu Ala Thr
	65	70	75
Asp Asp Glu Leu	Gly Leu Ile Asp	Thr Lys Glu Lys	Ala Lys Pro Gly
	85	90	95
Arg Pro Lys Gly	Lys Ser Ser Thr	Ser Ser Thr Ser	Ala Thr Gly Arg
	100	105	110
Gly Arg Arg Pro	Ala Thr Pro Ala	Ala Ala Glu Cys	Glu Ser Asp Asn
	115	120	125
Asp Glu Asp Glu	Leu Ala Gln Thr	Asp Ala Pro Lys	Lys Arg Pro Gly



## 17439

130 135 140  
 Arg Pro Arg Thr Lys Pro Leu Pro Lys Glu Asp Glu Val Lys Pro Glu  
 145 150 155 160  
 Ala Ala Pro Arg Pro Arg Gly Arg Pro Arg Ala Thr Ala Ala Thr Lys  
 165 170 175  
 Pro Thr Val Thr Thr Gly Ala Asp Lys Asp Ser Thr Lys Lys Lys Thr  
 180 185 190  
 Arg Ala Gln Thr Gly Ala Val Glu Ala Ser Ser Ser Gly Pro Lys His  
 195 200 205  
 Ile Leu Ile Ala Thr Asn Ser Thr Thr Met Arg Ser Asn Leu Leu Arg  
 210 215 220  
 Gly Pro Ala Lys Lys Lys Thr Val Thr Phe Lys Asp Val Ser Asp Ser  
 225 230 235 240  
 Glu Glu Glu Asp Ala Asn Glu Pro Ala Pro Thr Thr Thr Gly Arg Arg  
 245 250 255  
 Arg Ala Ala Thr Thr Ala Ala Gly Lys Val Gly Leu Gly Ala Lys Pro  
 260 265 270  
 Val Arg Lys Pro Ala Thr Thr Thr Thr Arg Gly Arg Lys Pro Ala Gly  
 275 280 285  
 Ser Lys Ile Glu Ala Gly Lys Pro Leu Ser Pro Lys Lys Ala Thr Gln  
 290 295 300  
 Val Ala Lys Ser Ile Ser Ser Tyr Ile Ser Ser Asp Gly Glu Asp Asp  
 305 310 315 320  
 Glu Leu Ser Ser Val Gln Asp Gln Met Lys Leu Ile Ile Asn Ser Pro  
 325 330 335  
 Leu Lys Lys Gly Ser Gly Ser Tyr Trp Val Glu Leu Ser Cys Ala  
 340 345 350

&lt;210&gt; 40025

&lt;211&gt; 968

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40025

Asn Arg Leu His Thr Lys Lys Thr Gln Pro Val Gly Gly Arg Lys Met  
 1 5 10 15  
 Val Ser Pro Thr Phe Asn Pro Arg Arg Gln Trp Thr Ser Val Ala Arg  
 20 25 30  
 Cys Leu Cys Pro Val Leu Pro Gly Gly Pro Pro Pro Ser Pro Phe His  
 35 40 45  
 Tyr Thr Val Lys Glu Thr Pro Arg Gly Ala Arg Leu Ser Phe Lys Gly  
 50 55 60  
 Ser Ala Lys Ser Ile Ala Gln Pro Ser Leu Thr Pro Thr Gln Asn Ser  
 65 70 75 80  
 Pro Leu Lys Ala Ala Pro Lys Lys Ala Asn Leu Glu Thr Pro Arg His  
 85 90 95  
 Gly Gly Leu Gly Leu Cys Asp Glu Ile Met Pro Leu Ser Gln Pro Asn  
 100 105 110  
 Phe Thr Pro Gly His Asn Ser Pro Leu Lys Ser Ser Pro Lys Lys Gly  
 115 120 125  
 Ile Phe Gly Val Ser Phe Ala Gln Ala Pro Leu Gln Glu Ser Ser Ser  
 130 135 140  
 Thr Pro Phe Lys Ser Arg Ser Leu Leu Leu Gln Ser Pro Ala Lys Arg  
 145 150 155 160  
 Ile Ala Ser Pro Phe Lys Asn Ser Leu Phe Ser Ser Val Arg Ser Met  
 165 170 175

Pro Glu Leu Arg Arg Asn Glu Ser Gly Met Gly Leu Val Ser Gly Ala  
 180 185 190  
 Asp Gln Ala Asn Asp Ala Glu His Val Glu Ser Ser Phe Arg Thr Pro  
 195 200 205  
 Glu Pro Gln Gly Pro Met Asp Val Asp Tyr Asp Asn Glu Gly Leu Glu  
 210 215 220  
 Gln Asp Glu Val Pro Gln Gln Glu Ser Ser Asp Glu His Pro Val Val  
 225 230 235 240  
 Asp Ser Arg Ala Gln Phe Ala Asp Ser His Asp Val Asn Asp Glu Gln  
 245 250 255  
 Gln Thr Pro Ser Met Thr Ala Glu Asp Val Glu Glu Ala Pro Glu Gln  
 260 265 270  
 Leu Ser Asp His Asp Asp Val Ala Asp Asn Val Glu Asp Leu Gln Ala  
 275 280 285  
 Cys Glu Leu Thr Asn Glu Gly Pro Glu Val Glu Phe Glu Glu Ser Gly  
 290 295 300  
 Asp Gln Thr Leu Ala Gly Lys Glu Pro Arg Ala Leu Asp Asp Asn Asp  
 305 310 315 320  
 Ser Glu Glu Gly Ser Lys Ile Asp Glu Ser Asp Ile His Leu Ala Asp  
 325 330 335  
 Glu Ser Ile Val Gly His Thr Ala Tyr Val Ser Asn Met Gly Thr His  
 340 345 350  
 Thr Glu Gln Asn Asp His Thr Pro Asp Tyr Asp Asp Ala Glu Asp Pro  
 355 360 365  
 Asp Ala Thr Glu Ser Glu Pro Glu Glu Glu His Met Met Gln Asp Val  
 370 375 380  
 Tyr Gly Ser Glu Phe Gln Ala Val Thr Glu Glu Ser Ser Leu Pro Phe  
 385 390 395 400  
 Gln Arg His Ser Ile Glu Gly Leu Glu Asp Val Phe Thr Asp Ala Pro  
 405 410 415  
 Val Ala Tyr Glu Asp Val Asp Gly Glu Ser Asp Thr Asp Ser Val Pro  
 420 425 430  
 Glu Ala Thr Gly Ser Ala Ala Val Gln Val Asp Phe Gln Pro Gly Glu  
 435 440 445  
 Leu Asn Asn Glu Tyr Val Asp Phe His Asp Ser Glu Tyr Phe Asp Asp  
 450 455 460  
 Asp Glu Ala Thr Leu Val Ala Ser Asp Thr Thr Asp His Tyr Ile Tyr  
 465 470 475 480  
 Glu Val Gln Pro Asp Glu Glu Pro Asn Ala Gln Leu Asn Thr Gln Leu  
 485 490 495  
 Gly Pro Gln Gln Glu Leu Glu Arg Met Asn Ser His Leu His Asp Gln  
 500 505 510  
 Asp Gly Ser Leu Ala Pro Gln Ala Ser Thr Thr Gln Asp Gly Ile Phe  
 515 520 525  
 Tyr His Gly Asp Leu Lys Tyr Arg Glu Glu Val Asp Met Ser Glu Ser  
 530 535 540  
 Glu Leu Thr Thr Asp Asn Gln Ser His Ser Ile Glu His Asn Asp Leu  
 545 550 555 560  
 Pro Asp Ser Pro Thr Ser Ala Ala Val Cys Asn Asp Glu Pro Glu Ser  
 565 570 575  
 Gly Phe Leu Met Gln Arg Asn Arg Gly Pro Arg Phe Thr Leu Leu Ala  
 580 585 590  
 Glu Gln Leu Ser Gln Trp Lys Ala Ser Ser Pro Glu Lys Ser Glu Pro  
 595 600 605  
 Arg Arg Thr Arg Arg Gly Val Phe Ser Ile Gly Gly Leu Arg Arg Ser  
 610 615 620

17441

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Ser Arg Arg Gly Thr Arg Leu Pro Gln Glu Val Ala Tyr Pro Asp Ile
625                               630                               635                               640
Glu Asp Cys Leu Gly Ser Pro Gln Glu Lys Ala Ser Asp Arg Pro Arg
                               645                               650                               655
Asp Ser Glu Ile Tyr Ala Gly Val Pro Glu Ile Tyr Glu Asp Gln Asp
                               660                               665                               670
Asp Gln Asn Leu Glu Glu Ser Arg Ser Ser Ala Val Ala Thr Ser Ser
                               675                               680                               685
Pro Gln Arg Glu Pro Met Thr Glu Leu Phe Ser Glu Pro Gln Pro Glu
690                               695                               700
Phe Ser Glu Pro Thr Ala Tyr Lys Lys Val Leu Asn Arg Gln Pro Ala
705                               710                               715                               720
His Ala Ser Asp Thr Thr Lys Ser Pro Ile Ala Ser Pro Ser Ser Pro
                               725                               730                               735
Lys Glu Gly Asp Ser Asp Glu Asn Lys Glu Asn Glu Arg Val Glu Pro
                               740                               745                               750
Pro Ala Pro Ala Thr Pro Val Lys Gln Lys Ser Ile Pro Leu Glu Thr
                               755                               760                               765
Phe His Thr Val Ser Lys Val Pro Leu Lys Pro Glu Gly Gln Val Ser
770                               775                               780
Pro Leu Lys Leu Ser Arg Lys Arg Gly Arg Ser Leu Ser Ile Ser Ser
785                               790                               795                               800
Pro Ile Arg Ser Ser Pro Arg Leu Arg Lys Arg Val Leu Ala Ser Pro
                               805                               810                               815
Gln Gln Ser Thr Ala Gln Ala Ser Pro Arg Lys Met Pro Lys Leu Gln
                               820                               825                               830
His Asn Glu Thr Pro Arg Ser Gln Lys Cys Glu Ser Arg Arg Thr Ser
                               835                               840                               845
Val Ala Ser Gln Ser Ser Arg Arg Ser Met Ala Pro Ser Ala Ser Pro
850                               855                               860
Gly Pro Ser Lys Thr Pro Ala Cys Glu Asn Ile Leu Gly Gly Ala Val
865                               870                               875                               880
Val Tyr Val Asp Val His Thr Thr Glu Gly Glu Asp Ala Ser Gly Ile
                               885                               890                               895
Phe Ile Glu Leu Leu Gln Gln Met Gly Ala Arg Cys Val Lys Ser Trp
900                               905                               910
Gly Trp Asn Pro Arg Ala Ser Met Ser Ser Gly Asp Met Thr Asn Arg
915                               920                               925
Arg Asp Ser Lys Val Gly Ile Thr His Val Val Phe Lys Asp Gly Gly
930                               935                               940
Val Arg Thr Leu Glu Lys Val Arg Gln Ala Ala Gly Leu Val Lys Cys
945                               950                               955                               960
Val Gly Val Gly Trp Val Leu Glu
                               965

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<210> 40026

<211> 260

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (254)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40026

## 17442

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Ser Cys Ser Leu Leu His Arg Lys Pro Ser Val Pro Leu Ser Arg Phe
1          5          10          15
Thr Thr Leu Trp Leu Ala Phe Ser Leu Met His Ala Ala Pro Thr Ser
          20          25          30
His Pro Arg His His Asp Asp Asp His Leu His Leu Asn His Val Asp
          35          40          45
Ala Ser Pro His Gly Leu Thr Cys Leu Asp Lys Asp Arg Asp Gly Asp
          50          55          60
Ile Pro Asn Ser Thr Asn Asn Asp Gly Ser His Pro Pro Thr Ser Pro
65          70          75          80
Asp Ala His Val Phe Asp Ile Thr Ser His Gly Arg Thr Ser Ser Asp
          85          90          95
Thr Ser Phe Asn Asp Ser Asp Gly Asp Asp Ala Glu Asp Ala Asp
          100          105          110
Leu Val Ile Asp Thr Pro Ser Glu Lys Pro Val Thr Trp Ala Ser Leu
          115          120          125
Pro Lys Lys Gly Gln Leu Ala Ile Leu Thr Phe Ala Arg Leu Ser Glu
130          135          140
Pro Leu Thr Gln Thr Ser Leu Gln Ala Tyr Leu Phe Tyr Gln Leu Lys
145          150          155          160
Ser Phe Asp Pro Ser Leu Pro Asp Ser Thr Ile Ser Thr Gln Ala Gly
          165          170          175
Ile Met Gln Gly Ser Phe Thr Ala Ala Gln Phe Leu Thr Ala Val Trp
          180          185          190
Trp Gly Arg Leu Ala Asp Ala Glu Trp Met Gly Arg Lys Arg Val Leu
          195          200          205
Leu Ile Gly Leu Leu Gly Thr Cys Ile Ser Cys Leu Gly Phe Gly Phe
210          215          220
Ser Ser Ser Phe Ala Ala Ala Val Val Phe Arg Val Leu Gly Gly Ile
225          230          235          240
Leu Asn Ser Asn Val Gly Val Met Arg Thr Met Ile Ser Xaa Ile Ile
          245          250          255
Glu Arg Arg Lys
          260

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&lt;210&gt; 40027

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (108)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40027

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Val Leu Thr Gln Tyr Pro Trp Asn Ser Gln Trp Leu Thr Thr Leu Lys
1          5          10          15
His Arg Asp Leu His Leu Gly Asn Val Cys Ile Lys Thr Thr Arg Ser
          20          25          30
Asp Gly Ser Met Thr Pro Pro Ser Asp Ile Glu Ile Met Arg Gln Thr
          35          40          45
Trp Thr Ser Gly Phe Gly Leu Ser Ser Leu Glu Thr Thr Ile Ile Asp
          50          55          60
Tyr Ser Leu Ser Arg Ala Glu Leu Arg Ala Ser Glu Asp Ser His Gln
65          70          75          80

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17443

Ile Val Asp Ile Ala Ser Ser Asp Leu Asp Lys Lys Gln Ile Phe Asp  
85 90 95  
Ala Ile Gly Arg Asp Glu Asp Glu Ile Leu Leu Xaa Asp Thr Asp Arg  
100 105 110  
Gln

<210> 40028  
<211> 158  
<212> PRT  
<213> A.fumigatus

<400> 40028  
Tyr Gly Asn His Asp Ile Asn Leu Ile Ser Ser Met Arg Ala Glu Val  
1 5 10 15  
Tyr Thr Gly Asn Pro Val Asp Thr Lys Arg Thr Pro Asp Ile Pro Gly  
20 25 30  
Ile Trp Glu Tyr Ala Pro Arg Thr Asn Leu Ile Trp Leu Leu Phe  
35 40 45  
Ile Leu Lys Asn Leu Leu Lys Asn Arg Lys Ser Glu Pro Ser Thr Ser  
50 55 60  
Ala Ala Thr Arg Pro Pro Leu Ala Pro Cys Ser Pro Asn Lys Asn Ile  
65 70 75 80  
Glu Ser Lys Gln Ala Lys Asn Leu Gly Glu Lys Ala Lys Pro Pro Leu  
85 90 95  
Leu Gly Gln Thr Gln Val Thr Glu Ala Asp Lys Arg Val Ala Asp Leu  
100 105 110  
Lys Gln Ser Leu Glu Asp Arg Leu Lys Ser Val Leu Asp Leu Leu Asp  
115 120 125  
Leu Glu His Gly His Lys Asp Met Cys Cys Ala Ala Asp Leu Val Ala  
130 135 140  
Tyr Ala Ile Asp Ser Gln Trp Leu Ser Glu Glu Asp Phe Phe  
145 150 155

<210> 40029  
<211> 148  
<212> PRT  
<213> A.fumigatus

<400> 40029  
Gly Val Ala Thr Glu Lys Tyr Arg Thr Lys Glu Met Ser Arg Asp Ala  
1 5 10 15  
His Ala Cys Pro Cys Ala Gln Gly Arg Met Ala Ser Asp Leu Leu Gly  
20 25 30  
Gln Cys Asp Lys Pro Ser Ile Lys Trp Ser Arg Ser Val Thr Ile Ile  
35 40 45  
Gly Gln Ala Tyr Thr Val Tyr Met Leu Leu Pro Arg Arg Gly His Ser  
50 55 60  
Tyr Val Gly Asp Lys Glu Ala His Glu Thr Ser Tyr Ser Gln Ala Thr  
65 70 75 80  
His Lys Asp His Ala His Glu Pro Thr Ser Ser Leu Ser Phe Ile His  
85 90 95  
Arg Asn Pro Val Thr Ser Ser His His Thr Ala Ala Ala Lys Ile Ser  
100 105 110  
Val Gly Asn Pro Glu Gln Lys Leu His Asn Glu Glu Ile Lys Glu Ile  
115 120 125

17444

Thr Leu Tyr Asn Gly Pro Ser Pro Ser Asn Val Thr Lys Gln Val Lys  
 130 135 140  
 Trp Asp Glu Pro  
 145

<210> 40030  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 40030  
 His Tyr Ser Leu Ser Lys Lys Lys Ser Ile Asp Thr Asn Lys Gly Asp  
 1 5 10 15  
 Ile Leu Thr Asp Gln Asp Ala Lys Pro Ala Arg Arg Gly Val Asn Val  
 20 25 30  
 Ser Lys Gln Lys Arg Asn Lys Arg Thr Cys Lys Gly Val Tyr Val Ser  
 35 40 45  
 Ala Ser Gly Pro Asp Asn Pro Pro Lys Ala Leu Ile Asn Phe Ser Arg  
 50 55 60  
 Leu  
 65

<210> 40031  
 <211> 192  
 <212> PRT  
 <213> A.fumigatus

<400> 40031  
 Gly Asp Val Gly Ile Leu Gly Tyr Leu Cys Pro Val Ile Thr Leu Gln  
 1 5 10 15  
 Val Pro Arg Ser Phe Leu Arg His Arg Val Gly Arg Ser Val Gly Glu  
 20 25 30  
 Leu Val His His Leu Thr Ala Ala His Leu Pro Leu His Gln Phe Gly  
 35 40 45  
 Glu Gly Ala Ile Arg Ala Ser Thr Glu Leu Leu Ile Thr Ala Leu Phe  
 50 55 60  
 Gly Tyr Ser Ser Val Gly Thr Lys Asp Asn Asn Arg Ile Gly Ser Leu  
 65 70 75 80  
 Asn Ser Arg Glu Ser Met Ser Asp Ala Asn Gly Ser Ile Val Thr Thr  
 85 90 95  
 Lys Glu Arg Gly Lys Ser Thr Val His Lys Ser Phe Gly Leu Arg Ile  
 100 105 110  
 Glu Ser Arg Ser Cys Phe Ile Glu Tyr Glu Asn Ile Arg Ile Leu Asp  
 115 120 125  
 Gln Ser Pro Gly Asn Arg Asn Ala Leu Leu Leu Ala Thr Arg Lys Leu  
 130 135 140  
 Ser Ala Pro Gly Ser Asp Leu Gly Val Lys Thr Ile Arg Leu Asp Asn  
 145 150 155 160  
 Thr Ile Ser Ser Tyr Leu Asn Gln Asn Gly Arg Arg Pro Thr Tyr Lys  
 165 170 175  
 Val Thr Tyr Glu Leu Ala Val Arg Leu Ala Arg Ser Cys Asn Asp Leu  
 180 185 190

<210> 40032  
 <211> 196  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40032

Gln Leu Gly Glu Leu Thr Ser Phe Leu Met Tyr Thr Ala Tyr Ala Gly  
 1 5 10 15  
 Ser Ser Met Phe Gly Leu Ser Ser Phe Tyr Ser Glu Leu Met Lys Gly  
 20 25 30  
 Val Gly Ala Ala Ser Arg Leu Phe Glu Leu Gln Asp Arg Gln Pro Thr  
 35 40 45  
 Ile Ser Pro Thr Lys Gly Glu Lys Val Ala Ser Ala Arg Gly Pro Ile  
 50 55 60  
 Arg Phe Glu Asn Val Thr Phe Ser Tyr Pro Thr Arg Pro Ala Val Pro  
 65 70 75 80  
 Ile Phe Arg Asp Leu Asn Phe Glu Ile Pro Gln Gly Thr Asn Val Ala  
 85 90 95  
 Ile Val Gly Pro Ser Gly Gly Gly Lys Ser Thr Ile Ala Ser Ile Leu  
 100 105 110  
 Leu Arg Phe Tyr Ser Pro Thr Glu Gly Arg Val Leu Ile Gly Gly Lys  
 115 120 125  
 Asp Ile Thr His Met Asn Ala Lys Ser Leu Arg Arg Lys Ile Gly Ile  
 130 135 140  
 Val Ser Gln Glu Pro Val Leu Phe Ser Gly Thr Ile Ala Glu Asn Ile  
 145 150 155 160  
 Ala Tyr Gly Lys Pro Gln Ala Lys Arg Ser Glu Ile Val Ala Ala Ala  
 165 170 175  
 Arg Lys Ala Asn Cys Gln Phe Ile Ser Asp Phe Val Ser Trp Ser Thr  
 180 185 190  
 Ser Ile Leu Val  
 195

&lt;210&gt; 40033

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40033

Ala Asp Cys Val Val Gln Pro Asp Gly Leu Asp Thr Gln Val Gly Pro  
 1 5 10 15  
 Arg Gly Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile Ala Ile Ala  
 20 25 30  
 Arg Ala Leu Ile Lys Asp Pro Asp Ile Leu Ile Leu Asp Glu Ala Thr  
 35 40 45  
 Ser Ala Leu Asp Ala Glu Ser Glu Thr Leu Val Asn Ser Ala Leu Thr  
 50 55 60  
 Ala Leu Leu Arg Gly Asn Asn Thr Thr Ile Ser Ile Ala His Arg Leu  
 65 70 75 80  
 Ser Thr Ile Lys Arg Ser Asp Thr Ile Ile Val Leu Gly Pro Asp Gly  
 85 90 95  
 Arg Val Ala Glu Gln Gly Ser Tyr Glu Glu Leu Ser Ala Arg Pro Asp  
 100 105 110  
 Gly Ala Phe Thr Lys Leu Met Glu Trp Gln Met Ser Gly Gly Glu Val  
 115 120 125  
 Met Asp Gln Leu Ala Asn Thr Pro Ala Asn Pro Val Ala Gln Glu Thr  
 130 135 140  
 Ser Trp Asp Leu Gln Ser Asp Asp Gly Thr Glu Ile Ser Glu Asp Thr  
 145 150 155 160

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Asn Ile Pro Ser Glu Pro Arg Lys Ile Asp  
165 170

<210> 40034  
<211> 393  
<212> PRT  
<213> A.fumigatus

<400> 40034  
Leu Cys Arg Thr Trp Val Arg Asn Met Phe Leu Ala Ala Ala Pro Tyr  
1 5 10 15  
Phe Tyr Leu Arg Phe Arg Ser Asp Lys Trp Thr Ala Thr His Phe Gln  
20 25 30  
Pro Ser Ile Leu Thr Val Ser Thr Ile Thr Asn Leu Gly Ser Ala Phe  
35 40 45  
Ile Leu Ala Lys Leu Gln Lys Gly Pro Ser Tyr Ser Arg Arg Val Thr  
50 55 60  
Leu Ser Leu Leu Ile Asn Ile Val Ile Phe Ser Leu Leu Ala Leu Ser  
65 70 75 80  
Thr Val Phe Val Lys Asp Val Asp Val Lys Thr Tyr Phe Ser Phe Leu  
85 90 95  
Met Phe Met Val Phe Gly Ala Ser Leu Ala Thr Gly Ile Asn Gln Asn  
100 105 110  
Gly Val Phe Ala Tyr Val Ser Gly Phe Gly Arg Glu Glu Tyr Thr Gln  
115 120 125  
Ala Ile Met Ala Gly Gln Gly Val Ala Gly Val Leu Pro Cys Val Val  
130 135 140  
Gln Ile Ile Ser Ala Leu Ala Val Pro Lys Arg Glu Gly Gln Asn Met  
145 150 155 160  
Pro Gln Ala Ser Ser Lys Ser Ala Phe Met Tyr Phe Thr Thr Ala Thr  
165 170 175  
Ala Ile Ala Ala Ile Ser Leu Val Ala Phe Leu Ser Leu Val Arg Arg  
180 185 190  
Arg Ser Val Leu Ser Leu Gln Leu Pro Glu Glu Gln Leu Asp Ser Ile  
195 200 205  
Ser Ser Gly Tyr Ala His Lys Thr Val Ser Leu Trp Val Leu Phe Lys  
210 215 220  
Lys Leu Arg Tyr Leu Ala Ser Ala Leu Phe Leu Cys Phe Ala Ile Thr  
225 230 235 240  
Met Val Tyr Ala Val Phe Thr Ala Glu Ile Glu Ser Val His Gln Asp  
245 250 255  
Pro Asn His Ser Arg Leu Phe Ser Arg Glu Val Phe Ile Pro Val Ala  
260 265 270  
Phe Leu Phe Trp Asn Ala Gly Asp Leu Ile Gly Arg Met Ser Val Ile  
275 280 285  
Ile Pro Arg Leu Ser Leu Ala His Arg Pro Trp Val Leu Phe Val Ile  
290 295 300  
Ser Val Thr Arg Leu Gly Phe Ile Pro Leu Tyr Leu Leu Cys Asn Ile  
305 310 315 320  
Gly Gly Arg Gly Ala Ile Val Gln Ser Asp Phe Phe Tyr Leu Phe Val  
325 330 335  
Val Gln Leu Leu Phe Gly Val Ser Asn Gly Tyr Leu Gly Ser Ser Cys  
340 345 350  
Met Met Gly Ala Ser His Trp Val Ser Val Asp Glu Arg Glu Ala Ala  
355 360 365  
Gly Gly Phe Met Ser Met Val Leu Val Gly Gly Leu Ala Val Gly Ser



17447

370 375 380  
 Leu Met Ser Phe Leu Val Ala Asn Ile  
 385 390

<210> 40035  
 <211> 242  
 <212> PRT  
 <213> A.fumigatus

<400> 40035  
 Ala Gly Ala Phe Phe Trp Phe Val Glu Lys Gln Ser Gln Ile Ala Asn  
 1 5 10 15  
 Tyr Arg Arg Arg Thr Leu Thr Arg Arg Gln Gly Cys Val Tyr Leu Ile  
 20 25 30  
 Gly His Ser Ile Tyr Ala Ile Tyr Phe His Pro Leu Ser Arg Tyr Pro  
 35 40 45  
 Gly Pro Lys Ile Ala Ala Ile Ser Pro Ile Ala Leu Leu Val Trp Glu  
 50 55 60  
 Ile Arg Gly Lys Val His Ser Lys Val Lys His Leu His Asp Arg Tyr  
 65 70 75 80  
 Gly Asp Val Val Arg Ile Gly Pro Asn Ala Leu Val Tyr Arg Val Pro  
 85 90 95  
 Arg Ala Trp Lys Glu Ile Tyr Gly Tyr Arg Thr Lys Lys Gly Gln Arg  
 100 105 110  
 Thr Phe Gln Lys Asp Pro Ser Leu Tyr Val Pro Thr Pro Asn Gly Val  
 115 120 125  
 His Ala Ile Ile Thr Ala Ala Glu Ser Asp His Ile Arg Met Arg Arg  
 130 135 140  
 Leu Ile Ala His Ala Phe Ser Asp Arg Ala Leu Arg Glu Gln Glu Ser  
 145 150 155 160  
 Leu Leu His Leu Tyr Ala Asp Leu Leu Val Gln Lys Leu His Glu Asn  
 165 170 175  
 Leu Asn His Ser His Ser Glu Val Val Asp Ile Ala Arg Trp Tyr Asn  
 180 185 190  
 Phe Thr Thr Phe Asp Leu Ile Gly Asp Leu Ala Phe Gly Glu Pro Phe  
 195 200 205  
 Gln Cys Leu Lys Asp Ser Lys Tyr His Trp Trp Val Ser Ile Met Leu  
 210 215 220  
 Asp Ala Val Lys Leu Ser Val Tyr Leu Lys Val Leu Trp Phe Phe Pro  
 225 230 235 240  
 Ile Pro

<210> 40036  
 <211> 163  
 <212> PRT  
 <213> A.fumigatus  
  
 <220>  
 <221> UNSURE  
 <222> (83)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40036  
 Ala Pro Leu Thr Lys Leu Leu Val Pro Arg Tyr Leu His Gln Arg Arg  
 1 5 10 15

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Glu Ala Ser Phe Gln Leu Thr Val Glu Lys Val Ile Arg Arg Leu His  
 20 25 30  
 Arg Gln Thr Asn Arg Pro Asp Tyr Leu Ser Tyr Ile Ile Arg His Lys  
 35 40 45  
 Asp Asp Glu Asn Arg Met Ser Arg Gln Glu Ile Asp Gly Asn Ala Ala  
 50 55 60  
 Thr Phe Val Leu Ala Gly Ser Glu Thr Thr Ala Ala Leu Leu Ser Gly  
 65 70 75 80  
 Cys Thr Xaa Tyr Leu Leu Lys Asn Pro His Ile Tyr Arg Arg Leu Val  
 85 90 95  
 Thr Glu Ile Arg Ser Arg Phe Gln His Pro Ser Glu Ile Arg Leu Ser  
 100 105 110  
 Ser Ile Ala Thr Leu Ser Tyr Leu Asn Ala Val Leu Glu Glu Ser Leu  
 115 120 125  
 Arg Ile Tyr Pro Pro Ile Pro Ala Met Leu Pro Arg Leu Val Pro Glu  
 130 135 140  
 Glu Gly Ala Met Ile Asn Gly Glu Tyr Val Pro Ala Gly Val Ser Pro  
 145 150 155 160  
 Gly Leu Cys

<210> 40037  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 40037  
 Thr Ile His Glu Gln Ser Met Asp Asn Ser Gly Arg Phe Arg Val Ser  
 1 5 10 15  
 Leu His Lys Val Ile Ser Gly Thr Val Trp Arg Gln Trp Leu Gln Lys  
 20 25 30  
 Ala Tyr Asn Ser Ile Pro Lys Ala Ile Leu Leu Leu Val Tyr Ser Thr  
 35 40 45  
 Asp Glu Leu Leu Thr Thr Cys Val Thr Ser Pro Leu Thr Phe Ser Leu  
 50 55 60  
 Phe Val Arg Glu  
 65

<210> 40038  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 40038  
 Leu Glu Glu Gln Arg Ala Ser Leu Asn Pro Val Lys Pro Ala Ile Ser  
 1 5 10 15  
 Leu Met Gly Ile His Ala Val Ile Thr Glu Ser Arg Pro Gln Gly Met  
 20 25 30  
 His Pro Leu Gly Ala Pro Ile Val Ala Asn His Lys Asn Thr Ser Leu  
 35 40 45  
 Ala Ser Asp Thr Tyr Asn Arg Pro Gly Gly Cys Trp Ala His Arg  
 50 55 60

<210> 40039  
 <211> 74  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40039

Cys Gln Ile Pro Ala Pro Phe Ile Thr Arg Phe Ala Ser Gly Glu Glu  
 1 5 10 15  
 Thr Asp Leu Ala Asn Pro Leu Lys Asp Thr Val Ile Arg Pro Ser Ile  
 20 25 30  
 Glu Ala Pro Thr Glu Val Lys Ser Val Val Ser Thr Leu Ile Thr Pro  
 35 40 45  
 Leu Ser Arg Glu Gln Val Arg His Ser Gly Lys Arg Leu Leu Gln Tyr  
 50 55 60  
 Ile Arg Phe Pro Val Val Arg Leu Ser  
 65 70

&lt;210&gt; 40040

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40040

Pro Ala Cys Ala Ala Arg Cys Ser Gly Val Thr Pro Phe Asn Asn Cys  
 1 5 10 15  
 Ala Leu Ile Leu Ala Pro Ala Cys Ser Ser Asn Arg Thr Ile Ser Thr  
 20 25 30  
 Ala Pro Leu Ser Gln Ala Leu Cys Ser Gly Val Gln Pro Pro Ser Leu  
 35 40 45  
 Arg Ala Ser Met Ser Ala Pro Cys Leu Ser Ser Ser Cys Thr Ile Ser  
 50 55 60  
 Ser Leu Pro Cys Ala Ala Ala Ile Cys Ser Asp Val Leu Phe Leu Ser  
 65 70 75 80  
 Ser Thr Ala Phe Thr Ser Ala Ile Gly Pro Arg Arg Arg Val Ser Ser  
 85 90 95  
 Ser Ser Ala Thr Arg Ser Phe Pro Val Ala His Ala Gln Cys Ser Gly  
 100 105 110  
 Val Arg Pro Asn Ser Ser Arg Pro Ser Ala Pro Ser Ser Ala His Pro  
 115 120 125  
 Val Pro Ser Arg Ser Ser Ile Thr Ser Ser Pro Gln Ser His Cys Leu  
 130 135 140  
 Ser Ala Ala Arg Leu Cys Lys Thr Phe Leu Phe Arg Arg Ser Phe Ala  
 145 150 155 160  
 Leu Thr Ser Ala Pro Arg Asp Ile Asn Thr Cys Lys Thr Cys Gln  
 165 170 175

&lt;210&gt; 40041

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40041

Pro Ala Val Asp Glu Gln Gly Ala Val Gly Ala Leu Phe Asp Leu Pro  
 1 5 10 15  
 Gly Gly Ile Leu Val Leu Asp Leu Val Ala Leu Gly Gly Arg Arg Ser  
 20 25 30  
 Arg Gly Lys Asp Ile His Leu Leu Gln Arg Val Ser His Lys Phe Val  
 35 40 45  
 His Leu Ile Pro Arg His Pro His Ala His Ala His Ala Asp Leu Pro

17450

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      50              55              60
Phe Leu Leu Gly Arg Gln Arg Gln Thr Pro Leu Arg Ile His Leu Ile
65              70              75              80
Arg Arg Thr Cys Thr Trp Leu Pro Pro Pro Gln Pro Gly His Met Met
      85              90              95
Arg Arg Leu Asp Arg Asp Ala Leu Leu Leu His Arg Leu His Arg Ile
      100              105              110
Arg Arg Gln Pro Leu Ile Lys His Arg Gln His Arg Arg Arg Asn Ile
      115              120              125
Val Gln Arg Asp Pro Trp Asp Pro Arg Gln Ala Gly Ile Gln Leu His
      130              135              140
Glu Ile Ala Gly Asp Glu Ile Ala Gln Arg Arg Arg Gln Leu Arg Pro
145              150              155              160
Arg Arg Pro Gly Pro His Asn Arg Lys Val Gln Gln Pro Leu Pro His
      165              170              175
Leu Arg Arg Arg Arg Arg Gln His Arg Gln Leu Glu Ala Leu Ala His
      180              185              190
Pro Pro Pro Asp Pro Pro Arg Val Pro Asn Val Leu Glu Glu Glu Arg
      195              200              205
Val Leu Ala His Pro Gly Gly Ile Glu Arg Leu Gly Asp Gly Pro His
      210              215              220
Arg Asp Asp Glu Leu Val Val Gly Asn Arg Lys Arg Phe Ala Gly Phe
225              230              235              240
Pro Pro Ser Phe Gly His Arg Ala Gly Asp Thr Pro Arg Leu Val Arg
      245              250              255
Pro Arg Arg Leu Arg His Pro Ala Leu Asp Asp Arg Arg Leu Ala Glu
      260              265              270
Asp Gly Leu Pro Val Glu Val His Arg Ser Arg Arg Arg Leu Asp Glu
      275              280              285
Val His Pro Arg Pro Ala Ile Pro Asp Arg Leu Asp Asp Ile Arg Glu
      290              295              300
Ile Lys Arg Ala Pro Gly Cys Ile Arg Lys Gln Arg Arg Glu Asp Lys
305              310              315              320
Val Arg Pro Arg Gly Asp Asp Gln Arg Arg Glu Leu Ala Gly Gly Glu
      325              330              335
Pro Pro Arg Glu Thr Val Ala Ser Pro Pro Gly Ala Gln Asp Asp Asp
      340              345              350
Pro Leu Phe Ala Leu Val Ser Leu Leu Val Val Arg Glu Gly Arg Arg
      355              360              365
Val Phe Asp Leu Cys Cys
      370

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<210> 40042

<211> 460

<212> PRT

<213> A.fumigatus

<400> 40042

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Leu Leu Thr Thr Leu Arg Val Ala Leu Val Gly Arg Arg Pro Arg Leu
1              5              10              15
Gly Pro Phe Arg Cys Pro Phe Ala Leu Phe Ala Leu Arg Ala Ala Glu
      20              25              30
Pro Ile Val Lys Arg Ala Gly Ile Arg Pro Phe Lys Leu His Ala Leu
      35              40              45
Asp Leu Gly Leu Phe Gly Leu Gly Arg Val Val Val Pro Val Asp Asn
50              55              60

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## 17451

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Asp Cys Gly Gln Phe Arg Leu Ser Thr Leu Leu Asp Pro Leu Ile Leu
65              70              75              80
Ala Glu Arg Ala Cys Ser Arg Gly Ala Leu Thr Gln Arg Pro His Glu
85              90              95
Val Gly Val Arg Pro Leu Ser Ala Val Leu Val Ile Glu Arg Pro Phe
100            105            110
Gln Ser Leu Glu Ala Leu His Val Val Gly Ala Phe Phe Asp Lys Arg
115            120            125
Leu Gly Glu Gln Arg Phe His Pro Gly His Val Val Arg Gly Gln Met
130            135            140
Asp Pro Ala Lys Ile Arg Arg Leu Ala Val Gly Trp Asp Gly Ala Glu
145            150            155            160
Arg Leu Leu Ala Trp Ile Phe Arg Val Ala Pro Ile Gln Gln Val Lys
165            170            175
His Gly Arg Leu Leu Asp Pro Ile Leu Val Val Lys Val Ala Lys Val
180            185            190
Asn His Arg Cys Val Lys Gly Leu Ala Cys Ala Pro Arg Ile Arg Arg
195            200            205
Glu Arg Ile Asp Val Val Glu Arg Arg Gln Glu Gln His Asp Val Leu
210            215            220
Pro Leu Lys Leu Cys Arg Pro Glu Glu Arg Gly Ala Pro Lys Val Val
225            230            235            240
Pro Asn Thr Ala Phe Gln Val Arg Ser Phe Glu Gln Ala Leu Asp Asp
245            250            255
Leu Ala Val Thr Gly Leu Arg Gly Gln Met Gln Arg Arg Asp Pro Val
260            265            270
Gln Gln Leu Arg Val Asp Leu Gly Pro Ser Leu Gln Gln Gln Pro His
275            280            285
Asp Leu His Cys Ala Leu Val Thr Gly Ile Val Gln Arg Arg Pro Ala
290            295            300
Pro Ile Ala Pro Arg Phe Asp Val Arg Pro Val Leu Glu Gln Gln Leu
305            310            315            320
His Asp Ile Leu Pro Ala Met Arg Arg Arg Asp Met Gln Arg Arg Leu
325            330            335
Val Pro Gln Leu Asp Gly Ile His Ile Arg Asn Arg Ala Pro Pro Ser
340            345            350
Cys Gln Gln Gln Leu Arg Asp Ser Gln Phe Pro Arg Arg Thr Arg Pro
355            360            365
Val Gln Arg Arg Ala Ala Gln Leu Ile Pro Pro Val Arg Ala Val Lys
370            375            380
Arg Thr Pro Arg Pro Gln Gln Lys Leu Asp His Ile Leu Ala Pro Ile
385            390            395            400
Ala Leu Leu Ile Arg Arg Gln Val Met Gln Asp Ile Pro Leu Pro Gln
405            410            415
Ile Phe Arg Ile Asp Val Arg Pro Ala Arg Tyr Gln His Leu Gln Asp
420            425            430
Val Pro Val Ile Pro Pro Arg Ser Arg His Gln Arg Gly Pro Pro Phe
435            440            445
Leu Ile Arg Arg Leu Arg Arg Gly Pro Val Ile Gln
450            455            460

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&lt;210&gt; 40043

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40043

Phe Leu Glu Tyr Arg Arg Ala Gly Pro Gly Ser Gln Gly Ala Gly Gly  
 1 5 10 15  
 Leu His Pro Gly Gly Gly Ala Ser Gly Gly Leu Pro Pro Glu Asp His  
 20 25 30  
 Pro Leu Arg Gly Asp Gly Arg Gln Glu Arg Gly Asp Gly Val Ala Ala  
 35 40 45  
 Asp Gly Arg Gly Gly Gly Cys His Gln His Asp Gly Gln Thr Thr Val  
 50 55 60  
 Gly Ser Arg Arg Asn Val Tyr Gly Ser Leu Arg Gln Ala Arg Arg Arg  
 65 70 75 80  
 Gly Gly Asp Arg His Gln Asp Val Gln Tyr Pro Arg Gly Ala Arg Glu  
 85 90 95  
 Arg Ala Leu Leu Gln Gly His Trp Gly Arg Ala Ala Gly Gln Ala Ala  
 100 105 110  
 Gly Ala Arg Val Leu Arg Ala Gly Gly Ala Ala Asp Asp Gly Ala Gly  
 115 120 125  
 Asp Glu Ala Val Ala Ala Ala Leu Cys Asp Cys Gly Gly Arg Ala Asp  
 130 135 140  
 Gly Asp Gly Ala Gly Gly Val Ala Ala Arg Phe His Leu Pro Arg Ser  
 145 150 155 160  
 His Ala Ala Val Ser Gln Pro Gly Gly Asp Pro Thr Asp His Ala Val  
 165 170 175  
 Arg Cys Cys Ala Asp Gly Ala Val Asp Val  
 180 185

&lt;210&gt; 40044

&lt;211&gt; 1059

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (37)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40044

Lys Gly Cys Ser Lys Ile Val Asp Leu Ala Pro Gly Lys Met Ala Ser  
 1 5 10 15  
 Ser Asn Glu Asn Leu Leu Arg Val Val Leu Met Arg Ser Cys Glu Arg  
 20 25 30  
 Gly Ser Phe Ala Xaa Thr Gln Tyr Leu Phe Ser Leu Gly Ala Lys Thr  
 35 40 45  
 Glu Val Pro Ser Asn Arg Val Ala Pro Leu Leu Arg Ala Val Glu His  
 50 55 60  
 Asn His Val Arg Ile Val Gln Leu Leu Leu Asp Tyr Gly Ala Ser Thr  
 65 70 75 80  
 Glu Thr Ala Asp Lys Lys Gly Arg Thr Ser Leu Met Thr Ala Ala Trp  
 85 90 95  
 Arg Asn His Trp His Val Leu Gln Val Leu Ile Ser Arg Gly Ala Asp  
 100 105 110  
 Val Asn Ala Lys Asp Leu Arg Lys Arg Asn Val Leu His Asn Leu Ala  
 115 120 125  
 Ala Asp Lys Gln Cys Asp Trp Gly Glu Asp Val Ile Glu Leu Leu Leu  
 130 135 140  
 Gly Thr Gly Cys Ala Leu Asp Gly Ala Asp Gly Arg Asp Glu Leu Gly

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145          150          155          160
Arg Thr Pro Leu His Trp Ala Cys Ala Thr Gly Lys Leu Arg Val Ala
          165          170          175
Glu Leu Leu Leu Thr Arg Arg Arg Gly Pro Ile Ala Asp Val Asn Ala
          180          185          190
Val Glu Leu Arg Asn Lys Thr Ser Leu His Ile Ala Ala Ala His Gly
          195          200          205
Arg Glu Asp Ile Val Gln Leu Leu Leu Lys His Gly Ala Asp Ile Glu
          210          215          220
Ala Arg Ser Asp Gly Gly Trp Thr Pro Leu His Asn Ala Cys Asp Lys
225          230          235          240
Gly Ala Val Glu Ile Val Arg Leu Leu Leu Gln Ala Gly Ala Lys Ile
          245          250          255
Asn Ala Gln Leu Leu Asn Gly Val Thr Pro Leu His Leu Ala Ala Gln
          260          265          270
Ala Gly His Arg Glu Val Val Glu Cys Leu Leu Glu Arg Pro Asp Leu
          275          280          285
Lys Arg Arg Val Arg Asp Asn Phe Gly Ser Thr Pro Phe Leu Arg Ala
290          295          300
Ala Gln Phe Lys Arg Lys Asp Ile Val Leu Leu Leu Ala Pro Phe Asn
305          310          315          320
Asn Ile Asp Ala Leu Ser Ala Asp Ala Arg Gly Ala Cys Glu Ala Phe
          325          330          335
Asp Ala Thr Val Val Asp Phe Gly Asn Phe His Asn Glu Asn Arg Val
          340          345          350
Gln Lys Thr Ser Val Phe Asn Leu Leu Tyr Gly Arg Asp Pro Glu Asn
          355          360          365
Pro Arg Lys Gln Ala Phe Arg Thr Ile Pro Ala Asp Ser Lys Ala Thr
370          375          380
Asp Phe Arg Trp Ile His Leu Pro Ala Asn Asn Met Ala Trp Val Glu
385          390          395          400
Ala Leu Leu Thr Lys Ser Phe Ile Glu Glu Gly Ala His Asp Val Glu
          405          410          415
Ser Phe Lys Gly Leu Glu Arg Ser Phe Asn Tyr Gln His Arg Gly Gln
          420          425          430
Arg Thr His Ser His Phe Met Arg Pro Leu Cys Gln Ser Thr Pro Arg
          435          440          445
Ala Arg Pro Phe Arg Glu Asp Glu Arg Ile Lys Glu Ser Gly Glu Thr
          450          455          460
Glu Leu Pro Thr Ile Val Val Asn Gly Asn Asp Asp Pro Ser Lys Ala
465          470          475          480
Lys Lys Ser Lys Val Gln Gly Met Lys Leu Glu Arg Ala Asp Thr Cys
          485          490          495
Ser Leu Asp Asp Gly Phe Ser Ser Ser Gln Gly Lys Lys Gly Lys Gly
500          505          510
Thr Pro Lys Arg Ala Lys Ser Gly Pro Ser Pro Asn Lys Ser Asp Thr
          515          520          525
Lys Gly Ser Lys Gln Ser Ser Ala Gln Asp Asp Lys Arg Arg Ala Pro
530          535          540
Leu Ser Leu Cys Lys Asp His Ser Leu Thr Pro Ala Cys Asn Val Cys
545          550          555          560
Val Phe Met Pro Tyr Leu His Phe Glu Thr Ala Glu Arg Arg Gln Lys
          565          570          575
Met Gln Glu Ala Ile Gln Arg Ala Glu Thr Leu Arg Phe Gln His Pro
          580          585          590
Gly Ile Ser Arg Ser Ser Thr Arg Asp Glu Met Leu Ile Ser Ala His

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595	600	605
Leu Ala Ser Ser Thr Thr Ser	Leu His Val Arg Arg	Thr Leu Asp Gln
610	615	620
Phe Phe Tyr Pro Asn Ile Asp	Thr Gln Ser Arg Asp	Gln Asp Gln Val
625	630	635
Ile Tyr Arg Tyr Gln Thr Lys	Gly Gln Gly Arg Asp	Arg Phe Arg Ser
645	650	655
Asp Pro Lys Ile Phe Met Val	Asp Gln Leu Trp Met Trp	Ile Leu Gly
660	665	670
Thr Asn Leu Ile Val Thr Ser	Phe Ala Gln Arg Trp Asp	Gln Pro Lys
675	680	685
Asn Asp Pro Leu Asn Val Leu	Asp Gly Ile Ile Glu Asp	Ile Asn Ser
690	695	700
Lys Thr Arg Glu Pro Val Arg	Ser Val Tyr Asp Leu Ala	Ile Ile Ile
705	710	715
Thr Asn Arg Cys Ser Gly Val	Phe Asp Arg His Arg Met	Gly Asp Glu
725	730	735
Glu Tyr Gln Phe Leu Asp Met	Phe Glu Ala Ser Ile Gly	Val Ala Thr
740	745	750
Asp Arg Glu Thr Leu Leu Phe	Asn Met Phe Asn Ser Ala	Ser Ala Gln
755	760	765
Ala Ser Asp Trp Leu Lys Asn	His Arg Lys Leu Ser Arg	Phe Ala Arg
770	775	780
Asp Ala Asp Asn Ala Lys Gly	Lys Ala Phe Ala Glu Glu	Asp Glu Gln
785	790	795
Pro Leu Phe Val Asp Asn Leu	Leu Asp Ile Gly Gln Glu	Thr Asp Leu
805	810	815
Leu Ala Glu Ala Lys Asp Ile	Arg Asp Glu Leu Asn Met	Ile Arg Thr
820	825	830
Val Leu Gln His Gln Gln His	Ile Leu Asp Asp Phe Gln	Glu Val Ile
835	840	845
Cys Glu Ile Tyr His Gly Gln	His Arg Ser Gln Tyr Glu	Val Lys Lys
850	855	860
Arg Phe Lys Glu Gln Gln Arg	Thr Ile Asp Met His Leu	Lys Asp Ile
865	870	875
Glu Arg Met Asp Lys Gln Ala	Glu Arg Ile Tyr Ser Ser	Ile Thr Asp
885	890	895
Leu Leu Asp Leu Lys Gln Lys	His Ala Asn Ala Phe Glu	Ala Arg Phe
900	905	910
Ala Arg Asp Gln Ala Ala Asp	Thr Thr Arg Gln Gly Lys	Thr Ile Met
915	920	925
Val Phe Thr Ile Val Thr Ile	Ile Phe Leu Pro Leu Ser	Phe Ile Thr
930	935	940
Ser Ile Phe Thr Ile Asn Leu	Thr Glu Phe Pro Lys Gly	Pro Asp Gly
945	950	955
Val Gly Glu Leu His Leu Ser	Tyr Val Ala Lys Tyr Thr	Phe Gly Ile
965	970	975
Gly Phe Ala Ile Ser Ile Pro	Leu Ile Leu Leu Ala Leu	Ser Val Asp
980	985	990
Asp Ile Gly Asp Val Cys Gln	Glu Ala Met Arg His Met	Arg Arg Trp
995	1000	1005
Leu Ser Arg Arg Arg Lys Ser	Thr Asp Asp Gln Leu Asp	Glu Ala Thr
1010	1015	1020
Leu Glu Met Glu Lys Ile Ile	Ser Thr Ser Lys Ser Arg	Arg Ser Met
1025	1030	1035
Asp Thr Arg Tyr Ala Gly Ser	Leu Leu Pro Val Ser Thr	Arg Gly Ser



1045

1050

1055

Arg Pro Ala

&lt;210&gt; 40045

&lt;211&gt; 442

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40045

Arg	Ile	Ala	Asn	Cys	Leu	Ser	Ser	Ser	Met	Lys	Pro	Ala	Pro	Ser	Pro
1			5						10					15	
Val	Val	His	Gly	Ser	Arg	Arg	His	His	Pro	Trp	Thr	Leu	Val	Arg	Gln
		20					25						30		
Trp	Lys	Ser	Ile	Gly	Thr	Arg	Arg	Leu	Ala	Thr	Gln	Val	Glu	His	Ser
	35					40					45				
Thr	Ala	Phe	Pro	Asp	Asp	Lys	Gln	Arg	His	Gln	Gly	Lys	Glu	Arg	Val
	50					55				60					
Val	Ile	Leu	Gly	Ser	Gly	Trp	Gly	Gly	Tyr	Ser	Leu	Ser	Arg	Arg	Leu
65				70					75						80
Ser	Pro	Ser	Lys	Phe	Ala	Pro	Leu	Ile	Val	Ser	Pro	Arg	Ser	Tyr	Phe
			85					90						95	
Val	Phe	Thr	Pro	Leu	Leu	Thr	Asp	Ala	Ala	Gly	Gly	Ser	Leu	Asp	Phe
		100						105					110		
Ser	Asn	Ile	Val	Glu	Pro	Val	Arg	Asp	Arg	Arg	Ala	Arg	Val	Asp	Phe
	115						120					125			
Ile	Gln	Ala	Ala	Ala	Arg	Ala	Val	Asp	Phe	His	Arg	Lys	Thr	Ile	Leu
	130					135					140				
Cys	Glu	Ala	Thr	Val	Val	Lys	Ser	Gly	Val	Thr	Glu	Ser	Pro	Arg	Thr
145				150						155					160
Asp	Glu	Ala	Gly	Gly	Val	Thr	Ser	Thr	Met	Ala	Lys	Arg	Arg	Trp	Glu
			165						170					175	
Ala	Gly	Glu	Thr	Phe	Thr	Val	Pro	Tyr	Asp	Lys	Leu	Val	Val	Ala	Val
		180						185					190		
Gly	Thr	Val	Thr	Lys	Thr	Phe	Asn	Thr	Pro	Gly	Val	Arg	Glu	Asn	Ala
	195						200					205			
Leu	Phe	Phe	Lys	Asp	Ile	Gly	Asp	Ala	Arg	Arg	Val	Arg	Arg	Arg	Val
	210					215					220				
Arg	Glu	Cys	Phe	Glu	Leu	Ala	Val	Leu	Pro	Thr	Thr	Ala	Pro	Glu	Met
225					230					235					240
Arg	Gln	Trp	Leu	Leu	His	Phe	Ala	Ile	Val	Gly	Ala	Gly	Pro	Thr	Gly
			245						250					255	
Thr	Glu	Leu	Ala	Ala	Ser	Leu	Arg	Asp	Phe	Ile	Ser	Arg	Asp	Leu	Met
		260						265					270		
Gln	Leu	Tyr	Pro	Ser	Leu	Ala	Gly	Ile	Pro	Arg	Ile	Thr	Leu	Tyr	Asp
	275						280					285			
Val	Ala	Pro	Thr	Val	Leu	Ser	Met	Phe	Asp	Glu	Arg	Leu	Ala	Ala	Tyr
	290					295					300				
Ala	Met	Glu	Thr	Met	Lys	Glu	Gly	Ile	Thr	Ile	Lys	Thr	Ser	His	
305					310				315					320	
His	Val	Ala	Gly	Leu	Arg	Trp	Gly	Glu	Pro	Gly	Ala	Ser	Pro	Pro	Tyr
			325					330					335		
Glu	Met	Asp	Pro	Lys	Arg	Cys	Leu	Thr	Leu	Thr	Thr	Lys	Glu	Glu	Gly
		340						345					350		
Glu	Val	Gly	Val	Gly	Met	Cys	Val	Trp	Val	Thr	Gly	Asn	Gln	Met	Asn
	355						360					365			

## 17456

Glu Phe Val Arg Asn Ser Leu Glu Glu Val Asp Val Phe Pro Ser Ala  
 370 375 380  
 Ser Ala Thr Ala Lys Gly Asp Lys Ile Lys Asp Glu Asn Thr Ser Trp  
 385 390 395 400  
 Lys Val Lys Lys Gly Pro Asn Gly Ala Leu Leu Val Asp Gly Arg Leu  
 405 410 415  
 Arg Val Gln Leu Ala Asn Asp His Gly Glu Thr Gly Leu His His Gly  
 420 425 430  
 Ala Gly Arg Ile Arg Gly Gly Val Thr Ile  
 435 440

<210> 40046  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 40046  
 Arg Leu Leu Tyr Arg Ala Trp Gln Val Cys Gln Thr Pro Asn Glu Val  
 1 5 10 15  
 Leu Val Glu Lys Leu Gly Leu Asp Ile Pro Pro Pro Pro Glu Val Thr  
 20 25 30  
 Leu Glu Glu Ile Thr Ala Arg Glu Val Arg Ile Ala Trp Lys Leu Pro  
 35 40 45  
 Asp Phe His Asn Ser Ile His Lys His Ile Ile Gln Val Asn Gly Ser  
 50 55 60  
 Lys Gly Ser Leu Phe Cys Val Leu Leu Ser Arg Val Thr Ser Thr Leu  
 65 70 75 80  
 Asn Met Gln

<210> 40047  
 <211> 116  
 <212> PRT  
 <213> A.fumigatus

<400> 40047  
 Ile Asp Met Ile Arg His Ser Asp Asn Ala Gln Leu Arg Phe Ser Pro  
 1 5 10 15  
 Gln Leu Ser Val Val Arg Ala Thr Gln Arg Val Ser His Pro Gln Pro  
 20 25 30  
 Glu Arg Ala Ser Leu Pro Arg Leu Asp Leu Leu Thr Leu Gln Thr Leu  
 35 40 45  
 Thr Leu Gly Val Ser Lys Leu Val Thr Thr Ile Val Ser Thr Phe Thr  
 50 55 60  
 Ala His Tyr Ile Tyr His Trp Gly Thr Tyr Phe Pro Ser Thr Pro Leu  
 65 70 75 80  
 Gln Pro Pro Tyr Leu Pro Ser Phe Asp Gly Arg Ala Val Leu Tyr Pro  
 85 90 95  
 Thr Thr Arg Ile Leu Arg Asp Tyr Met Ser Trp Arg Gln Val Asp Cys  
 100 105 110  
 Ala Phe Asp Leu  
 115

<210> 40048  
 <211> 651  
 <212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (542)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40048

Lys	Lys	Ala	Gln	Gln	Gln	Tyr	Gln	Glu	Ala	Gln	Glu	Arg	Leu	Lys	Trp	1	5	10	15
Leu	Thr	Thr	Gln	Arg	Ser	Gly	Ser	Ser	Gly	Pro	Phe	Thr	Leu	Pro	Ala	20	25	30	
Leu	Asp	Leu	Asp	Met	Ser	Asn	Thr	Ala	Thr	Ile	Arg	Pro	Arg	Arg	His	35	40	45	
Arg	Ser	Ser	Leu	Asn	Ser	Asn	Val	Ser	Ser	Pro	Met	Asn	Phe	Pro	Gly	50	55	60	
Leu	Glu	Pro	Ser	Phe	Pro	Gly	Gly	Val	Asn	Phe	Asn	Pro	Pro	Ser	Thr	65	70	75	80
Asn	Ser	Pro	Thr	Phe	Ala	Pro	Ala	Pro	Ala	Phe	Phe	Asn	Ile	Asn	Asn	85	90	95	
Gly	Met	Thr	Leu	Pro	Gly	Leu	Ser	Asp	Leu	Gln	Asp	Pro	Met	Arg	Gly	100	105	110	
Asp	Leu	Asp	Val	Ser	Phe	Gly	Asn	Pro	Gln	Met	Ser	Pro	Arg	Ala	Asp	115	120	125	
Ala	Leu	Leu	Pro	Ser	Asp	Leu	Leu	Gly	Asp	Glu	Glu	Ser	Pro	Glu	Pro	130	135	140	
Pro	Arg	Pro	Ile	Val	Arg	Pro	Arg	Phe	Ser	Asn	Leu	Glu	Leu	Ser	Glu	145	150	155	160
Ser	Gln	Arg	Glu	Ser	Tyr	Ser	Arg	Gly	Pro	Ser	Ser	Pro	Glu	Ser	Ala	165	170	175	
Val	Gly	Ser	Lys	Pro	Ala	Ser	Ile	Phe	Ala	Ser	Pro	His	Glu	Asp	Arg	180	185	190	
Lys	Gly	Thr	Glu	Pro	Gln	Ser	Thr	His	Val	Asp	Glu	Ser	Ser	Asp	Ala	195	200	205	
Pro	Lys	Ser	Ala	Thr	Arg	Arg	Leu	Ser	Gly	Leu	Phe	Gly	Phe	His	Arg	210	215	220	
Pro	Arg	Gly	Lys	Thr	Leu	Ala	Asp	Glu	Pro	Pro	Leu	Leu	Gly	Thr	Leu	225	230	235	240
Lys	Pro	Gly	Gln	Ser	Gln	Ser	Phe	Pro	Arg	Asn	Leu	Asp	Glu	Met	Asp	245	250	255	
Pro	Ile	Gly	Ser	Arg	Arg	Arg	Arg	Leu	Ser	His	Thr	Gly	Asn	Trp	Thr	260	265	270	
Asn	Pro	Ile	Ser	Leu	Leu	Pro	Arg	Ser	Asn	Thr	Ala	Ala	Val	Thr	Ala	275	280	285	
Asp	Ser	Ser	Ser	Asp	His	Leu	Pro	Ser	Arg	Arg	Ala	Gly	Phe	Thr	Ser	290	295	300	
Ile	Phe	Ser	Pro	Ser	Arg	Phe	Gly	Phe	Gly	Gly	Gly	Ser	Ser	Ser	Leu	305	310	315	320
Leu	Lys	Ser	Ser	Glu	Pro	Ser	Asp	Val	Ser	Thr	Gly	Tyr	Asn	Gln	Phe	325	330	335	
Ser	Pro	Arg	His	Asp	Pro	Ile	Asp	Pro	Ala	Ser	Ile	Leu	Gly	Thr	Val	340	345	350	
Arg	Arg	Gly	Ser	Leu	Ser	Pro	Arg	Pro	Ser	Ser	Thr	Phe	Ser	Phe	Asp	355	360	365	
Asn	Gln	Leu	Pro	His	Pro	Ser	Thr	Asp	Asn	Arg	Pro	Phe	Gly	Trp	Pro	370	375	380	

## 17458

Ser Ala Glu Lys Pro Asn His Arg Ser Leu Leu Gly Phe Asp Trp Ala  
 385 390 395 400  
 Ser Pro Ser Ser Trp Ser Arg Ala Gln Ser Arg Arg Pro Ser Ile Thr  
 405 410 415  
 Tyr Gly Ser Ser Gly His Leu Pro Leu Gly Leu Thr Gly Glu Pro Asp  
 420 425 430  
 Phe Pro Gln Glu Thr Phe Glu Arg Gln Gly Arg Pro Leu Gln Ala Pro  
 435 440 445  
 Ile Gly Thr Arg Pro Ser Ser Ser His Arg Pro Val Thr Pro Lys Leu  
 450 455 460  
 Asn Pro Ala Ala Pro Thr Phe Lys Thr Ile Phe Ser Arg Lys Ser Asp  
 465 470 475 480  
 Lys Asp Lys Asp Lys Glu Lys Gly Lys Glu Lys Glu Ser Asp Met Pro  
 485 490 495  
 Phe Asp Phe His Met Glu Glu Gly Ser Pro Ser Glu Pro Arg Ile Ser  
 500 505 510  
 Arg Asp Ser Arg Ser Arg Ser Leu Ser Ile Phe Asn Glu Asp Ser Tyr  
 515 520 525  
 Val Ser Leu Glu Arg Thr Pro Ser Ala Thr Phe Ala Asp Xaa Ser Asn  
 530 535 540  
 Ser Lys Glu Ser Phe Ile Arg Lys Ile Thr Arg Lys Gly Ser Ser Ser  
 545 550 555 560  
 Lys Phe Gly Ser Trp Lys Glu Arg Ser Gly Leu Phe Ser Lys Lys Gly  
 565 570 575  
 Asp Ser Ser Gln Gly Asp Ile Asp Glu Asp Ala Ser Ser Glu Ala Gln  
 580 585 590  
 Leu Ala Lys Ser Ile Asp Ser Thr Val Ser Ser Ala Asp Arg Ser Thr  
 595 600 605  
 Arg Ser Ser Leu Gly Phe Phe Ser Arg Lys Ser Lys Lys Ser Asp Lys  
 610 615 620  
 Ala Ala Ser Glu Thr Ser Glu Arg Pro Ser Glu Leu Ala Ser Glu Thr  
 625 630 635 640  
 Gly Asp Asp Glu Ile Ala Glu Glu Glu Glu Pro  
 645 650

&lt;210&gt; 40049

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40049

Phe Thr Pro His Glu Leu Thr Arg Ser Cys Gln Gly Thr Val Ser Ser  
 1 5 10 15  
 Asp Lys Asn Glu Ile Leu Phe Lys Arg Phe Gly Ile Asn Tyr Asn Asn  
 20 25 30  
 Glu Asp Glu Met Phe Lys Lys Gly Ser Val Val Tyr Arg Gln Val Gly  
 35 40 45  
 Gln Gln Gly Cys Leu Tyr Asp Arg Arg Leu Thr Trp Ile Leu Gln Tyr  
 50 55 60  
 Gln Leu Glu Asp Pro Lys Pro Glu Ser Lys Ser Arg His Gly Asp Asp  
 65 70 75 80  
 Asp Glu Ala Pro Met Asp Glu Ser Lys Ile Ser Arg Ala Gln Gln Asp  
 85 90 95  
 Lys Leu Arg Lys Leu Arg Arg Lys Ala Gln Val Val Val Asp His Val  
 100 105 110  
 Asp Ile Ile Lys Asp Glu Phe Trp Glu Arg Arg Pro Trp Ile Leu Ser

115 120 125  
 Gly Lys Pro Gly Lys Leu Pro Glu Ala  
 130 135

<210> 40050  
 <211> 372  
 <212> PRT  
 <213> A.fumigatus

<400> 40050  
 Leu Ile Leu Arg Ile Thr Val Ala Ser Tyr Ile Asn Thr Lys His Ala  
 1 5 10 15  
 Ile Val Gly Glu Ser Lys Arg Val Glu Thr Ala Val Glu Ile Ser Asn  
 20 25 30  
 Leu Val Pro Gly Ser Ile Tyr His Ile Cys Val Phe Ser Val Ser Ala  
 35 40 45  
 Ala Asn Phe Gln Thr Pro Ser Ala Val Ile His Val Arg Thr Lys Pro  
 50 55 60  
 Leu Pro Leu Ser Gln Ser Gln Gln Asn Ala Pro Val Gly Ser Pro Thr  
 65 70 75 80  
 Ile Arg Ala Ser Ile Pro Arg Pro Thr Ala Gly Leu Val Ala Pro Ser  
 85 90 95  
 Ala Pro Pro Met Ala Arg Glu Leu Ser Gly Gly Gln Leu Gln Gly Lys  
 100 105 110  
 Arg Thr Ser Ala Gly Arg Lys Gln Ser Pro Ala Ala Ser Gly Val Asp  
 115 120 125  
 Leu Pro His Gly His Pro Glu Glu Thr Gln Lys His Ala Thr His Ser  
 130 135 140  
 Asp Ser Ser Glu Thr Leu Glu Arg Leu Ala Asp Arg Leu Lys Thr Leu  
 145 150 155 160  
 Gln His Glu Asn Glu Asn Val Glu Lys Gln Ala Ala Glu Glu Glu Glu  
 165 170 175  
 Glu His Ile Ala Leu Leu Lys Glu Leu Glu Arg Gln Arg Asp Gln Leu  
 180 185 190  
 Arg Lys Arg Val Lys Glu Lys Asp Glu Ala Ser Gly Asp Leu Lys Lys  
 195 200 205  
 His Val Asn Lys Leu Glu Ser Val Asn Arg Thr Val Gln Asn Glu Lys  
 210 215 220  
 Ala Lys Arg Glu Arg Leu Leu Gln Gln Lys Glu Thr Glu Arg Lys Lys  
 225 230 235 240  
 Arg Lys Glu Asp Ile Ile Arg Trp Arg Glu Glu Met Glu Arg Met Thr  
 245 250 255  
 Thr Glu Val Ala Gln Ile Asn Glu Glu Lys Ala Arg Met Glu Glu Glu  
 260 265 270  
 Gly Lys Arg Ser Ala Asp Gly Val Arg Glu Lys Ile Ala Lys Glu Gln  
 275 280 285  
 Ala Glu Met Lys Val Leu Asp Asp Glu Ile Gln Asp Lys Gly Gly Arg  
 290 295 300  
 Val Lys Lys Leu Glu Glu Arg Lys Arg Gln Gln Gly Gly Asp Ser  
 305 310 315 320  
 Glu Asp Gly Lys Glu Leu Asp Arg Ile Asp Asn Glu Arg Ala Arg Gln  
 325 330 335  
 Trp Glu Val Lys Leu Ser Asn Leu Asn Ala Arg Tyr Ala Ala Leu Val  
 340 345 350  
 Asn Leu His Ala Gln Val Gly Ala Arg Thr Thr Tyr Trp Arg Phe Gln  
 355 360 365

17460

Ile Glu Gly Tyr  
370

<210> 40051  
<211> 62  
<212> PRT  
<213> A.fumigatus

<400> 40051  
Ile Thr Asn Asp Arg Leu Ser Asp Arg Tyr Gly Phe Ile Lys Pro Asn  
1 5 10 15  
Asp Arg Arg Ala Leu Asp Leu Met Asn Ala Ala Ala Val Glu Val Met  
20 25 30  
Lys Glu Leu Pro Asp Leu Cys Ile Ala Tyr Gly Val Ser Asp Glu Tyr  
35 40 45  
Arg Ser Val Pro Arg Gln Leu Asp Arg His Asp Ser Ser Leu  
50 55 60

<210> 40052  
<211> 113  
<212> PRT  
<213> A.fumigatus

<400> 40052  
Ser Pro Cys Cys Val Leu Tyr Val Lys Val Leu Thr Lys Ser Arg Ser  
1 5 10 15  
Asp Ala Leu Gly His Val Leu Asn Met Ile Gly Arg Asp Trp Thr His  
20 25 30  
Ala Gly Val Ala Lys Leu Tyr Thr Asp Ile Val Asn Asn Gly Tyr Asn  
35 40 45  
Ile Met Tyr Leu Thr Ser Arg Ser Val Gly Gln Ala Asp Thr Thr Arg  
50 55 60  
Thr Tyr Leu Tyr Gly Val Cys Gln Asp Gly Tyr Arg Leu Pro Lys Gly  
65 70 75 80  
Pro Val Ile Met Ser Pro Asp Arg Thr Ile Ala Ala Leu Arg Arg Glu  
85 90 95  
Ile Tyr Leu Arg Lys Pro Glu Val Phe Lys Met Ala Ser Ser Pro Arg  
100 105 110  
Gly

<210> 40053  
<211> 133  
<212> PRT  
<213> A.fumigatus

<400> 40053  
Glu Glu Gly Thr Asp Leu Leu Phe Arg Arg Ile Ser Ser Asp Leu Thr  
1 5 10 15  
Glu Leu Asp Phe Phe Ser Phe Gln Val Glu Phe Gln Val Asn Gly Val  
20 25 30  
Lys Gln Asp Tyr Ala Met Lys Leu Gly Glu Gly Gly Glu Ala Phe Phe  
35 40 45  
Val Phe Glu Thr Ser Asp Glu Ile Pro Val Ser Leu Gln Thr Ser Pro  
50 55 60  
Leu Val Ser Pro Ala Ala Ser Pro Arg Thr Arg Ser Glu Val Asp Leu

## 17461

```

65          70          75          80
Pro Ser Ser Leu Gln Glu Pro Glu Phe Leu Asp Leu Glu Lys Ser Ser
      85          90          95
Ala Thr Thr Gln Ser Gln Asp Val Lys Ala Gly Ser Asp Ile Pro Leu
      100          105          110
Leu Ser Arg Gly Val Arg Ala Ser Ser Asp Leu Gly Thr Val Ala Leu
      115          120          125
Ser Leu Val Arg Ile
      130

```

<210> 40054  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40054
Ala Gly Pro Leu Met Ser Ser Ser Ser Ser Arg Lys Met Val Ala Pro
1          5          10          15
His Ile Ser Gly Leu Ser Asn Ile Leu Leu Met Leu Ala Ile Gly
      20          25          30
Thr Leu Ala Cys Ser Pro Phe His Val Arg Phe Gly Lys Phe Ser Leu
      35          40          45
Leu Arg Pro Tyr Glu Lys Lys Val Pro Ile Cys Cys Ser Val Glu Phe
      50          55          60
Leu Arg Ile
65

```

<210> 40055  
 <211> 368  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (218)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 40055
Gly His Leu Val Ile Trp Val Arg Trp Arg Phe Pro Trp Ser Gly Ser
1          5          10          15
Glu Ala His Ala His Met Asp Ile Gly Ala Met Thr Pro Leu Ser Gln
      20          25          30
Ser Pro Glu Glu Glu Thr Asn Val Gly Arg Leu Arg Arg Gly Ser Leu
      35          40          45
Gly Asp Ala Pro Gly Phe Asp Arg Ala Ser Ser Glu Pro Val Leu Thr
      50          55          60
Ala Lys Arg Asn Thr Gly Thr Ser Asn Glu Gly Gly Leu Ala Val Gly
65          70          75          80
Thr Gln Pro Pro Ser Pro Thr Thr Ser Asp Gly Asp Asn His Thr Asp
      85          90          95
Arg Pro Arg Ser Pro Pro Leu Leu Thr Pro Gln Glu Ala Val Ser Arg
      100          105          110
Ala Leu Ser Leu Ser Lys Lys Leu Ser Ser Ser Asn Ile Pro Thr Arg
      115          120          125
Val Asn Glu Thr Gly Asp Leu Met Leu Asp Met Thr Gly His Lys Ser
      130          135          140

```

## 17462

```

Asn Glu Glu Asp Ala Leu Arg Ala Glu Leu Ile Ala Arg Lys Ile Leu
145                      150                      155                      160
Ala Glu Glu Leu Glu Gly Ser Tyr Asp Ile Gly Ser Leu Ile Gly Ala
                      165                      170                      175
Asp Glu His Gly Asn Leu Trp Ile Tyr Ser Ser Glu Glu Ala Lys Glu
                      180                      185                      190
Ala Ala Asn Arg Arg Ala Thr Phe Asn Ser Met Arg Pro His Ser Ala
                      195                      200                      205
Met Ser Glu Asn Ala Val Ser Asp Pro Xaa Tyr His Ser Asp Thr Asp
                      210                      215                      220
His Pro Met Ser Glu Ser Ser Tyr Pro Thr Arg His His Arg Ala Lys
225                      230                      235                      240
Ser Asp Val Gln Pro Gly Pro Pro Thr Pro Pro Gln Ser Pro Thr Gln
                      245                      250                      255
Asp Ser Thr Pro Gly Glu Gln Thr Arg Asn Tyr Ala Lys Thr Leu Arg
                      260                      265                      270
Leu Thr Ser Asp Gln Leu Lys Ala Leu Asn Leu Lys Pro Gly Ala Asn
                      275                      280                      285
Pro Met Ser Phe Ser Val Asn Arg Ala Thr Cys Thr Ala Thr Met Tyr
                      290                      295                      300
Leu Trp Asn Ser Thr Thr Pro Ile Val Ile Ser Asp Ile Asp Gly Thr
305                      310                      315                      320
Ile Thr Lys Leu Val Ser Met Leu Cys Ile Ile Cys Gln Gly Thr Asp
                      325                      330                      335
Glu Lys Gln Val Arg Arg Phe Gly Ser Cys Val Glu Tyr Asp Arg Ser
                      340                      345                      350
Gly Leu Asp Thr Cys Trp Cys Gly Glu Ala Leu His Arg Tyr Cys Gln
                      355                      360                      365

```

&lt;210&gt; 40056

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40056

```

Leu Asn Tyr Ser Ala Met Leu Thr Leu Trp Phe Pro Arg Leu Ile Asn
1                      5                      10                      15
Asn Ser Asn Ser Met Asn Ile Phe Thr Lys Ile Thr Ile Tyr Tyr Tyr
                      20                      25                      30
Leu Val Asn Asp Leu Lys Pro Asn Leu Leu Ile Arg Thr Asn Val Ile
                      35                      40                      45
Cys Ser Lys Gly Phe Ile Leu Asn Phe Lys Tyr Ser Ile Ile Ile Ile
50                      55                      60
Ser Ser Tyr Ser
65

```

&lt;210&gt; 40057

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40057

```

Lys Ile His Pro Val Leu Ser Val Thr His Leu Lys Pro Ala Pro Ala
1                      5                      10                      15
Thr Pro Asn Leu Phe Tyr His Glu Leu Pro Lys Pro Pro Thr Val Ile
20                      25                      30

```



## 17463

```

Asn Ala Lys Val Tyr Pro Ser Glu Asp Asp Ile Tyr Lys Val Lys Cys
    35                      40                      45
Leu Leu Asp Lys His Thr Ile Gln His Arg Arg Lys His Thr Pro Tyr
    50                      55                      60
Ile Glu Tyr Leu Met Gln Trp Lys Gly Tyr Arg Leu Glu Asp Asp Gln
65                      70                      75                      80

```

```

<210> 40058
<211> 70
<212> PRT
<213> A.fumigatus

```

```

<400> 40058
Ile Thr Val Trp Phe Ser Lys Gly Thr Asn Cys Ala Thr Gly Arg Ile
1      5                      10                      15
Asn His Arg Pro Leu Asp Thr Trp Ile Ser Asn Thr Trp Ile Ser Val
    20                      25                      30
Arg Tyr Ala Thr Leu Ile Pro Pro Lys Gln Tyr Ile Lys Leu Ile Asn
    35                      40                      45
Leu Ile Ile Ile Phe Leu Ile Tyr Pro Pro Leu Lys Lys Ile Tyr Phe
    50                      55                      60
Ile Leu Leu Phe Leu Ser
65                      70

```

```

<210> 40059
<211> 64
<212> PRT
<213> A.fumigatus

```

```

<400> 40059
Asn Gly Pro Trp Val Cys Leu Glu Pro Arg Leu Asn Trp Ala Glu Ala
1      5                      10                      15
Ser Leu Asn Val Ala Lys Cys Asn Val Glu Asp Trp Ile Asn Ile Lys
    20                      25                      30
Asp Tyr Tyr Ile Ala Leu Leu Glu Cys Phe Ile Asp Ile Ile Gln Thr
    35                      40                      45
Phe Ser Leu Trp Thr Leu Leu Ala Glu Val Phe Ser Val Ile Leu Phe
    50                      55                      60

```

```

<210> 40060
<211> 68
<212> PRT
<213> A.fumigatus

```

```

<400> 40060
Trp Trp Gln Arg Arg Gln Tyr Ala Glu Val Gly Ile Ile Thr His Val
1      5                      10                      15
Phe Val Thr Leu Thr Tyr Arg Thr Pro Ala Asp Glu Leu Gln His Asp
    20                      25                      30
His Glu Phe Glu Arg Ser Leu Tyr Thr Ala Thr Phe Gly Thr Arg Asp
    35                      40                      45
Met Ala Glu Gly Val Thr Ala Phe Leu Glu Lys Arg Ala Pro Val Trp
    50                      55                      60
Arg Thr Pro Ser
65

```

<210> 40061  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 40061  
 Leu Tyr Gln Pro Pro Leu Leu Lys Ala Asn Gly Pro Ser Phe Tyr Pro  
 1 5 10 15  
 Asp Pro Met Ala Ser Arg Thr Ser Gly Ala Ser Ser Phe Met Ser Gln  
 20 25 30  
 Pro Ile Leu Gly Arg Arg Gly Pro Thr Asp Leu Val Arg Gly Arg Leu  
 35 40 45  
 Ile Asn His Phe Gln Gln Ile Leu Leu Ser Arg Asn Pro Gln Arg  
 50 55 60

<210> 40062  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 40062  
 Ala Asp Cys Ala Ala Phe Gln Ala Asp Phe Ile Val Ala Thr Pro Glu  
 1 5 10 15  
 Val Glu Phe Arg Leu Pro Glu Ile Ser Ile Gly Leu Ile Pro Gly Ala  
 20 25 30  
 Gly Gly Thr Gln Arg Val Thr Ala Ala Val Gly Lys Tyr Arg Val Ala  
 35 40 45  
 Ala Leu Tyr Ala Arg Cys Thr Lys Gly Ser Thr Asp Lys Val Arg Glu  
 50 55 60  
 Gly Asn Glu Ser Asp Ser Thr Lys  
 65 70

<210> 40063  
 <211> 123  
 <212> PRT  
 <213> A.fumigatus

<400> 40063  
 Met Arg Ile Val Met Asp Tyr Ser Thr Gln Thr Glu Arg Phe Ile Leu  
 1 5 10 15  
 Ala Arg Thr Cys Gln Ser Ser Thr Arg Ile Leu Thr Leu Asp Arg Pro  
 20 25 30  
 Asn Lys Arg Asn Ala Leu Cys Gln Thr Leu Ile Asp Glu Leu Leu Gln  
 35 40 45  
 Gln Leu Lys Ile Ala Ser Ala Asp Pro His Ile Arg Ala Ile Val Ile  
 50 55 60  
 Ala Gly Ser Gly Ala Ile Phe Ser Gly Arg Cys Leu His Ile Glu Cys  
 65 70 75 80  
 Arg Gln His Val Ala Glu Leu Pro Pro Leu Ala Ile Ser Ile Gln Leu  
 85 90 95  
 Val Pro Thr Ser Lys Arg Ser Leu Ser Trp Met Ala Ser Leu Leu Gly  
 100 105 110  
 Arg Ser Gly Thr Leu Lys Thr Ser Val Met Gly  
 115 120

<210> 40064

<211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 40064

Leu	Leu	Phe	Met	Leu	Gly	Ala	Gln	Arg	Val	Arg	Leu	Thr	Arg	Ser	Val
1				5					10					15	
Lys	Ala	Met	Asn	Leu	Ile	Leu	Leu	Asn	Glu	Pro	Leu	Ser	Gly	Ser	Glu
			20					25					30		
Ala	Tyr	Gln	Val	Gly	Leu	Val	Ser	Lys	Leu	Val	Glu	Pro	Gly	Met	Ala
			35				40					45			
Leu	Ser	Gly	Ala	Leu	Glu	Ile	Ala	Glu	Lys	Leu	Ala	Ser	Trp	Ser	Ala
	50					55					60				
Pro	Thr	Leu	Met	Val	Ala	Lys	Glu	Ala	Ile	Cys	Arg	Gly	Gly	Asn	His
65				70						75				80	
Tyr	Ser	Cys	Val	Cys	Asp	Ser	Tyr	Leu	Gln	Asn	Thr	Ser	Gly	Arg	Ile
			85						90					95	
Ala	Ala														

<210> 40065  
 <211> 270  
 <212> PRT  
 <213> A.fumigatus

<400> 40065

Val	Ile	Trp	His	Thr	Phe	Gly	Ala	Leu	Ser	Thr	Asn	Leu	Lys	Leu	Ile
1				5					10					15	
Arg	Ser	Thr	Gly	Ala	Tyr	Ser	Leu	Ser	Ile	Trp	Thr	Arg	Asn	Phe	Arg
			20					25				30			
His	Ile	Val	His	Gln	Pro	Ser	Trp	Pro	Val	Pro	Ala	Ser	Asn	His	Thr
		35					40				45				
Glu	Asp	Val	Ile	Ile	Ile	Gly	Ser	Gly	Asn	Asn	Trp	Gly	Ser	Ile	Tyr
	50					55					60				
Thr	Ala	Val	His	Ala	Ile	Asn	Arg	Thr	Val	Val	Gly	Gly	Gln	Asp	Ala
65				70					75					80	
Thr	Val	Gly	Pro	Gly	Gly	Leu	Ile	Gln	Asn	Gly	Gly	His	Gly	Leu	Leu
				85				90						95	
Ser	Ser	His	His	Gly	Leu	Ala	Ser	Asp	Gln	Val	Tyr	Gln	Val	Thr	Val
			100				105						110		
Ile	Thr	Thr	Asp	Gly	Arg	Arg	Leu	Val	Ala	Asn	His	Ala	Glu	Asn	Glu
			115				120					125			
Asp	Leu	Phe	Trp	Ala	Val	Arg	Gly	Gly	Gly	Gly	Gly	Gln	Phe	Gly	Val
	130					135					140				
Val	Thr	Glu	Phe	Val	Leu	Lys	Thr	Tyr	Pro	Val	Pro	Ala	Asn	Val	Val
145					150					155				160	
Ser	Gly	Gly	Leu	Ser	Phe	Tyr	Pro	Ser	Arg	Ser	Thr	Lys	Ala	Cys	Glu
			165						170					175	
Leu	Ala	Ser	Trp	Asp	Ala	Leu	Ala	Glu	Thr	Thr	Arg	Leu	Ile	Pro	Asp
			180					185					190		
Leu	Met	Asp	Ser	Gly	Met	Thr	Gly	Thr	Val	Thr	Ala	Met	Thr	Lys	Glu
	195						200					205			
Ala	Ala	Ile	Arg	Leu	Thr	Gly	Val	Lys	Glu	Ser	Ile	Pro	Gly	Val	Thr
	210					215					220				
Val	Ser	Ile	Asn	Met	Ile	Gly	Tyr	His	Met	Thr	Met	Thr	Lys	Met	Asn
225					230					235					240

Thr Ser Ile His His Leu Ala Ala Arg Ile Arg Lys Tyr Ser Ile Ser  
                           245                          250                          255  
 Ser Ser Leu Thr Val Thr Leu Ser Ala Pro Ser Ala Gln Ser  
                           260                          265                          270

<210> 40066

<211> 429

<212> PRT

<213> A.fumigatus

<400> 40066

Arg Ala Met Ser Leu Asn Ile Tyr Leu Glu Asp Pro Arg Gln Tyr Tyr  
 1                  5                          10                          15  
 Ala Glu Asn Asp Met Ile Lys Gly Arg Ile Val Phe Asn Cys Pro Arg  
                   20                          25                          30  
 Asp Phe Gln Gln Leu Lys Asn Val Thr Leu Thr Phe Ser Gly Cys Ser  
                   35                          40                          45  
 Lys Ala Lys Ile Arg Lys Val Lys Gly Pro Ala Gly Pro Thr Gly Ser  
                   50                          55                          60  
 Tyr Gln Ser Lys Cys Ile Leu Phe Lys Arg Glu Arg Ile Leu Val Pro  
 65                          70                          75                          80  
 Ala Glu Glu Cys Lys Ile Pro Pro Thr Thr Tyr Glu Trp Pro Phe Glu  
                           85                          90                          95  
 Phe Arg Phe His Pro His Val Ala Ser Pro Asn Ala Trp Pro Glu Ala  
                   100                          105                          110  
 Glu Ser Phe Arg Val Asp Glu Asn Gln Pro Leu Pro Pro Ser Phe Asn  
                   115                          120                          125  
 Thr Glu Cys His Asn Ser Leu Arg Arg Val Ser Ala Ser Ile Glu Tyr  
                   130                          135                          140  
 Arg Leu Lys Val Gln Ile Phe Lys Pro Thr Lys Gly Leu Phe Glu Arg  
 145                          150                          155                          160  
 Lys Ser Pro Val Phe Glu Lys Val Leu His Leu Pro Leu Ile Pro Met  
                           165                          170                          175  
 Ala Ala Arg Ala His Thr His Val Ile Glu Leu Glu Lys Lys Gln Lys  
                   180                          185                          190  
 Ile Asn Arg Thr Phe Thr Val Arg Ser Leu Ser Leu Leu Pro Gly Asn  
                   195                          200                          205  
 Thr Asp Arg Ser Leu Ser Val Gln Glu Arg Phe Lys Ala Trp Leu Ser  
                   210                          215                          220  
 Pro Gly Gln Leu Pro Tyr Phe Ser Phe Gly Val Glu Phe Arg Tyr Pro  
 225                          230                          235                          240  
 Leu Tyr Leu Val Ala Gly Thr Pro Ile Pro Leu Leu Leu Glu Val Lys  
                           245                          250                          255  
 Pro Leu Ile Asp Asn Ser Asn Ala Pro His Val Pro Glu Ile Val Leu  
                   260                          265                          270  
 Gln Thr Ala Ser Ile Thr Leu Ile Gly Arg Thr Ala Ala Arg Ala Ser  
                   275                          280                          285  
 Pro Leu Leu Met Gly Ser Met Ser Gly Gln Met Asp Glu Glu Thr Met  
                   290                          295                          300  
 Leu Leu Ser Lys Thr Ser Leu Arg Met Val Ile Ser Gly Gln Met Gly  
 305                          310                          315                          320  
 Leu Ser Glu Arg Phe Gly Gln Ile Ser Phe Pro Thr Thr Asp Val Thr  
                           325                          330                          335  
 Phe Ser Thr Phe Asn Leu Ser Arg Ser Tyr Arg Leu Arg Ile Ser Leu  
                   340                          345                          350  
 Val Phe Glu Cys Ala Gly Lys Leu Phe Lys Phe Asp Ala Thr Asp Leu

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          355              360              365
Glu Val Gly Val Leu Ser Asn Ala Gly Met Thr Val Glu Lys Asp Gly
          370              375              380
Leu His Arg Val Ser Ala Asn Glu Gly Ser Ser His Ser Arg Gly Asn
385              390              395              400
Val Val His Gly Ser Asp Glu Gln Pro Pro Pro Tyr Leu Leu Ser Ser
          405              410              415
Gly Val Ser Glu Trp Ser Ser Glu Gly Lys Ser Ser Val
          420              425

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<210> 40067

<211> 212

<212> PRT

<213> A.fumigatus

<400> 40067

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Ser Cys Lys Val Pro Pro Glu Met Met Ser Pro Leu Val Ser Pro Arg
1              5              10              15
Asp Gly Asn Leu Phe Arg Ser Phe Gly Phe Gly Pro Gln Arg Pro Val
          20              25              30
Ser Tyr Pro Thr Val His His Ala Phe Ile Asp Cys Ala Lys Gln Tyr
          35              40              45
Pro Asp Thr Val Ala Val Cys Asp Leu Ser Arg Asn Lys Ser Val Glu
          50              55              60
Val Thr Tyr Gly Lys Leu Leu Gln Tyr Ala Gln Phe Val Ala Leu Arg
          65              70              75              80
Leu Gln Ser His Gly Val Val Pro Gly Ser Arg Ile Val Leu Ala Thr
          85              90              95
Lys Arg Ser Val Glu Met Val Ala Gly Ile Leu Gly Ile Leu Met Cys
          100              105              110
Gly Ala Gln Tyr Ile Pro Leu Asp Gly Ala Val Val Pro Asp Glu Thr
          115              120              125
Leu Ala His Ala Val Ile Gln Ser Gln Ser Ser Val Ala Leu Cys Thr
          130              135              140
Gly Thr Phe Arg Ser Arg Leu His Ser Leu Pro Gln Val Ser Ser Val
          145              150              155              160
Leu Val Leu Glu Asp Leu Leu Ala Glu Ala Glu His Thr Gly Ile Arg
          165              170              175
Ala Ser Thr Thr Pro Leu Ile Cys Glu Gly Asp Glu Asn Ser Gly Cys
          180              185              190
Tyr Val Ile Tyr Thr Ser Gly Gln Phe Val Ser Leu Cys Val Pro Asn
          195              200              205
Arg Thr Leu Ser
          210

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<210> 40068

<211> 132

<212> PRT

<213> A.fumigatus

<400> 40068

```

Val Ser Pro Gly Phe Leu Trp Asn Ser Cys Leu Asn Thr Ser Leu Leu
1              5              10              15
Asn Phe Ala Thr Leu Ala Arg Thr Asp Glu Ile Ala Phe Ala Ala Thr
          20              25              30
Gly Glu Pro Glu Gly His Leu Trp Arg Ala Asp Asp Asn Asp Tyr Ala

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17468

```

      35              40              45
Pro Asn Ser Ala His Ser Ala Arg Thr Asn Ala Ala Leu Ile Ser Leu
   50              55              60
Val Arg Asn Glu Glu Leu Glu Asp Leu Ile Ser Thr Met Lys Asp Leu
  65              70              75              80
Glu Arg Thr Trp Asn Ser Lys Phe Asn Tyr Pro Trp Ile Phe Phe Asn
      85              90              95
Asp Lys Pro Phe Thr Glu Glu Phe Lys Lys Arg Thr Gln Ala Glu Thr
      100              105              110
Lys Ala Lys Cys Tyr Tyr Gly Ile Cys Ala Gln Phe Tyr Phe Tyr Ser
      115              120              125
Met Lys Glu Thr
      130

```

<210> 40069  
 <211> 219  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40069
Lys Lys Pro Asp Lys Lys Cys Pro Glu Gln Val Pro Lys Glu His Trp
 1              5              10              15
Asp Pro Pro Glu Trp Ile Asn Met Glu Leu Phe Arg Glu Ser Ala Ala
      20              25              30
Ile Leu Thr Glu Gln Lys Ile Gln Tyr Ser Asp Lys Leu Ser Tyr His
      35              40              45
Gln Met Cys Arg Trp Asn Ser Gly Met Phe Tyr Lys His Pro Ala Leu
      50              55              60
Lys Asn Tyr Lys Tyr Tyr Trp Arg Val Glu Pro Lys Val Gln Phe Phe
 65              70              75              80
Cys Asn Val Asp Tyr Asp Val Phe Arg Phe Met Glu Asp Arg Asn Leu
      85              90              95
Thr Tyr Gly Phe Thr Ile Asn Leu Phe Asp Asp Pro Lys Thr Val Pro
      100              105              110
Thr Leu Trp Pro Glu Thr Lys Lys Phe Leu Ala Ala Asn Pro Ser Tyr
      115              120              125
Leu Ser Ser Asn Asn Met Met Gly Trp Leu Thr Asp Asp Ser Leu Arg
      130              135              140
Pro Asp His Thr Glu Ala Ala Asn Gly Tyr Ser Thr Cys His Phe Trp
 145              150              155              160
Ser Asn Phe Glu Ile Gly Asp Leu Asp Phe Phe Arg Gly Glu Gln Tyr
      165              170              175
Asp Ala Tyr Phe Asn His Leu Asp Arg Ala Gly Gly Phe Phe Tyr Glu
      180              185              190
Arg Trp Gly Asp Ala Pro Val His Ser Ile Gly Leu Gly Leu Phe Ala
      195              200              205
Asp Ala Ala Lys Val His Trp Tyr Val Thr Ser
      210              215

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<210> 40070  
 <211> 165  
 <212> PRT  
 <213> A.fumigatus

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<400> 40070
Arg Leu Arg Leu Arg Glu Leu Ile Pro Gly Ala Ser Phe Trp Pro Ser

```

## 17469

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1           5           10           15
Phe Glu Arg Asn Ala Ser Glu Gln Tyr Glu Gly Arg Val Cys Met Val
      20           25           30
Arg Ile Ser Asp Pro Asp Pro Ala Asn Pro Ser Val Phe Leu His Gly
      35           40           45
Met Asn Gly Ser Ser Leu Pro Ile Ala Val Ala His Gly Glu Gly Arg
      50           55           60
Ala Ser Phe Ala Ala Ala Pro Gly Thr Ser Ala Gln Asp Phe Val Arg
65           70           75           80
Gln Gly Leu Ala Pro Val Gln Tyr Val Asp Asn Ala Thr Leu Lys Pro
      85           90           95
Thr Met Lys Tyr Pro Phe Asn Pro Asn Gly Ser Pro Glu Gly Ile Ala
      100          105          110
Gly Ile Arg Ser Ala Asp Gly Arg Val Leu Ala Ile Met Pro His Pro
      115          120          125
Glu Arg Thr Val Met Gly Gly Ile Ala Ser Trp Leu Pro Pro Asn Ala
      130          135          140
Glu Glu Trp Gly Asp Ile Gly Pro Trp Gly Arg Val Phe Phe Ser Ala
145          150          155          160
Arg Arg Trp Val Gly
      165

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<210> 40071  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

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<400> 40071
Thr Leu Ser Ser Ser Pro Arg Glu Asp Ala Val Arg Pro Ser Gly Phe
1           5           10           15
Ile Arg Ala Pro Gln Phe Pro Arg Ser Arg Val Gln Val Pro Ala Ala
      20           25           30
Leu Ala Leu Asn Arg Pro Ser Phe Ser Thr Thr Thr Lys Arg Leu Ser
      35           40           45
Gly Ala His Glu Asp Glu Thr Tyr Glu Glu Phe Ser Ala Arg Tyr Ala
      50           55           60
Ile Thr Ile Ser Lys Pro Leu Asp Ala Ile
65           70

```

<210> 40072  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40072
Arg Val Ala Asn Cys Ile Gly Phe Leu Phe Cys Pro Arg Tyr Met Thr
1           5           10           15
Leu Ile Ile Ser Pro Leu Gln Arg Asn Leu Asn Asn Cys Phe Ala Tyr
      20           25           30
Asp Leu Val Pro Ser Val Glu Val Leu Ser Ala Ala Leu Arg Ala Ala
      35           40           45
Arg Arg Val Asn Asp Phe Pro Thr Ala Val Arg Ile Phe Glu Gly Ala
      50           55           60
Pro Leu Ala Phe Leu Leu Leu Tyr Thr His Arg His Ser Cys Ile Cys
65           70           75           80
Thr

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<210> 40073  
 <211> 873  
 <212> PRT  
 <213> A.fumigatus

<400> 40073

Asn	Thr	Ser	Arg	Leu	Lys	His	Leu	Lys	His	His	Val	Glu	Asp	Thr	Phe
1				5					10					15	
Lys	Ser	Ala	Ser	His	Val	Arg	Thr	Asp	Gln	Phe	Ala	Val	Ser	Lys	Gln
		20						25					30		
Leu	Glu	Gly	Leu	Gln	Glu	Lys	Phe	Gln	Val	Leu	Asn	Arg	Asp	Asp	Leu
		35					40					45			
Ala	Asp	Ala	Leu	Arg	Asn	Arg	Leu	Thr	Glu	Leu	Asp	Glu	His	His	Lys
	50				55						60				
Ser	Trp	Phe	Pro	Glu	Ile	Leu	Ser	Phe	Leu	Leu	Gln	Leu	Ser	Ser	His
65				70					75						80
Pro	Ala	Val	Phe	Ser	Arg	Val	Asp	Arg	Leu	Pro	Lys	Pro	Lys	Val	Asp
				85					90					95	
Glu	Gly	Ala	Lys	Gln	Leu	Ser	Trp	Thr	Glu	Met	Asp	Ala	Ser	Gly	Ser
		100						105					110		
Ala	Tyr	Cys	Asp	Glu	Asp	Ile	Trp	Glu	Cys	Val	Asp	Phe	Gly	Ala	Asp
	115						120					125			
Ser	Ser	Ser	Glu	Glu	Asp	Asp	Asp	Leu	Ala	Ser	Ser	Gly	Arg	Ser	Asp
	130					135						140			
Ala	Pro	Ile	Pro	Gln	Thr	Leu	Pro	Ser	Ser	Pro	Ile	Ala	Ser	Glu	Glu
145				150						155					160
Asp	Tyr	Glu	Ile	Pro	Asp	Glu	Val	Phe	Pro	Pro	Gly	Thr	Asp	Met	Ala
			165					170						175	
Leu	Val	Asp	Ser	Val	Arg	Glu	Ala	Gln	Phe	Trp	Lys	Pro	Arg	Lys	His
		180						185					190		
Ala	Glu	Ser	Asn	Gln	Val	Gly	Lys	Leu	Ser	Cys	Arg	Val	Ile	Thr	Glu
	195						200					205			
Leu	Gln	Ile	Val	Arg	Glu	Thr	Leu	Phe	Met	Leu	Gln	Gly	Leu	Pro	Thr
	210					215					220				
Ser	Leu	Phe	Trp	Arg	Leu	Asp	Asp	Ser	Ile	Glu	Val	Asp	Arg	Arg	Tyr
225				230						235					240
Thr	Leu	Ala	His	Thr	Ser	Ser	Glu	Ala	Leu	Ser	Ser	Leu	Leu	Arg	Ser
			245						250					255	
Phe	Ser	Met	Ile	Gly	Ala	Arg	Leu	Asp	Val	Val	Arg	Arg	Phe	Val	Lys
		260						265					270		
Ile	Thr	Gln	Val	Val	Pro	Tyr	Met	Gln	Thr	Phe	His	Arg	Cys	Val	Glu
	275						280					285			
Asp	Cys	Leu	Ser	Gln	Phe	Asp	Ala	Phe	Leu	Ser	Glu	Val	Gln	Thr	Gln
	290					295					300				
Cys	Ile	Ser	Gln	Gly	Ala	Pro	Phe	Ser	Val	Ser	Leu	Leu	Gln	Leu	Ala
305				310						315					320
Glu	Asp	Val	Arg	Thr	Ala	Ser	Ala	Met	Leu	Val	Leu	Leu	Ala	Asp	Leu
			325						330					335	
Ile	Ser	Asn	Leu	Glu	Tyr	Asp	Ser	Pro	Asp	Asp	Gly	Val	Arg	Cys	Leu
		340						345					350		
Asp	Leu	Leu	Tyr	Asp	Val	Val	Cys	Met	Lys	Gln	Ala	Thr	Gly	Asp	Asp
	355						360					365			
Val	Glu	Phe	Thr	Phe	Leu	Ala	Lys	Leu	Phe	Phe	Ser	Cys	Leu	Glu	Thr
	370					375					380				



Tyr Ile Arg Pro Ile Arg Arg Trp Met Glu Glu Gly Arg Leu Asp Pro  
 385 390 395 400  
 Arg Glu Gly Val Ser Phe Ile Ile Asp Gln Arg Asp Asp Lys Asp Leu  
 405 410 415  
 Arg Ser Leu Trp Arg Asp Trp Tyr Ala Val Asp Asp Ser Cys Gly Leu  
 420 425 430  
 Pro Gln Phe Met Arg Pro Val Ala Gln Lys Ile Phe Thr Thr Gly Lys  
 435 440 445  
 Ser Met Val Phe Leu Gln His Leu Asn Ala Leu Glu Thr Leu Gly Asp  
 450 455 460  
 Ser Lys Ala Ile Thr Leu Thr Leu Glu His Thr Tyr Gly Asp Glu Ser  
 465 470 475 480  
 Ser Ser Leu Leu Cys Leu Pro Phe Ala Ala Ile Cys Glu Ser Ala Ile  
 485 490 495  
 Gly Lys Leu Val Glu Ala Asn His Ser Phe Ala Ser Asp Leu Leu Arg  
 500 505 510  
 Lys Glu Leu Asp Gln Gln Cys Gly Leu Trp Arg Ser Leu Gln Ala Leu  
 515 520 525  
 Glu His Ile Tyr Leu Cys Lys Asp Leu Ser Val Ser Ala Ile Ile Asp  
 530 535 540  
 Asn Lys Val Phe Asp Leu Met Asp Arg Gly Arg Gly Thr Trp Ser Asp  
 545 550 555 560  
 Arg Tyr Leu Leu Thr Glu Leu Ala Gln Ser Ala Phe Ser Ser Met Pro  
 565 570 575  
 Phe Ile Asp His Ser Arg Ile Ile Val Arg Ser His Gln Asp Ser Gln  
 580 585 590  
 Gly Arg Ser Arg Ser Val Lys Gly Leu Lys Thr Ile Ser Phe Asp Tyr  
 595 600 605  
 Ile Leu Pro Trp Pro Ile Ala Asn Ile Ile Pro Lys Asp Ala Ile His  
 610 615 620  
 Arg Tyr Arg Arg Ile Ser Thr Phe Leu Met Gln Ile Arg Arg Ala Lys  
 625 630 635 640  
 His Leu Ile Val Lys Gln Arg Leu Lys Tyr Ala Asp Glu Thr Asp Glu  
 645 650 655  
 Phe Ser Arg Asp Arg Ser Ser Asn Ala Leu Ser Tyr Ser Leu Arg His  
 660 665 670  
 His Met Leu Trp Phe Leu Asn Thr Leu Tyr Ser His Ile Thr Asp Phe  
 675 680 685  
 Val Ile Ser Thr Ala Thr Glu Ser Leu Arg Lys Phe Leu Ser Ala Thr  
 690 695 700  
 Lys Asp Val Asp Ala Met Ile Ala Ala His Cys Ala Tyr Met Ser Ser  
 705 710 715 720  
 Leu Glu Asp Gln Cys Leu Leu Ser Ser Asn Leu Ser Pro Leu Tyr Gln  
 725 730 735  
 Thr Thr Ile Ser Leu Leu Asp Leu Cys Val Tyr Phe Ala Asp Ile Gln  
 740 745 750  
 Ala Thr Arg Tyr Gly Asp Lys Leu Ser Asp Gln Ser Thr Pro Thr Arg  
 755 760 765  
 His Ala Lys Phe Pro Gln Gly Arg Lys Ser Leu Ser Thr Thr His Gln  
 770 775 780  
 Ile Pro Tyr Thr Asp Asp Thr Ile Pro Ser Asp Asp Asp Asp Asp  
 785 790 795 800  
 Asp Thr Gln Asp Glu Ser Asp Glu Asp Val Gly Asn Thr Thr Gly Ile  
 805 810 815  
 Ser Phe Tyr Glu Thr Pro Tyr Ala His Arg Leu Arg Asp Ile Lys Gly  
 820 825 830

17472

Arg Phe Asp Gln Leu Leu Ala Phe Leu Thr Ser Gly Leu Lys Gly Val  
 835 840 845  
 Gly Arg Val Asp Gly Gln Ile Ser Trp Glu Ile Leu Ala Glu Lys Leu  
 850 855 860  
 Glu Trp Arg Lys Lys Arg Leu Ala Val  
 865 870

<210> 40074  
 <211> 189  
 <212> PRT  
 <213> A.fumigatus

<400> 40074  
 Ala Thr Tyr Ser Gly Arg Ala Arg Arg Pro Pro Cys Val Thr Asn Cys  
 1 5 10 15  
 Glu Pro Lys Pro Pro Ala Pro Gly Leu Gly Val Ala Pro Thr Met Leu  
 20 25 30  
 Arg Arg Ala Ala Ile Pro Val Ala Pro Pro Ala Ser Pro Ala Val Val  
 35 40 45  
 Pro Gly Ala Pro Ser Ala Gly Gly Asp Ser Ile Ser Arg Ala Ser Val  
 50 55 60  
 Lys Gly Arg Leu Ser Ser Ser Ser Ser Ala Ile Pro Ser Pro Phe Gly  
 65 70 75 80  
 Asn Ala Ser Pro Ser Ser Ser Ala Lys Lys Ser Ala Ser Tyr Ala Pro  
 85 90 95  
 Gly Ala Ala Ser Ser Ser Ala Ala Ala Ser Ser Ser Cys Leu Arg Leu  
 100 105 110  
 Ala Gln Asn Ala Ser Ser Ile Ser Pro Leu Thr Ala Val Arg Ser Cys  
 115 120 125  
 Arg Arg Leu Leu Asn Cys Arg Arg Pro Thr Ser Phe Phe Glu Pro Met  
 130 135 140  
 Arg Ala Leu Gly Leu Arg Lys Arg Arg Ser Ser Cys Leu Glu Leu Lys  
 145 150 155 160  
 Cys Leu Ser Ser Gly Ser Arg Phe Arg Pro Leu Val Phe His Cys Val  
 165 170 175  
 Leu Gly Arg Glu Met Val Glu Leu Glu Leu Ala Gly Val  
 180 185

<210> 40075  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

<400> 40075  
 Thr Phe Ser Ile Gly Ser Arg Ala Ala Ser Pro Ala His Ala Ser Pro  
 1 5 10 15  
 Pro Leu Pro Lys Pro Ala Ser Ser Leu Arg Ser Asn Pro Ala Arg Val  
 20 25 30  
 Pro Ser Ser Ser Ser Lys Pro Thr Thr Leu Ser Ser Ser Met Ile  
 35 40 45  
 Pro Glu Ala Ser Phe Pro Pro Arg Pro Ser Ser Leu Pro Phe Ser Leu  
 50 55 60  
 Arg His Ser Ser Gly Ala Leu Arg Lys Gly Ile Ser Ser Asp Pro Glu  
 65 70 75 80  
 Gly Ser Pro Arg Ser Lys Phe Leu Arg Asp Gly Gln Ile Ser Cys Ser  
 85 90 95

17473

Ser Arg Arg Val Lys Ser Gly Lys Asn Trp Phe Ala Ser Gly Val Met  
 100 105 110  
 Ser Ile Ser Thr Ser Ser Lys Ala Ser Ser Glu Asp Arg Phe Gly Ala  
 115 120 125  
 Gly Glu Glu Asp Phe Gly Cys Ser Gly Ser Ser Glu Pro Ser Arg Leu  
 130 135 140  
 Leu Ser Thr Ser Leu Gly Leu Ser Ser Thr Ala Ser Ser Leu Leu Ser  
 145 150 155 160  
 Lys Thr Ile Arg Pro Cys Pro Ser Ile Asp Arg  
 165 170

<210> 40076

<211> 918

<212> PRT

<213> A.fumigatus

<400> 40076

Gln Cys Arg Leu Val Arg Gln Ala Lys Asp Gln Cys Ser Phe Val Arg  
 1 5 10 15  
 Val Asn Cys Ser Asp Leu Glu Asp Gly Leu Leu Ser Tyr Val Gln Leu  
 20 25 30  
 Tyr Tyr Cys Thr Phe Ala Asn Ala Lys Pro Ile Ala Phe Ile Val Leu  
 35 40 45  
 Ile Leu Trp Leu Ser Leu Leu Phe Ser Thr Ile Gly Ile Ala Ala Ser  
 50 55 60  
 Asp Phe Leu Cys Ile Asp Leu Ser Thr Leu Ala Ser Ile Leu Gly Met  
 65 70 75 80  
 Ser Glu Ser Leu Thr Gly Val Thr Phe Leu Ala Phe Gly Asn Gly Ser  
 85 90 95  
 Pro Asp Val Phe Ser Thr Phe Ala Ala Met Arg Ser Asn Ser Gly Ser  
 100 105 110  
 Leu Ala Ile Gly Glu Leu Ile Gly Ala Ala Ser Phe Ile Thr Ser Val  
 115 120 125  
 Val Ala Gly Ser Met Ala Leu Val Arg Pro Phe Arg Val Ala Arg Arg  
 130 135 140  
 Ser Phe Val Arg Asp Val Gly Tyr Phe Val Ile Ala Val Ser Phe Ser  
 145 150 155 160  
 Met Val Leu Leu Ala Asp Gly Arg Leu His Ala Trp Glu Ser Ala Thr  
 165 170 175  
 Met Val Gly Leu Tyr Cys Phe Tyr Val Val Leu Val Val Thr Trp His  
 180 185 190  
 Trp Tyr Leu Val Arg Arg Arg Arg Ala Tyr Glu Arg Asn Leu Ala Ala  
 195 200 205  
 Arg Ala His Phe His Ile Pro Glu Asn Gln Glu Leu Glu Ile Glu Glu  
 210 215 220  
 Glu Val Glu Glu Asp Pro Gly Val Ala Ser Glu Ser Arg Ser Leu Leu  
 225 230 235 240  
 Arg Gly Pro Ser Thr Glu Asp Phe Asp Ala Leu Gln Gly Ser Asp Leu  
 245 250 255  
 Pro Ala Trp Lys Asp Gly Asp Glu Asp Asp Thr Arg Asn Arg Tyr  
 260 265 270  
 Leu Ala Glu Ile Ser Glu Asn Met His Val Phe Arg Pro Ser Thr Arg  
 275 280 285  
 Arg Arg Asn Thr Phe Asn Pro Ile Arg Pro Ser Leu Val Gly Ala Leu  
 290 295 300  
 Glu Phe Gln Thr Val Leu Ser Ser Leu Gln Lys Ser Arg Ser Ile Asn

305 310 315 320  
 Arg Gly Thr Pro Ile Gly His Asp Leu His Phe Asp Asn Pro Glu Leu  
 325 330 335  
 Ala Arg Ala Pro Ser Ala Leu Gln Asp Asn Leu Ser Val Ala Ser His  
 340 345 350  
 Pro Arg Thr Ser Arg Pro Ser Gly Asn Asn Ser Leu Leu Ser Pro Asn  
 355 360 365  
 Ser Ala Ala Gly Ser Ser Arg Val Arg Ala Val Ser Ala Asn Asp Ala  
 370 375 380  
 Ala Gly Leu Lys Leu Asp Thr Ser Ile Phe Asn Ser Gly Met Pro Gln  
 385 390 395 400  
 Pro Arg Val Thr Val Ser Arg Pro Ser Gly Thr Glu Glu Thr Phe Gln  
 405 410 415  
 Pro Gln Ile Ser Gln Ile Asp Gln Thr Ser Ala Thr Pro Ser Leu Ser  
 420 425 430  
 Ser Ser Gly Arg Pro Ser Arg Asp Ser Ser Ala Ala Arg Ser Ala Ser  
 435 440 445  
 Pro Asn Leu Leu Ala Pro Pro Gly Thr Phe His Ser Pro Asn Tyr Gln  
 450 455 460  
 Ala Asp Ser Pro Leu Thr Arg Ser Pro Leu Asp Val Ser Pro Leu Gly  
 465 470 475 480  
 Thr Ser Tyr Ala Thr Arg Gly Ala Glu Ile Ala Pro Glu Ser Pro Ser  
 485 490 495  
 Ser Pro Phe Pro Pro Phe Pro Asp Ala Ile Asp Phe Met Gln Ser Arg  
 500 505 510  
 Ala Pro Ser Ile Arg Leu Pro Ala Pro Thr Ser Pro Thr Glu Thr Leu  
 515 520 525  
 Gln Val His Asp Asn Asp Phe Glu Asp Glu Gly His Arg Ser Ser Ser  
 530 535 540  
 Pro Ala Lys Trp Ser Leu Leu Ser Pro Cys Cys Ile Ala Arg Ser Val  
 545 550 555 560  
 Met Pro Val Leu Phe Pro Thr Leu Val Asp Trp Gly Thr Lys Ser Phe  
 565 570 575  
 Leu Glu Arg Leu Leu Gly Val Val Ala Ala Pro Ser Val Leu Leu Leu  
 580 585 590  
 Thr Ile Thr Leu Pro Val Val Glu Pro Ala Gln Arg Glu Gly Asp Pro  
 595 600 605  
 Ala Pro Asn Ile Leu Pro Ser Ala Asp Gly Gly Glu Ser Ala Ala Pro  
 610 615 620  
 Arg Val Arg Leu Pro Glu Asp Ser Pro Leu Ile Arg Thr Leu Asp Arg  
 625 630 635 640  
 Asp Leu Gly Asp Gln Asp Met Ala Ser Leu Ala Gly Lys Ala Gln Ser  
 645 650 655  
 Leu Gln Glu Arg Arg Arg Trp Asp Ser Glu Leu Pro Ala Leu Glu Pro  
 660 665 670  
 Pro Thr Ser Ser Ala Ser Gln Pro Lys Asp Trp Cys Gln Trp Leu Leu  
 675 680 685  
 Tyr Ile Gln Leu Phe Ile Gly Pro Phe Phe Val Ala Leu Ile Thr Trp  
 690 695 700  
 Thr Thr Met Asp Pro Glu Met Lys Val Arg Asn Leu Phe Leu Pro Ser  
 705 710 715 720  
 Leu Cys Ser Leu Leu Phe Ser Phe Leu Cys Leu Val Cys Leu Val Val  
 725 730 735  
 Ser Thr Arg Asn Cys Arg Ser Ser Arg Pro Ser Ser Phe Trp Arg Pro  
 740 745 750  
 Phe Leu Ala Met Leu Gly Phe Val Val Ala Ile Phe Trp Ile Ala Thr

755                      760                      765  
 Ile Ala Thr Glu Val Val Ser Leu Leu Lys Thr Phe Gly Val Ile Leu  
 770                      775                      780  
 Asn Ile Ser Asp Ser Leu Leu Gly Leu Thr Val Phe Ala Val Gly Asn  
 785                      790                      795                      800  
 Ser Leu Gly Asp Leu Val Ala Asp Ile Thr Val Ala Arg Leu Gly Tyr  
 805                      810                      815  
 Pro Val Met Ala Leu Ser Ala Cys Phe Gly Gly Pro Met Leu Asn Ile  
 820                      825                      830  
 Leu Leu Gly Ile Gly Leu Gly Gly Leu Tyr Met Thr Val Lys Ala Lys  
 835                      840                      845  
 Pro Glu Thr Glu Ala Ala Arg Gln Gly Ser Tyr Asp Ile Ala Ile Ser  
 850                      855                      860  
 Lys Val Leu Val Ile Ser Gly Ala Thr Leu Leu Thr Thr Leu Leu Leu  
 865                      870                      875                      880  
 Leu Leu Ile Val Val Pro Leu Asn Asn Trp Arg Met Asp Arg Lys Ile  
 885                      890                      895  
 Gly Trp Gly Leu Ile Ile Leu Trp Ala Cys Ser Thr Leu Gly Asn Val  
 900                      905                      910  
 Ile Ala Glu Val Leu Asn  
 915

<210> 40077  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 40077  
 Arg Gly Leu Arg Met Phe Gly Val Leu Arg Ala Phe Ala Thr Ile Val  
 1                      5                      10                      15  
 His Val Ile Arg Ala Phe Leu Asn Ser Val Val Ala Ala Val Lys Asp  
 20                      25                      30  
 Asp Thr Ser Leu Pro Ile Tyr Arg Gln Val Ile Gln Glu Gln Ala Phe  
 35                      40                      45  
 Gly Pro Ser Leu Val Lys Ile Arg Gly Gly Phe Leu Glu  
 50                      55                      60

<210> 40078  
 <211> 218  
 <212> PRT  
 <213> A.fumigatus

<400> 40078  
 Glu Leu Lys Arg Leu Asn Gly Ala Leu Gly Cys Lys Gly Glu Asp Asp  
 1                      5                      10                      15  
 Ile Asn Glu Leu Arg Ile Pro Leu Asn Asp Asp Thr Gly Glu Lys Ala  
 20                      25                      30  
 Ala Arg Leu Glu Ala Arg Gln Ala Arg His Asp Arg Gln Met Asp Gln  
 35                      40                      45  
 Ile Lys Ala Ala Val Lys Thr Pro Met Pro Pro Arg Arg Tyr Thr Tyr  
 50                      55                      60  
 Asp Arg Ala Ser Ser Met Ser Pro Gly Thr Pro Arg Gly Ser Gly His  
 65                      70                      75                      80  
 Arg Arg Arg Glu Ser Asp Ala Asp Gly Arg Arg Ala Val Thr Pro Met  
 85                      90                      95  
 Lys Arg Val Pro Ile Leu Ala Asn Phe Glu Glu Trp Met Lys Met Ala

## 17476

100	105	110
Thr Asp Asn Lys Ile Asn Ala Asn Asn Ser Trp Asn Phe Ala Leu Ile		
115	120	125
Asp Tyr Phe His Asp Met Ser Leu Leu Lys Glu Gly Asp Gly Val Asn		
130	135	140
Phe Gln Lys Ala Ser Cys Thr Leu Asp Gly Cys Val Lys Ile Tyr Thr		
145	150	155
Ser Arg Val Asp Ser Val Ala Thr Glu Thr Gly Lys Leu Leu Ser Gly		
165	170	175
Leu Ala Asp Ser Arg Glu Lys Arg Gly Arg Asp Thr Gly Ala Glu Gly		
180	185	190
Glu Gly Asp Asp Glu Asp Asp Glu Glu Gly Glu Asp Gly Thr Ala Arg		
195	200	205
Lys Ser Arg Arg Lys Val Arg Arg Thr Val		
210	215	

&lt;210&gt; 40079

&lt;211&gt; 666

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40079

Leu His Gln Ala Gln Arg Thr His Glu Ala Thr Leu Ala Pro Ser Phe		
1	5	10
Ala Ala Leu Gln Leu Lys Lys Phe Glu Leu Glu Phe Ser Val Asp Pro		
20	25	30
Leu Phe Lys Lys Ala Ser Ala Asp Phe Asp Glu Gly Gly Ala Lys Gly		
35	40	45
Leu Leu Leu Asn His Leu Ser Ile Asp Gly Gln Gly Arg Ile Val Phe		
50	55	60
Asp Ser Ser Asp Asp Ala Val Glu Glu Ser Pro Asn Asp Val Asp Asn		
65	70	75
Ser Arg Glu Gly Ser Glu Asp Pro Glu His Pro Lys Ser Ser Ser Pro		
85	90	95
Ala Pro Lys Arg Ser Ser Asp Asp Ala Phe Glu Asp Val Glu Ile Asp		
100	105	110
Ile Thr Pro Leu Ala Asn Gln Phe Phe Pro Asp Leu Thr Arg Leu Asp		
115	120	125
Glu Gln Asp Ile Cys Pro Ser Leu Lys Asn Phe Asp Leu Gly Asp Pro		
130	135	140
Ser Gly Ser Leu Asp Ile Pro Phe Leu Lys Ala Pro Glu Glu Trp Arg		
145	150	155
Asn Glu Lys Gly Asn Glu Asp Gly Arg Gly Gly Asn Asp Ala Ser Gly		
165	170	175
Ile Met Leu Asp Asp Asp Asn Val Val Gly Phe Asp Asp Asp Gly		
180	185	190
Thr Leu Ala Gly Phe Asp Leu Ser Glu Asp Ala Gly Phe Gly Asn Gly		
195	200	205
Gly Glu Ala Trp Ala Gly Glu Ala Ala Leu Glu Pro Met Leu Lys Val		
210	215	220
His Arg Ile Asp Arg Asp Gly Asp Gln Asn Gln Asp Gly Gly Glu Ala		
225	230	235
Met Asp Asp Glu Asp Gly Tyr Ala Ile Ser Leu Thr His Gln Pro Asp		
245	250	255
Lys Arg Asp His Glu Asn Ile Leu Ser Tyr Phe Asp Asn Ala Leu Gln		
260	265	270

Lys Asn Trp Ala Gly Pro Glu His Trp Lys Ile Arg Arg Ile Lys Glu  
 275 280 285  
 Asn Ala Ala Ala Ile Ser Ala Thr Ala Ala Pro Lys Gln Arg Lys Glu  
 290 295 300  
 Lys Glu Pro Phe Glu Ile Asp Phe Ala Ala Pro Leu Asp Pro Thr Val  
 305 310 315 320  
 Ala Glu Leu Ile Tyr Thr Pro Ala Ser Ser Asn Ser Thr Ile Ser Leu  
 325 330 335  
 Pro Lys Thr Gln Trp Lys Thr Lys Gly Arg Asn Leu Leu Pro Asp Asp  
 340 345 350  
 Lys His Phe Asn Ser Arg Gln Leu Leu Arg Leu Phe Leu Lys Pro Lys  
 355 360 365  
 Ala Arg Met Gly Ser Lys Lys Leu Val Gly Leu Arg Gln Phe Asn Ser  
 370 375 380  
 Arg Arg Gln Asp Arg Thr Ala Val Asn Gly Glu Met Asp Glu Ala Phe  
 385 390 395 400  
 Trp Ala Ser Arg Lys Gln Glu Glu Glu Ala Ala Asp Glu Asp Ala  
 405 410 415  
 Ala Pro Gly Ala Tyr Asp Ala Asp Phe Phe Ala Asp Asp Asp Gly Leu  
 420 425 430  
 Ala Phe Pro Asn Gly Leu Gly Met Ala Asp Asp Asp Asp Asn Leu  
 435 440 445  
 Pro Phe Thr Asp Ala Arg Glu Met Leu Ser Pro Pro Ala Asp Gly Ala  
 450 455 460  
 Pro Gly Thr Thr Ala Gly Asp Ala Gly Gly Ala Thr Gly Ile Ala Ala  
 465 470 475 480  
 Leu Leu Asn Met Val Gly Ala Thr Pro Lys Pro Gly Ala Gly Gly Phe  
 485 490 495  
 Gly Ser Gln Leu Val Thr Gln Gly Gly Arg Arg Ala Arg Pro Glu Tyr  
 500 505 510  
 Val Ala Tyr Ala Arg Val Ala Lys Lys Ile Asp Val Arg Arg Leu Lys  
 515 520 525  
 Gln Glu Met Trp Lys Gly Met Gly Glu Arg Leu Ile Ala Ser Thr Gln  
 530 535 540  
 Phe Asp Ser Met Thr Gln Ala Ser Ala Gly Asn Gly Val Asn Gln Val  
 545 550 555 560  
 Leu Asn Thr Glu Thr Glu Pro Asp Ala Pro Pro Thr Pro Thr Pro Gln  
 565 570 575  
 Arg Pro Gln Pro Val Asp Ser Ser Glu Glu Pro Lys Glu Asp Arg Arg  
 580 585 590  
 Leu Arg Phe Thr Gln Val Met Asn Ser Leu Lys Thr Val Tyr Pro Pro  
 595 600 605  
 Glu Lys Leu Arg Asp Ile Ser Thr Ser Phe Gly Phe Ile Cys Leu Leu  
 610 615 620  
 His Leu Ala Asn Glu Gln Gly Leu Ile Leu Gln Asn Asp Gly Leu Ser  
 625 630 635 640  
 Glu Gly Ala Gly Ala Gly Ser Leu Glu Glu Ile Tyr Ile Ala Lys Asp  
 645 650 655  
 Val Asn Ala Val Ile Asp Glu Ala Ser Ala  
 660 665

&lt;210&gt; 40080

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40080

Phe Tyr Phe Gln Pro Ala Leu Thr Met Glu Lys Glu Pro Leu Lys Ser  
 1 5 10 15  
 Thr Phe Pro Ser Val Ser Tyr Arg Gly Met Leu Lys Leu Glu Glu Gln  
 20 25 30  
 Phe Arg Asn Ala Ser Ser Ser Thr Arg Thr Asp Met Gln Phe Asp Ser  
 35 40 45  
 Leu Val Ser Pro Thr Asn Ser Lys Val Ala Ile Pro Arg Ile Ala Arg  
 50 55 60  
 Ser Gln Ser Arg Asn Ala Val Arg Arg Ala Lys Arg Ala Cys Leu Gly  
 65 70 75 80  
 Cys Arg Gln Lys Lys Ala Lys Cys Asp Gly His Gln Pro Cys His Gln  
 85 90 95  
 Cys Val Leu Phe Glu Ala Ala Cys Glu Tyr Ala Glu Gly Lys Glu Asp  
 100 105 110  
 Arg Ile Lys Arg  
 115

&lt;210&gt; 40081

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40081

Ser Arg Ile Ser Met Glu Ile Gln Ser Met Ser Cys Cys Cys Asn Asp  
 1 5 10 15  
 Arg Asp Ile Gln His Gln Glu Val Arg Thr His Gln Gly Val Gln Thr  
 20 25 30  
 His Gln Glu Val Arg Pro His Gln Glu Val Trp Thr Asn Gln Glu Val  
 35 40 45  
 Arg Pro His Gln Glu Val Arg Pro His Gln Asp Pro Gly Ala Leu Thr  
 50 55 60  
 Leu Ser Ser Ala Leu Thr Leu Pro Ser Ala Phe Thr His Pro Gly Ala  
 65 70 75 80  
 Leu Thr Leu Pro Ser Ala Leu Arg Leu Ser Ser Ala Leu Ala Leu Pro  
 85 90 95  
 Asn Ala Phe Thr Leu Pro Ser Ala Phe Thr Leu Ser Ser Ala Phe Thr  
 100 105 110  
 Leu Pro Ser Ala Leu Thr Leu Pro Ser Ala Phe Thr Leu Pro Ser Ala  
 115 120 125  
 Phe Thr Leu Pro Gly Ala Leu Ala Leu Pro Ser Ala Leu Ala Leu Pro  
 130 135 140  
 Gly Ala Leu Thr Leu Pro Ser Ala Leu Thr Leu Pro Ser Ala Phe Thr  
 145 150 155 160  
 Leu Pro Gly Ala Leu Thr Leu Ser Ser Ala Leu Ala Leu Pro Ser Ala  
 165 170 175  
 Leu Ala Leu Ser Ser Ala Phe Thr Leu Pro Gly Ala Leu Ala Leu Pro  
 180 185 190  
 Gly Ala Leu Thr Leu Pro Ser Ala Phe Thr Leu Pro Ser Ala Leu Ala  
 195 200 205  
 Leu Lys Ile Val Ser Phe Leu Ile Ser Gly Val Arg Ile Ile Leu Leu  
 210 215 220  
 Tyr Pro Thr Gly Glu Lys Val Val Pro Gly Pro Gly Pro Ala Phe  
 225 230 235

&lt;210&gt; 40082



<211> 224  
 <212> PRT  
 <213> A.fumigatus

<400> 40082

Arg	Leu	Val	Ile	Asn	Ile	Phe	Trp	His	Arg	Gln	Val	Gly	Ser	Leu	Val
1				5					10					15	
Tyr	Leu	Trp	Lys	Ser	Asn	Pro	Cys	His	Ala	Val	Val	Thr	Thr	Gly	Ile
			20					25					30		
Phe	Asn	Thr	Arg	Lys	Cys	Glu	His	Thr	Arg	Glu	Cys	Lys	His	Thr	Lys
		35					40					45			
Lys	Cys	Asp	His	Thr	Lys	Lys	Cys	Gly	Gln	Thr	Lys	Lys	Cys	Asp	His
	50					55					60				
Thr	Lys	Lys	Cys	Asp	His	Thr	Arg	Thr	Leu	Val	His	Leu	His	Ser	Leu
65					70				75						80
Val	His	Leu	His	Ser	Leu	Val	His	Leu	His	Thr	Leu	Val	His	Leu	His
			85					90					95		
Ser	Leu	Val	His	Leu	Asp	Ser	Leu	Val	His	Leu	His	Ser	Leu	Met	His
		100					105						110		
Leu	His	Ser	Leu	Val	His	Leu	His	Ser	Leu	Val	His	Leu	His	Ser	Leu
		115				120						125			
Val	His	Leu	His	Ser	Leu	Val	His	Leu	His	Ser	Leu	Val	His	Leu	His
	130					135						140			
Ser	Leu	Val	His	Leu	His	Ser	Leu	Val	His	Leu	His	Phe	Leu	Val	His
145					150				155						160
Leu	His	Ser	Leu	Val	His	Leu	His	Ser	Leu	Val	His	Leu	His	Ser	Leu
			165					170						175	
Val	His	Leu	His	Ser	Leu	Val	His	Leu	His	Ser	Leu	Val	His	Leu	His
		180					185					190			
Ser	Leu	Val	His	Leu	His	Ser	Leu	Val	His	Leu	His	Phe	Leu	Val	His
	195					200						205			
Leu	His	Ser	Leu	Val	His	Leu	His	Ser	Leu	Val	His	Leu	His	Ser	Lys
	210					215						220			

<210> 40083  
 <211> 201  
 <212> PRT  
 <213> A.fumigatus

<400> 40083

Tyr	Tyr	Phe	Glu	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu
1				5					10					15	
Cys	Lys	Cys	Thr	Arg	Lys	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr
			20					25					30		
Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys
		35					40					45			
Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu
	50					55					60				
Cys	Lys	Cys	Thr	Arg	Lys	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr
65					70				75						80
Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys
			85					90					95		
Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu
		100						105					110		
Cys	Lys	Cys	Ile	Arg	Glu	Cys	Lys	Cys	Thr	Arg	Glu	Ser	Lys	Cys	Thr
	115						120						125		

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Arg Glu Cys Lys Cys Thr Arg Val Cys Lys Cys Thr Arg Glu Cys Lys
 130                      135                      140
Cys Thr Arg Glu Cys Lys Cys Thr Arg Val Leu Val Trp Ser His Phe
145                      150                      155                      160
Leu Val Trp Ser His Phe Leu Val Cys Pro His Phe Leu Val Trp Ser
                      165                      170                      175
, His Phe Leu Val Cys Leu His Ser Leu Val Cys Ser His Phe Leu Val
                      180                      185                      190
Leu Asn Ile Pro Val Val Thr Thr Ala
                      195                      200

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<210> 40084

<211> 258

<212> PRT

<213> A.fumigatus

<400> 40084

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Glu Ile Pro Val Leu Ala Asp Lys Gly Ile Met Val Leu Ile Glu Val
1      5      10      15
Ile Lys Gly Leu Thr Thr Gly Leu Cys Ile Ile Ser His Ile Leu Ser
20     25     30
Arg Ile Ser Trp Thr Asn Gln Lys Ala Gly Pro Gly Pro Gly Thr Thr
35     40     45
Phe Ser Pro Val Gly Tyr Ser Lys Ile Met Arg Thr Pro Asp Ile Arg
50     55     60
Asn Asp Thr Ile Leu Ser Ala Ser Ala Leu Gly Ser Val Asn Ala Leu
65     70     75     80
Gly Ser Val Ser Ala Pro Gly Ser Ala Ser Ala Pro Gly Ser Val Asn
85     90     95
Ala Leu Glu Ser Ala Ser Ala Leu Gly Ser Ala Ser Ala Leu Glu Ser
100    105    110
Val Ser Ala Pro Gly Ser Val Asn Ala Leu Gly Ser Val Ser Ala Leu
115    120    125
Gly Ser Val Ser Ala Pro Gly Ser Ala Ser Ala Leu Gly Ser Ala Ser
130    135    140
Ala Pro Gly Ser Val Asn Ala Leu Gly Ser Val Asn Ala Leu Gly Ser
145    150    155    160
Val Ser Ala Leu Gly Ser Val Asn Ala Leu Glu Ser Val Asn Ala Leu
165    170    175
Gly Ser Val Asn Ala Leu Gly Ser Ala Ser Ala Leu Glu Ser Leu Ser
180    185    190
Ala Leu Gly Ser Val Ser Ala Pro Gly Cys Val Asn Ala Leu Gly Ser
195    200    205
Val Ser Ala Leu Glu Ser Val Ser Ala Pro Gly Ser Trp Cys Gly Arg
210    215    220
Thr Ser Trp Cys Gly Arg Thr Ser Trp Phe Val His Thr Ser Trp Cys
225    230    235    240
Gly Arg Thr Ser Trp Cys Val Cys Thr Pro Trp Cys Val Arg Thr Ser
245    250    255

Trp Cys

```

<210> 40085

<211> 180

<212> PRT

<213> A.fumigatus

17481

<400> 40085

```

Pro Arg Met Leu Asp Asn Glu Tyr His Asp Met Asp Gln Thr Leu Val
1           5           10           15
Leu Asn Leu Asn Gln Ala Ala Ile Asn Gly Ile Arg Ala Ala Gly Ala
20           25           30
Thr Ser Gln Tyr Ile Phe Val Glu Gly Asn Ser Trp Thr Gly Ala Trp
35           40           45
Thr Trp Ala Asp Val Asn Asp Asn Leu Lys Ala Leu Thr Asp Pro Gln
50           55           60
Asp Lys Ile Val Tyr Glu Met His Gln Tyr Leu Asp Ser Asp Gly Ser
65           70           75           80
Gly Thr Ala Glu Ser Cys Val Ser Thr Thr Ile Gly Lys Glu Arg Val
85           90           95
Ser Ala Ala Thr Lys Trp Leu Lys Asp Asn Gly Lys Val Gly Ile Ile
100          105          110
Gly Glu Phe Ala Gly Gly Val His Asp Gln Cys Arg Thr Ala Ile Ser
115          120          125
Gly Met Leu Glu Tyr Leu Ala His Asn Thr Asp Val Trp Lys Gly Ala
130          135          140
Leu Trp Trp Ala Ala Gly Pro Trp Trp Gly Asn Tyr Met Phe Asn Met
145          150          155          160
Glu Pro Pro Thr Gly Ala Ala Tyr Val Gly Met Leu Asp Ile Leu Glu
165          170          175
Pro Tyr Leu Gly
180

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<210> 40086

<211> 110

<212> PRT

<213> A.fumigatus

<400> 40086

```

Glu Lys Tyr Thr Ala Ala Asp Asn Ile Lys Gly Lys Glu Phe Ile Phe
1           5           10           15
Pro Asp Pro Ser Thr Ile Ser Thr Leu Ile Gly Lys Gly Met Asn Ile
20           25           30
Phe Arg Ile Gln Phe Leu Met Glu Arg Leu Val Pro Ser Ser Met Thr
35           40           45
Gly Ser Tyr Asn Glu Glu Tyr Leu Ala Asn Leu Thr Ser Val Gly Leu
50           55           60
Ser Ser Ser Met Leu Asp Cys Met Arg Leu Thr Arg Pro Gly Cys Gly
65           70           75           80
Arg Cys His Gln Gly Arg Ile Leu Cys Tyr Phe Gly Pro Thr Gln Leu
85           90           95
Trp Gln Ile Val Ser Asn Ala Arg His Thr Val Asp Leu Phe
100          105          110

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<210> 40087

<211> 504

<212> PRT

<213> A.fumigatus

<400> 40087

```

Thr Asp Gly Asp Tyr Val Phe Thr Ala His Asp Ala Lys Leu Ser Leu
1           5           10           15

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His	Val	Val	Glu	Asn	Ser	His	Ser	Val	Asn	Thr	Ile	Tyr	Leu	Gln	Gln
			20					25					30		
Leu	Val	Thr	Gly	Val	Lys	Ser	Ile	Leu	Phe	Ser	Ala	Asp	Thr	Ile	Ala
		35					40					45			
Leu	Ser	Ser	Ser	His	Ile	Leu	Ile	Ala	Ala	Gly	Thr	Val	Phe	Gly	Glu
	50					55					60				
Ile	Ile	Val	Trp	Ser	Cys	Phe	Val	Asp	Asp	Asp	Glu	Ser	Gln	Pro	Leu
65					70					75					80
Thr	Leu	Asn	Ala	Val	Gly	Ser	Ile	His	His	Phe	Phe	Thr	Gly	His	Glu
				85						90				95	
Gly	Ser	Ile	Phe	Gly	Val	Arg	Met	Ser	Pro	Pro	Ile	Ser	Ser	Leu	Pro
			100					105					110		
Gly	Gly	Gln	Pro	Gly	Arg	Leu	Leu	Ala	Ser	Cys	Ser	Asp	Asp	Arg	Thr
		115					120					125			
Val	Arg	Val	Trp	Asp	Ile	Thr	Asp	Cys	Glu	His	Ala	Ser	Arg	Gln	Asp
	130					135					140				
Pro	Ser	Ala	Tyr	Ser	Thr	Asp	Gly	Phe	Glu	Leu	Arg	Thr	Thr	Gly	Phe
145					150					155					160
Gly	Ala	Val	Ala	Thr	Thr	Asp	Asp	Lys	Ser	Gly	Ser	Glu	Ser	Cys	Val
				165				170						175	
Ala	Lys	Ala	Phe	Gly	His	Ser	Ala	Arg	Ile	Trp	Gly	Val	His	Phe	Val
			180					185					190		
Pro	Thr	Ala	Val	Glu	Asn	Gln	Ser	Gln	Leu	Thr	Ile	Val	Ser	Arg	Gly
		195					200					205			
Glu	Asp	Ala	Lys	Cys	Ile	Leu	Trp	Asp	Leu	Ser	Trp	Asn	Leu	Ser	Pro
	210					215					220				
Thr	His	Lys	Thr	Glu	Phe	Lys	Leu	Thr	Gln	Ser	Ser	Ser	Pro	His	Leu
225					230					235					240
His	Asn	Gly	Lys	His	Ile	Trp	Ser	Leu	Asp	Leu	Cys	Ser	Ser	Gly	Thr
				245					250					255	
Gln	Thr	Thr	Ile	Tyr	Thr	Gly	Gly	Ala	Asp	Ser	Ser	Val	Arg	Ser	Phe
			260					265					270		
Lys	Ile	Asp	Val	Asp	Asp	Thr	Ala	Ser	Ile	Ser	Leu	Pro	Asn	Arg	Asp
		275					280					285			
Asn	Arg	Ile	Ile	Phe	Ser	Ser	Asp	Pro	Gln	Asn	Thr	Val	Leu	Ala	Arg
	290					295					300				
Glu	Arg	Ser	Phe	Lys	Ala	Phe	Ala	Phe	Ile	Ser	Pro	Glu	Leu	Phe	Val
				310						315					320
Ala	Thr	Thr	Phe	Gln	Gly	Glu	Ile	Gln	Leu	Cys	Ser	Ile	Arg	Thr	Asp
				325					330					335	
Ser	Gly	Lys	Gly	Gln	Phe	Ile	Phe	Lys	Glu	Thr	Leu	His	Val	Glu	Asp
			340					345					350		
Asp	Leu	Arg	Ser	Phe	Ser	Val	Val	Ser	Ser	Leu	Pro	Gln	Lys	Gly	Val
		355					360					365			
Ala	Leu	Leu	Gly	Asn	Ala	Arg	Gly	Leu	Ile	Arg	Leu	Tyr	Thr	His	Gly
	370					375					380				
Thr	Gly	Leu	Leu	Asn	Gln	Ile	Val	Gln	Ala	Asp	Gly	Arg	Pro	Leu	Gln
385					390					395					400
Leu	Tyr	Phe	Leu	Gly	Tyr	Asp	Thr	Asn	Thr	Ser	Glu	Ala	Leu	Ala	Thr
				405					410					415	
Leu	Thr	Phe	Ala	Ile	Ser	Tyr	Ala	Thr	Leu	Arg	Lys	Ala	Asp	Leu	Phe
			420					425					430		
Gln	Val	Thr	Met	Gln	Ala	Asn	Thr	Glu	Pro	Lys	Val	Val	Lys	Thr	Glu
		435					440					445			
Leu	Ser	Leu	Pro	His	Gly	Met	Glu	Val	Ser	Cys	Ala	Ser	Tyr	Ile	Ser
	450					455					460				

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Ser Gln Tyr Leu Ala Leu Gly Ile Lys Ser Gly Ala Leu Ile Val Ser  
 465 470 475 480  
 Arg Thr Ala Arg Asn Trp Cys Val Ser Pro Ala Asp His Leu Arg Ser  
 485 490 495  
 Glu Ser Pro Trp Ser Arg Gly Arg  
 500

<210> 40088  
 <211> 329  
 <212> PRT  
 <213> A.fumigatus

<400> 40088  
 Ile Trp His Pro Asp Asn Leu His Lys Leu Arg Leu Leu Asn Val Glu  
 1 5 10 15  
 Glu Lys Pro Phe Lys Arg Ile Ser Lys Arg Leu Leu Asn Pro Ser Ser  
 20 25 30  
 Leu Val Ile Ser Asn Ala Thr Ile Leu Pro Thr Pro Pro Pro Asp Glu  
 35 40 45  
 Thr Glu Glu Asn Ala Thr Ala Ala Ala Glu Ala Glu Lys Gln Lys Arg  
 50 55 60  
 Leu Asp Glu Trp Arg Asn Phe Arg Glu Asp Val Thr Leu Asp Phe Ala  
 65 70 75 80  
 Ser Phe Glu Gly Ser Ile Ala Arg Ile Gln Phe Leu Leu Thr Ser Asn  
 85 90 95  
 Glu Arg Glu Arg Glu Arg Tyr Ala Ala Glu Lys Leu Arg Ile Leu Ser  
 100 105 110  
 Thr Met Gln Ala Val Arg Glu Asn Thr Ala Glu Leu Arg Val Gln Leu  
 115 120 125  
 Glu Glu Ala Gln Arg Leu Leu Ala Leu Arg Lys Ser Tyr Asp Glu Leu  
 130 135 140  
 Ala Glu Lys Ile Thr Ser Asn Arg Leu Leu Lys Pro Arg Glu Asp Gln  
 145 150 155 160  
 Gln Ala Asn Leu Gln Lys Leu Gln Ala Glu Ile Ala Asp Leu Glu Asn  
 165 170 175  
 Glu Ser Lys Glu Tyr Ala Lys Thr Trp Ala Glu Arg Arg Glu Gln Phe  
 180 185 190  
 Gly Arg Ile Val Glu Glu Gly Met Gln Leu Arg Arg Leu Ile Arg Asp  
 195 200 205  
 Glu Lys Glu Glu Val Glu Arg Arg Glu Gly Met Gln Glu Gly Glu Asp  
 210 215 220  
 Gly Asp Glu Gly Asp Val Pro Ser Lys Gly Lys Ser Ser Gly Ala Asn  
 225 230 235 240  
 Thr Pro Arg Pro Glu Ser Asn Thr Ile Thr Pro Ser Gln His Ser Gln  
 245 250 255  
 Asp Glu Ala Gly Arg Pro Ser Ala Gly Leu His Ala Glu Arg Ile Ser  
 260 265 270  
 Ala Thr Thr Gly Ala Ala Ser Pro Leu Arg Asn Val Ser Thr Ala Asp  
 275 280 285  
 Gln Glu Asp Thr Asn Met Asp Glu Gly Glu Val Thr Gly Glu Asp Gly  
 290 295 300  
 Ser Glu His Pro Asp Glu Leu Glu Glu Gly Glu Ala Glu Pro Asp Asp  
 305 310 315 320  
 Lys Thr Ala Asp Arg Met Asp Thr Thr  
 325

17484

<210> 40089  
<211> 78  
<212> PRT  
<213> A.fumigatus

<400> 40089  
Arg Leu Ile His Trp Ile Gln Ile Phe Asp Met Gln Leu Tyr Leu Phe  
1 5 10 15  
Ile Met Gly Pro Tyr Ile Phe Pro Arg Leu Trp Leu Cys Ser Arg Thr  
20 25 30  
Val Ile Val Leu Pro Ile Tyr Asn Asp Leu Val Val Asp Glu Gln Arg  
35 40 45  
Ile Gly Gln Arg Leu Gly Gln Met Gln Lys Ala Met Val Ser Glu Arg  
50 55 60  
Leu His Val Gly Thr Lys Val Gly Ala Ser Lys Arg Ala Tyr  
65 70 75

<210> 40090  
<211> 79  
<212> PRT  
<213> A.fumigatus

<400> 40090  
Ile Thr Asp Lys Leu Cys Ser Gln Ile Val Asn Met Ala Pro Arg Ser  
1 5 10 15  
Gln Leu Glu Ile Ala Thr Ser Ser Val Glu Arg Leu Val Lys Glu Glu  
20 25 30  
Ala Ser Tyr His Arg Glu Leu Gln Gln Gln Thr Glu Arg Ile Gln Lys  
35 40 45  
Leu Glu Ser Gln Glu Pro Gly Glu Asp Glu Asn Arg Glu Tyr Met Leu  
50 55 60  
Lys Gln Glu Val Gly Leu Met Arg Ile Lys Ala Ser Pro Gln Phe  
65 70 75

<210> 40091  
<211> 205  
<212> PRT  
<213> A.fumigatus

<400> 40091  
Arg Asn Val Leu Leu Thr Pro Gln Ala Arg Pro Gln Arg Arg Pro Asn  
1 5 10 15  
Met Ser Arg Gln Gln Ala Ala Glu Lys Ala Leu His Asp Gln Met Asn  
20 25 30  
Ile Leu Pro Ile Val Gln Leu Leu Val Val Phe Ala Gly Leu Ala Val  
35 40 45  
Ser Leu Leu Ile Thr Phe Val Asp Gln Asn Gly Ile Ser Val Thr Leu  
50 55 60  
Pro Thr Ile Ala Lys Asp Leu Asn Ala Glu Asn Thr Ile Ser Trp Ala  
65 70 75 80  
Gly Thr Ser Ser Leu Ile Ala Asn Thr Met Phe Ser Val Leu Tyr Gly  
85 90 95  
Arg Leu Ser Asp Ile Phe Gly Arg Lys Ile Val Tyr Leu Ser Ala Leu  
100 105 110  
Ala Leu Leu Cys Ile Ala Asp Leu Leu Cys Gly Leu Ser Gln Asn Ala  
115 120 125

## 17485

Ala	Met	Phe	Tyr	Val	Phe	Arg	Gly	Leu	Ala	Gly	Ile	Ala	Gly	Gly	Gly
130						135					140				
Val	Gly	Ser	Leu	Thr	Met	Ile	Ile	Val	Ser	Asp	Ile	Val	Thr	Leu	Glu
145					150					155					160
Asn	Arg	Gly	Lys	Tyr	Gln	Gly	Ile	Leu	Gly	Ala	Ser	Met	Gly	Leu	Gly
			165						170					175	
Asn	Val	Ile	Gly	Pro	Phe	Ile	Ala	Gly	Ala	Phe	Ile	Met	His	Ser	Thr
			180					185					190		
Trp	Arg	Gly	Leu	Leu	Trp	Leu	Ile	Ser	Pro	Leu	Ala	Ala			
	195						200					205			

&lt;210&gt; 40092

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40092

Val	Thr	Ala	Val	Met	Thr	Glu	Met	Tyr	Ser	Gly	Leu	His	Val	Gly	Gln
1			5						10					15	
Arg	Phe	Ala	Ser	Leu	Glu	Glu	Phe	Lys	Ser	Val	Val	Arg	Ser	Ile	Ser
			20					25					30		
Val	Arg	Gln	His	Trp	Glu	Leu	Arg	Val	Thr	Arg	Ser	Asn	Lys	Lys	Ser
		35					40					45			
Val	Val	Ile	Gly	Cys	Arg	Ser	Ser	Ala	Asn	Cys	Tyr	Phe	Arg	Val	Val
	50					55					60				
Cys	Arg	Ala	Asn	Lys	Asn	Glu	Thr	Tyr	Ile	Thr	Ser	Leu	Gln	Asp	Ser
65					70					75					80
His	Ser	Cys	Arg	Arg	His	Ala	Ala	Ser	Pro	Gly	Thr	Thr	Pro	Ala	Arg
				85					90					95	
Ser	Glu	Ala	Ser	His	Val	Arg	Phe	Leu	Leu	Asn	Glu	Ile	Pro	Lys	Leu
			100					105					110		
Phe	Asp	Leu	Ser	His	Lys	Ile	Lys	Gly	Gln	Asp	Val	Val	Asp	Ala	Val
		115					120					125			
Lys	Arg	Tyr	His	Gly	Tyr	Asp	Ile	Ser	Ile	Arg	Gln	Ala	His	Arg	Ala
		130					135					140			
Leu	Thr	Lys	Leu	Gln	Pro	Arg	Leu	Pro	His	His	Gln	Ile	Glu	Glu	Pro
145					150						155				160
Arg	Asp	Arg	Gly	Leu	Asn	Gly	Asp	Asp	Gln	Pro	Gly	Pro	Gln	Val	Pro
				165					170					175	
Ala	Thr	Pro	Ser	Val	Asn	Gly	Ser	Val	Tyr	Ser	Ala	Ile	Ser	Glu	Gln
			180					185					190		
Arg	Trp	Ile	Ser	Asp	Asn	Val	His	Gln	Ser	Gly	Phe	Leu	Val	Lys	Arg
	195					200						205			
Pro	Val	Glu	Leu	Thr	Ala	Gly	Pro	Ser	His	Glu	Ser	Pro	Gln	Pro	Ala
	210					215						220			
Glu	Leu	Ala	Arg	Asp	Ala	Val	Gln	Pro	Gln	Ile	Pro	Ser	Gln	Arg	Pro
225					230					235					240
Gln	Pro	Val	His	Gly	Ser	Ser	Gln	Val	Gln	Leu	Pro	Ser	Gly	Ala	Gln
				245					250					255	
Pro	Gln	Glu	Gln	Ile	Ala	Leu	Asn	Asp	Gly	Leu	Arg	Thr	Ser	Asp	Glu
			260					265					270		
Gln	Gln	Ser	Asp	Tyr	Ile	Leu	Ser	Ala	Pro	Thr	Val	Leu	Ser	Ala	Pro
		275					280					285			
Gln	Gln	Gly	Pro	Ser	Gln	Ser	Pro	Gln	Gln	Pro	Arg	Gly	Ser	Gly	His
	290					295					300				
Pro	Ser	Ala	Pro	Gln	Met	Ile	Leu	Thr	Ser	Phe	Lys	Ile	Glu	Phe	Thr

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<210> 40093
<211> 330
<212> PRT
<213> A.fumigatus
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Leu	Leu	Gly	Ile	Val	Arg	Leu	Ile	Phe	Pro	Asp	Asn	Glu	Tyr	His	Asp
1				5					10					15	
Met	Asp	Gln	Thr	Leu	Val	Leu	Asn	Leu	Asn	Gln	Ala	Ala	Ile	Asn	Gly
			20					25					30		
Ile	Arg	Ala	Ala	Gly	Ala	Thr	Thr	Gln	Tyr	Ile	Phe	Val	Glu	Gly	Asn
		35					40					45			
His	Tyr	Ser	Gly	Ala	Trp	Thr	Trp	Ala	Asp	Asn	Asn	Asp	Asn	Leu	Lys
	50					55					60				
Gly	Leu	Lys	Asp	Pro	Glu	Asp	Lys	Ile	Val	Phe	Glu	Met	His	Gln	Tyr
65					70					75					80
Leu	Asp	Ser	Asp	Gly	Ser	Gly	Thr	Ser	Glu	Ser	Cys	Val	Ser	Ser	Thr
				85					90					95	
Ile	Gly	Gln	Glu	Arg	Val	Glu	Ser	Ala	Thr	Gln	Trp	Leu	Lys	Asp	Asn
			100					105					110		
Ser	Leu	Lys	Gly	Phe	Leu	Gly	Glu	Phe	Ala	Gly	Gly	Val	Asn	Ser	Gln
		115					120					125			
Cys	Glu	Thr	Ala	Val	Glu	Gly	Leu	Leu	Ser	Tyr	Met	Ser	Glu	Asn	Ser
	130					135					140				
Asp	Val	Trp	Leu	Gly	Ala	Glu	Trp	Trp	Ser	Ala	Gly	Pro	Met	Trp	Gly
145					150					155					160
Asn	Tyr	Met	Tyr	Ser	Leu	Glu	Pro	Ser	Thr	Gly	Pro	Ala	Tyr	Ser	Ser
				165					170					175	
Tyr	Leu	Pro	Ile	Leu	Lys	Asn	Tyr	Phe	Val	Ser	Gly	Thr	Ser	Ser	Ser
			180					185					190		
Ser	Ser	Ser	Ser	Ser	Ser	Ile	Thr	Ser	Ser	Thr	Thr	Ser	Val	Asn	Asn
		195					200					205			
Pro	Thr	Thr	Ser	Ala	Thr	Thr	Gln	Ala	Gln	Val	Val	Asn	Thr	Ser	Ser
	210					215					220				
Ser	Ser	Pro	Thr	Pro	Ser	Pro	Thr	Ser	Val	Pro	Ala	Ala	Glu	Ala	Pro
225					230					235					240
Ala	Pro	Thr	Pro	Thr	Glu	Ala	Ala	Lys	Thr	Ser	Ser	Ala	Ala	Ser	Thr
				245					250					255	
Thr	Pro	Thr	Thr	Ala	Ala	Ala	Ser	Thr	Thr	Ala	Phe	Ala	Cys	Arg	Ala
			260					265					270		
Pro	Glu	Pro	Ala	Asp	Glu	Thr	Thr	Leu	Pro	Ser	Ala	Thr	Pro	Thr	Thr
		275					280					285			



17487

Ser Ala Ser Ala Ser Gly Ile Ala Lys His Trp Tyr Gln Cys Gly Gly  
 290 295 300  
 Ile Asn Trp Thr Gly Pro Thr Thr Cys Glu Ser Gly Tyr Thr Cys Val  
 305 310 315 320  
 Glu Gln Asn Pro Tyr Tyr His Gln Cys Val  
 325 330

<210> 40094  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 40094  
 Ala His Gln His Pro Glu Ser Gly Ile Met Val Val Asn Ser Ser Thr  
 1 5 10 15  
 Thr Gly Ser Pro Ser Ser Ser Ser Ser Pro Ser Leu Ser Thr Thr Phe  
 20 25 30  
 Ser Ser Thr Tyr Phe Lys Thr Ile Thr Gln Arg Arg Gln Gln Lys Lys  
 35 40 45  
 Met Ser Ile Thr Gln Thr Tyr Tyr Leu Ala His Thr Ala Arg Lys Asn  
 50 55 60  
 Leu Ile Leu  
 65

<210> 40095  
 <211> 218  
 <212> PRT  
 <213> A.fumigatus

<400> 40095  
 Ser Ser Arg Ala Asp His Asp Leu Arg Leu Leu Val Gly His Ala Asn  
 1 5 10 15  
 Leu Leu Asp Ser Leu Met Leu Asp Leu Ala Asp Ala Glu Gln Glu Gln  
 20 25 30  
 Glu Arg Trp Phe Asn Gln Thr Val Asn Gly Ala Ser Lys Ser Ser Gln  
 35 40 45  
 Ser Ser Gln Pro Arg His Ile Gln Trp Ala Asp Thr Val Ile Glu Glu  
 50 55 60  
 Pro Glu Glu Asp Trp Asp Pro Glu Asp Ala Ser Asp Leu Asp Ser Asp  
 65 70 75 80  
 Ser Asp Asp Ser Asp Phe Asp Gly Glu Glu Asp Tyr Glu Glu Glu Gln  
 85 90 95  
 Thr Phe Ala Thr Ile Gln Leu Pro Ala Arg Gln Arg Ala Pro Ser Pro  
 100 105 110  
 Val Ala Val Ile Thr Glu Lys Glu Val Asp Glu Asp Tyr Asp Ser Asp  
 115 120 125  
 Ser Asp Ser Asp Phe Glu Tyr Asp Asp Ile Glu Asp Leu Asp Glu Leu  
 130 135 140  
 Thr Leu Thr Arg Ser Pro Ser Arg Gln Thr Pro Pro Glu Leu Ser Ser  
 145 150 155 160  
 Asp Ser Asp Glu Asp Ser Glu Asp Asp Ala Thr Pro Pro Ser Pro Pro  
 165 170 175  
 Gln Pro Thr Leu Ala Gly Phe Pro Glu Lys Gln Pro Gln Ser Ala Glu  
 180 185 190  
 Leu Pro Leu Ser Asp Pro Glu Tyr Gly Thr Gly Tyr Tyr Val Thr Gly  
 195 200 205

17488

Gln Glu Gln Ser Thr Phe Ile Glu Ala Tyr  
210 215

<210> 40096  
<211> 69  
<212> PRT  
<213> A.fumigatus

<400> 40096  
Leu Arg Leu Val Ser Ile Asp Cys Phe Ser Thr Ser Val Tyr Phe Cys  
1 5 10 15  
Asp Thr Leu Leu Ser Asp Asn Leu Gly Ile His Phe Gln Arg Phe Ala  
20 25 30  
Tyr Ala Lys Gln Glu Arg His Gly Val Phe Leu Gly Leu Ile Ser Ala  
35 40 45  
Ile Asp Leu Met His Leu Trp Ala Ser Arg Phe Leu Leu Val Cys Pro  
50 55 60  
Leu Phe Gly His Tyr  
65

<210> 40097  
<211> 65  
<212> PRT  
<213> A.fumigatus

<400> 40097  
Asn Phe Phe Ser Tyr Tyr Ser Ser Leu His Tyr Ser Tyr Ile Leu Phe  
1 5 10 15  
Ile Ser Leu Ser Asp Val Phe Leu Pro Leu Val Ala Val Ile Pro Ser  
20 25 30  
Lys Ser Glu Arg Arg Ser Asp Ala Gly Glu Lys Ala Ser Leu Thr Ser  
35 40 45  
Met Ala Arg Ala Gln Arg Asp Asn Trp Val His Leu Arg Lys Pro Glu  
50 55 60  
Lys  
65

<210> 40098  
<211> 193  
<212> PRT  
<213> A.fumigatus

<400> 40098  
Ile Thr Cys Thr Thr Glu Ala Lys Cys Asp Arg Ala Thr Leu Ser Val  
1 5 10 15  
Leu Asp Val Pro Pro His Ala Gln Leu Pro Val Ser Leu Arg Val Gln  
20 25 30  
Arg Pro Thr Ala Asn Leu Asn Thr Leu Val Val Val Arg Val Leu Leu  
35 40 45  
Asn Thr Gly Val Ala Ala Leu Ala Gly Cys Gly Ala Gly Pro Val Asp  
50 55 60  
Ser Thr Thr Leu Val Pro Val Leu Gly Asp Ala Arg Gly Arg Arg Arg  
65 70 75 80  
Ser Ser Trp Ser Ser Thr Gly Gln Ser Gly Phe Val Cys Arg Leu Gly  
85 90 95  
Gly Thr Ala Ser Lys Ser Cys Ser Arg Ser Ser Gly Gly Arg Arg Gly

17489

```

      100      105      110
Gly Arg Ser Thr Gly Ser Leu Ser Ser Leu Ser Arg Arg Gly Ser
      115      120      125
Gly Ser Leu Gly Cys Arg His Arg Gly Trp Arg Arg Ser Arg Gly Arg
      130      135      140
Gly Arg Ser Val Asp Asn Leu Ser Leu Ser Ser Gly Arg Ser Gly Gly
145      150      155      160
Val Val His Arg Ser Ser Arg Ala Gly Asp Gly Gly Arg Arg Arg Gly
      165      170      175
Arg Arg Gly Gly Ala Ala Asp Lys Val Ile Leu Gln Asn Gly Lys Val
      180      185      190
Ala

```

<210> 40099  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

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<400> 40099
Pro Ser Leu Glu Gly Asp Leu Leu Trp Asn Ala Gly Arg Thr Ser Ala
1      5      10      15
Thr Tyr Ile Glu Glu Lys Ala Ser Ser Leu Val Glu Gly Lys Asp Val
      20      25      30
Leu Glu Val Gly Ala Ala Ala Gly Val Pro Ser Ile Val Ser Ala Val
      35      40      45
Lys Gly Ala Arg Thr Val Val Met Thr Asp Tyr Pro Asp Pro Asp Leu
50      55      60
Val Glu Asp Met Arg Tyr Asn Ala Ser Leu Ser Ala Val Ile Ile Pro
65      70      75      80
Arg Cys His Pro Phe Met Leu Leu Asp Thr Asn Gly Val Ile Arg Leu
      85      90      95
Asn Arg

```

<210> 40100  
 <211> 119  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40100
Gln Leu Ile Val Leu Ser Gly Tyr Pro Cys Ser Gly Leu Ser Tyr Arg
1      5      10      15
Ala Gln Gln Leu Ala Ser Leu Leu Glu Val Thr Gln Asp Glu Leu Phe
      20      25      30
Lys Ser Gly Ala Ile Pro Ala Ser Arg Pro Arg Tyr Lys Ile His Ile
35      40      45
Val Pro Thr His Asp Pro Ser His Pro Arg Thr Val Tyr Asp Asn Ala
50      55      60
Arg Thr Glu Lys Glu Ala Arg Gly Val Ala Tyr Thr Arg Ala Lys Arg
65      70      75      80
Ala Leu Gly Arg Asp Ser Phe Val Ile Leu Asp Gly Met Asn Tyr Ile
      85      90      95
Lys Gly Tyr Arg Tyr Gln Leu Trp Cys Glu Ala Lys Ala Leu Gly Thr
100      105      110
Thr Ser Cys Val Val Ser Leu

```

115

&lt;210&gt; 40101

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40101

Cys Glu Met Leu Lys Val His Val Gly Thr Pro Val Asp Gln Cys Val  
 1 5 10 15  
 Ala Asn Asn Glu Ala Arg Ile Arg Arg Arg Asn Thr Gln Gln Glu Lys  
 20 25 30  
 Ser Glu Ser His Asp Asn Glu Pro Lys Glu Ala Ser Thr Ile Asn Ala  
 35 40 45  
 Asp Pro Glu Val Glu Ala Gln Asn Thr Thr Gln Thr Asp Ala Pro Ser  
 50 55 60  
 Pro Ala Thr Asp Asp Thr Glu Glu Pro Tyr Pro Pro Asp Leu Leu Lys  
 65 70 75 80  
 Asn Leu Ile Phe Arg Tyr Glu Glu Pro Ser Thr Tyr Ser Arg Trp Asp  
 85 90 95  
 Lys Pro Leu Phe Thr Val Leu Trp Ser Asp Pro Glu Pro Pro Ile Ala  
 100 105 110  
 Glu Ile Trp Thr Ala Leu Thr Gly Ile Pro His Pro Ser Thr Ser Thr  
 115 120 125  
 Glu Pro Glu Thr Pro Val Thr Ser Leu Thr Ser Val Leu Ala Ser Ser  
 130 135 140  
 Ala Leu Leu Ser Asp Thr Ala Ser Ile Asn Thr Ser Ala Thr Ala Arg  
 145 150 155 160  
 Thr Pro Arg Thr Ala Ala Leu His Arg Pro Lys Ile Lys Pro His Gln  
 165 170 175  
 Ala Thr Val Gln Pro Thr Ala Thr Asp Ser Ser Ala Leu Tyr Ala Met  
 180 185 190  
 Glu Lys Cys Thr Ser Ala Ile Val Ser Ala Ile Arg Ser Tyr Ala Leu  
 195 200 205  
 Thr Asn Pro Ser Ala Glu Ala Ala Leu Ala Gln Asn Pro Asp Ala Arg  
 210 215 220  
 Gly Ile Ala Ile Pro Val Pro Glu Ala Ser Ser Pro Ile Phe Ile Pro  
 225 230 235 240  
 Ala His Val Ala Thr Ser Gly Thr Thr Asp Glu Leu Ala Gly Ala Gly  
 245 250 255  
 Gly Ile Leu Ala Leu Pro Arg Leu Gln Arg Leu Arg Arg Gln Trp Ile  
 260 265 270  
 Gly Leu Asn Arg Ala Tyr Val Gly Val Asn His Ala Ser Ala Val Lys  
 275 280 285  
 Gly Gly Leu Ala Pro Asp Gln Val Gly Asp Ala Phe Val Arg Phe Leu  
 290 295 300  
 Asn Ala Glu Phe Ala Gly Glu Ser Gly Val  
 305 310

&lt;210&gt; 40102

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40102

Arg Ala Ile Tyr Glu Asn Val Gln Ile Ala Asp Lys Pro Thr Ser Lys

17491

```

1           5           10           15
Tyr Leu Asp Ser His Leu Lys Pro Tyr Arg Cys Lys Val Pro Ala Cys
      20           25           30
Met Glu Ala Gln Leu Gln Phe Ser Ser Asn Ala Cys Leu Phe Arg His
      35           40           45
Glu Arg Glu Ala His Gly Phe His Gly His Gly Asp Asn Pro His Leu
      50           55           60
Cys Leu Phe Glu Gly Cys Asp Arg Ser Val Pro Gly Tyr Gly Phe Pro
65           70           75           80
Arg Arg Trp Asn Leu Phe Asp His Met Arg Arg Val His Asp Tyr Ala
      85           90           95
Ser Ser Glu Arg Pro Ser Ser Pro Glu His Ser Pro Ser Gly Val Ser
      100          105          110
Ala Pro Lys Lys Lys Glu Ala Ser Gly Arg Lys Arg Arg Val Thr Gly
      115          120          125
Ala Ser Gly Ala Gln Thr Met Lys Arg Thr Arg Ser Thr His Ser Gln
      130          135          140
Thr Ser Thr Ser Lys Ala Leu Gln Gln Thr Ala Ser His Asn Ser Gln
145          150          155          160
Arg Leu Gln Asn Ala Glu Arg Asn Tyr Tyr Asn Cys Arg Ala Arg Leu
      165          170          175
Leu Glu Glu Leu Ser Asn Ile Thr Pro Gln Asp Ser Ser Met His Asp
      180          185          190
Lys Val Asn Ala Ser Leu Gln Glu Leu Ile Thr Leu Gly Leu Asn Tyr
      195          200          205
Arg His Ile Glu Ala Ser Gln Thr Ser Ser Leu Pro Asn Gly Leu Pro
      210          215          220
Ala
225

```

<210> 40103  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40103
Lys Ile Thr Asp Thr Pro Arg Lys Ala Phe His Ser Gly His Trp Ile
1           5           10           15
Cys Phe Cys Val Pro Met Ile Ser Ser Met Leu Lys Ser Ser Arg Ser
      20           25           30
Ala Arg His Thr Phe Ser Gly Ile Gly Thr Ser Cys Phe Glu Ser Ser
      35           40           45
Phe Phe Lys Gln Thr Thr Gly Pro Ile Ser Gly Gln Tyr His Cys Ser
      50           55           60
Val Lys Leu Ala
65

```

<210> 40104  
 <211> 170  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40104
Gly Trp Asn Gln Ala Arg Ser Lys Ser Ser Ala Gln Ala Leu Ile Asn
1           5           10           15
Thr Thr Ile Thr Asn Cys Lys Phe Ser Ser Lys Val Thr Gly Leu Pro

```

Parameter	Value	Unit	Source
$\alpha$	0.001	cm <sup>2</sup> /s	Table 1
$\beta$	0.001	cm <sup>2</sup> /s	Table 1
$\gamma$	0.001	cm <sup>2</sup> /s	Table 1
$\delta$	0.001	cm <sup>2</sup> /s	Table 1
$\epsilon$	0.001	cm <sup>2</sup> /s	Table 1
$\zeta$	0.001	cm <sup>2</sup> /s	Table 1
$\eta$	0.001	cm <sup>2</sup> /s	Table 1
$\theta$	0.001	cm <sup>2</sup> /s	Table 1
$\iota$	0.001	cm <sup>2</sup> /s	Table 1
$\kappa$	0.001	cm <sup>2</sup> /s	Table 1
$\lambda$	0.001	cm <sup>2</sup> /s	Table 1
$\mu$	0.001	cm <sup>2</sup> /s	Table 1
$\nu$	0.001	cm <sup>2</sup> /s	Table 1
$\xi$	0.001	cm <sup>2</sup> /s	Table 1
$\omicron$	0.001	cm <sup>2</sup> /s	Table 1
$\pi$	0.001	cm <sup>2</sup> /s	Table 1
$\rho$	0.001	cm <sup>2</sup> /s	Table 1
$\sigma$	0.001	cm <sup>2</sup> /s	Table 1
$\tau$	0.001	cm <sup>2</sup> /s	Table 1
$\upsilon$	0.001	cm <sup>2</sup> /s	Table 1
$\phi$	0.001	cm <sup>2</sup> /s	Table 1
$\chi$	0.001	cm <sup>2</sup> /s	Table 1
$\psi$	0.001	cm <sup>2</sup> /s	Table 1
$\omega$	0.001	cm <sup>2</sup> /s	Table 1
$\varphi$	0.001	cm <sup>2</sup> /s	Table 1
$\vartheta$	0.001	cm <sup>2</sup> /s	Table 1
$\varpi$	0.001	cm <sup>2</sup> /s	Table 1
$\varsigma$	0.001	cm <sup>2</sup> /s	Table 1
$\eta$	0.001	cm <sup>2</sup> /s	Table 1
$\theta$	0.001	cm <sup>2</sup> /s	Table 1
$\iota$	0.001	cm <sup>2</sup> /s	Table 1
$\kappa$	0.001	cm <sup>2</sup> /s	Table 1
$\lambda$	0.001	cm <sup>2</sup> /s	Table 1
$\mu$	0.001	cm <sup>2</sup> /s	Table 1
$\nu$	0.001	cm <sup>2</sup> /s	Table 1
$\xi$	0.001	cm <sup>2</sup> /s	Table 1
$\omicron$	0.001	cm <sup>2</sup> /s	Table 1
$\pi$	0.001	cm <sup>2</sup> /s	Table 1
$\rho$	0.001	cm <sup>2</sup> /s	Table 1
$\sigma$	0.001	cm <sup>2</sup> /s	Table 1
$\tau$	0.001	cm <sup>2</sup> /s	Table 1
$\upsilon$	0.001	cm <sup>2</sup> /s	Table 1
$\phi$	0.001	cm <sup>2</sup> /s	Table 1
$\chi$	0.001	cm <sup>2</sup> /s	Table 1
$\psi$	0.001	cm <sup>2</sup> /s	Table 1
$\omega$	0.001	cm <sup>2</sup> /s	Table 1
$\varphi$	0.001	cm <sup>2</sup> /s	Table 1
$\vartheta$	0.001	cm <sup>2</sup> /s	Table 1
$\varpi$	0.001	cm <sup>2</sup> /s	Table 1
$\varsigma$	0.001	cm <sup>2</sup> /s	Table 1
$\eta$	0.001	cm <sup>2</sup> /s	Table 1
$\theta$	0.001	cm <sup>2</sup> /s	Table 1
$\iota$	0.001	cm <sup>2</sup> /s	Table 1
$\kappa$	0.001	cm <sup>2</sup> /s	Table 1
$\lambda$	0.001	cm <sup>2</sup> /s	Table 1
$\mu$	0.001	cm <sup>2</sup> /s	Table 1
$\nu$	0.001	cm <sup>2</sup> /s	Table 1
$\xi$	0.001	cm <sup>2</sup> /s	Table 1
$\omicron$	0.001	cm <sup>2</sup> /s	Table 1
$\pi$	0.001	cm <sup>2</sup> /s	Table 1
$\rho$	0.001	cm <sup>2</sup> /s	Table 1
$\sigma$	0.001	cm <sup>2</sup> /s	Table 1
$\tau$	0.001	cm <sup>2</sup> /s	Table 1
$\upsilon$	0.001	cm <sup>2</sup> /s	Table 1
$\phi$	0.001	cm <sup>2</sup> /s	Table 1
$\chi$	0.001	cm <sup>2</sup> /s	Table 1
$\psi$	0.001	cm <sup>2</sup> /s	Table 1
$\omega$	0.001	cm <sup>2</sup> /s	Table 1
$\varphi$	0.001	cm <sup>2</sup> /s	Table 1
$\vartheta$	0.001	cm <sup>2</sup> /s	Table 1
$\varpi$	0.001	cm <sup>2</sup> /s	Table 1
$\varsigma$	0.001	cm <sup>2</sup> /s	Table 1
$\eta$	0.001	cm <sup>2</sup> /s	Table 1
$\theta$	0.001	cm <sup>2</sup> /s	Table 1
$\iota$	0.001	cm <sup>2</sup> /s	Table 1
$\kappa$	0.001	cm <sup>2</sup> /s	Table 1

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<210> 40105
<211> 72
<212> PRT
<213> A.fumigatus
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<210> 40106
<211> 214
<212> PRT
<213> A.fumigatus
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## 17493

```

          100                      105                      110
Ser Ser Val Ala Phe Thr Ser Leu Val Ser Ala Ala Gly Val Pro Ser
          115                      120                      125
Ala Ala Ala Tyr Gly Leu Ile Cys Leu Gly Arg Leu Leu Cys Thr Pro
          130                      135                      140
Lys Arg Phe Pro Lys Pro Lys Trp Ser Leu Gly Arg Leu Ser Lys Pro
          145                      150                      155                      160
Phe Gln Phe Ile Gly Val Phe Trp Asn Ala Trp Val Val Ala Ile Leu
          165                      170                      175
Phe Ser Pro Tyr Ala Phe Pro Val Thr Gly Glu Asn Leu Asn Cys Lys
          180                      185                      190
Ile Pro Gln Phe Phe Ile Leu Leu Ser Val Ser Val Cys Gly Arg Ile
          195                      200                      205
Leu Met Cys Leu Ser Glu
          210

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&lt;210&gt; 40107

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40107

```

Leu Ile Gly Lys Thr Arg Leu Pro Phe Arg Gly Met Trp Lys Leu Thr
1          5          10          15
Met Ser Arg Thr Ser Tyr Leu Val Thr Met Val Phe Thr Phe Ile Thr
          20          25          30
Ala Ala Val Ile Ala Glu Val Cys Ser Ala Ser Pro Ser Ala Gly Ser
          35          40          45
Ile Tyr Leu Trp Ala Ala Glu Ala Gly Gly Pro Arg Phe Gly Arg Leu
          50          55          60
Leu Gly Phe Thr Val Ala Trp Trp Ser Thr Thr Ala Trp Thr Thr Phe
          65          70          75          80
Cys Ala Ser Asn Thr Gln Ala Ala Val Asn Tyr Met Leu Ser Val Ser
          85          90          95
Leu Gln Val Tyr Ser Ser Ala Asn Gln Gly Pro Ser
          100          105

```

&lt;210&gt; 40108

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40108

```

Asp Thr Asp Val Leu Gln Pro Asp Ala Asp Thr Leu Phe Ser Phe Gly
1          5          10          15
Ser Pro Gln Pro Phe Val Ser Leu Tyr Ala Val Val Leu Gly Lys Gly
          20          25          30
Gly His Val Phe Met Asn Ile Ile Cys Ile Val Ala Leu Trp Leu Val
          35          40          45
Ser Arg Leu Ser Leu Thr Ile Pro Pro Gln Ser Thr Phe
          50          55          60

```

&lt;210&gt; 40109

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

17494

<400> 40109

```

Pro Leu Arg Arg Thr Arg Pro Ser Pro Ser Ser Pro Pro Arg Val Ser
1          5          10          15
Ser Ser Pro Ser Pro Val Thr Glu Ser Ser Pro Ser Pro Ala Gly Ser
          20          25          30
Pro Ala Ser Thr Thr Ala Ser Pro Ala Thr Pro Ser Ser Ser Ser Gly
          35          40          45
Pro Ser Pro Pro Ser Ser Pro Ala Pro Ser Ser His Gln Val Trp Arg
          50          55          60
Ser His Pro Ser Ser Pro Gln Pro Val Ser Pro Ala Pro Pro His Thr
65          70          75          80
Ala Ser Ser Ala Ser Ala Ala Ser Ser Ala Arg Leu Ser Ala Ser Pro
          85          90          95
Ser Gln Ser Gly Ala Trp Ala Ala Ser Ala Ser His Ser Ser Ser Ser
          100          105          110
Ala Tyr Ser Gly Thr Pro Gly Ser Leu Gln Ser Cys Ser Leu His Thr
          115          120          125
His Phe Pro Ser Arg Gly Lys Ile
          130          135

```

<210> 40110

<211> 80

<212> PRT

<213> A.fumigatus

<400> 40110

```

Leu Asp Lys Val Val Leu Glu Met Asp Glu Ile Asn Asp Asp Phe Pro
1          5          10          15
Asp Thr Asp Val Thr Leu Val Ile Gly Ala Asn Asp Thr Val Asn Pro
          20          25          30
Ile Ala Leu Glu Pro Asp Ser Pro Ile Ser Gly Met Pro Val Leu His
          35          40          45
Ala Trp Lys Ser Lys Glu Val Ile Val Met Lys Arg Gly Met Ser Ser
          50          55          60
Gly Tyr Gly Lys Cys Phe Leu Ser Phe Ile Leu Ser Arg Thr Tyr His
65          70          75          80

```

<210> 40111

<211> 63

<212> PRT

<213> A.fumigatus

<400> 40111

```

Ile Asp Ala Pro Ile Ile Met Ala Gly Val Thr Ile Leu Ala Leu Ile
1          5          10          15
Ser Tyr Phe Val Met Pro Glu Asp Ala Trp Leu Pro Arg Asn Arg Ile
          20          25          30
Ser His Phe Ile Asp Ser Lys Gly Ala Val Ser Glu Thr Val Glu Glu
          35          40          45
Val Gly Ser Ser Arg Met Ala Gln His Glu Gly Thr Ala Ser Gln
          50          55          60

```

<210> 40112

<211> 68

<212> PRT



&lt;213&gt; A.fumigatus

&lt;400&gt; 40112

Gly Gly Ala Phe Asp Cys Arg Lys Gly Glu Glu Leu Arg Gln Ile Lys  
 1 5 10 15  
 Cys Gln Phe Arg Leu Thr Ser Ala Glu Ala Ser Val Lys Glu Pro Thr  
 20 25 30  
 Thr His Ser Tyr Ser Ile Leu Asp Glu Ser Thr Ser Lys Tyr Ala Arg  
 35 40 45  
 Phe Val Gln Arg His Asn Ala Leu Thr Gln His Leu Gly Leu Gln Gly  
 50 55 60  
 Ala Thr Gln Thr  
 65

&lt;210&gt; 40113

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40113

Asp Asp Thr Phe Gly Glu Gly Arg Asn Asp Tyr Asp Thr Pro Ala Thr  
 1 5 10 15  
 Ser Ile Val Met Thr Pro Ala Glu Ser Asp Val Asn Lys Pro Arg Arg  
 20 25 30  
 Arg Val Asn Ala Ser Thr Arg Ala Arg Glu Leu Arg Ser Arg Thr Thr  
 35 40 45  
 Pro Leu Ser Ser Met Gln Arg Gly Leu Lys Arg Asn Ala Ala Ala Leu  
 50 55 60  
 Ser Pro Asp Asp Ser Thr Leu Gly Ala Ser Asp Glu Ala Phe Ala Glu  
 65 70 75 80  
 Ala Leu Gln Met Gln Glu Tyr Gln Glu Ser Phe Ser Lys Arg Arg Lys  
 85 90 95  
 Ile Ala Val Ser Ala Ser Arg Asp Thr Pro Glu Ile Glu Lys Ser Thr  
 100 105 110  
 Glu Asp Asp Asp Ile Leu Glu His Ile Asp Ser Asp Gly Phe Glu Asp  
 115 120 125  
 Ala Glu Asp Glu Glu Asp Leu Glu Pro Trp Gln Pro Lys Arg Ser Ile  
 130 135 140  
 Arg Thr Ser Arg Arg Ser Thr Thr Gln Gln Thr Val Pro Asp Ser Glu  
 145 150 155 160  
 Ala Ser Asp Leu Ser Asp Asp Glu Ala Gly Asp Gly Asn Tyr Gln Thr  
 165 170 175  
 Glu Ser Glu Ala Glu Gly Pro Pro Ser Ser Ser Glu Glu Glu Pro  
 180 185 190  
 Leu Ile Ala Glu Arg Ala Arg Asn Ser Gly Arg Ser Asn Ala Ser Ser  
 195 200 205  
 Gly Ser Arg Ala Arg Arg Gln Ala Leu Arg Asn Gln Arg His Thr Leu  
 210 215 220  
 Ile Pro Ser Trp Met Ser Gln Arg Val Ser Met Leu Ala Ser Ser Asn  
 225 230 235 240  
 Val Ile Met Leu

&lt;210&gt; 40114

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40114

Ala Tyr Arg Glu Arg Arg Lys Leu Glu Lys Gln His Pro Leu Ile Thr  
 1 5 10 15  
 Lys Met Trp Asp Asp Leu Lys Asn Thr Pro Pro Ile Thr Pro Val Leu  
 20 25 30  
 Ala Glu Gln Pro Pro Gly Ile Ser Arg Thr Leu Lys Ser Tyr Gln Leu  
 35 40 45  
 Glu Gly Leu Asn Trp Met Leu Gln Gln Glu Lys Ser Gln Tyr Lys Gly  
 50 55 60  
 Gly Leu Leu Gly Asp Glu Met Gly Met Gly Lys Thr Ile Gln Ala Val  
 65 70 75 80  
 Ser Leu Leu Met Ser Asp Tyr Pro Val Gly Lys Pro Ser Leu Val Val  
 85 90 95  
 Val Pro Pro Val Ala Leu Met Gln Trp Gln Ser Glu Ile Lys Val Arg  
 100 105 110  
 Leu Phe

&lt;210&gt; 40115

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40115

His Gln Gly Ile Ser Lys Gly Pro Leu Ala Phe Thr Tyr Leu Met Val  
 1 5 10 15  
 Thr Asn Ala Ser Gln Gln Arg Thr Thr Ser Val Ala Arg Ala Cys Phe  
 20 25 30  
 Ala Leu Lys Ala Ser Tyr Lys Trp Cys Leu Ser Gly Thr Pro Val Gln  
 35 40 45  
 Asn Arg Ile Gly Glu Phe Phe Ser Leu Leu Arg Phe Leu Glu Val Arg  
 50 55 60  
 Pro Phe Ala Cys Tyr Phe Cys Lys Gln Cys Lys Cys Gln Gln Leu His  
 65 70 75 80  
 Trp Ser Gln Asp Ala Asp Lys Arg Cys Gly Asn Cys Lys His Ser Gly  
 85 90 95  
 Phe Ser His Val Ser Val Phe Asn Gln Glu Ile Leu Asn Pro Ile Thr  
 100 105 110  
 Glu Arg Asp Asn Pro Glu Ala Arg Lys Glu Ala Leu Ala Lys Leu Arg  
 115 120 125  
 Leu Ile Thr Asp Arg Ile Met Leu Arg Arg Val Lys Arg Asp His Thr  
 130 135 140  
 Ala Ser Met Glu Leu Pro Pro Lys Arg Val Val Leu His Asn Glu Phe  
 145 150 155 160  
 Phe Gly Glu Ile Glu Arg Asp Phe Ser Arg Ser Ile Met Thr Asn Ser  
 165 170 175  
 Thr Arg Gln Phe Asp Thr Tyr Val Ser Arg Gly Val Met Leu Asn Asn  
 180 185 190  
 Tyr Ala Asn Ile Phe Gly Leu Ile Met Gln Met Arg Gln Val Ala Asn  
 195 200 205  
 His Pro Asp Leu Ile Leu Lys Lys His Ala Ala Gly Gly Gln Asn Val  
 210 215 220  
 Leu Val Cys Ser Ile Cys Asp Glu Pro Ala Glu Glu Ala Ile Arg Ser  
 225 230 235 240

## 17497

```

Arg Cys His His Glu Phe Cys Arg Arg Cys Ala Lys Asp Tyr Ile Gln
      245      250
Ser Phe Glu Ala Asp Ser Val Val Asp Cys Pro Arg Cys His Ile Pro
      260      265      270
Leu Ser Ile Asp Phe Glu Gln Pro Asp Ile Glu Gln Asp Ala Asp His
      275      280      285
Ile Lys Lys Asn Ser Ile Ile Asn Arg Ile Arg Met Glu Asp Trp Thr
      290      295      300
Ser Ser Thr Lys Ile Glu Met Leu Val Tyr Glu Leu Tyr Lys Leu Arg
305      310      315      320
Ser Gln Lys Gln Thr His Lys Ser Ile Val Phe Ser Gln Phe Thr Ser
      325      330      335
Met Leu Gln Leu Val Glu Trp Arg Leu Arg Arg Ala Gly Phe Asn Thr
      340      345      350
Val Met Leu Asp Gly Thr Met Thr Pro Ala Gln Arg Gln Arg Ser Ile
      355      360      365
Asp Tyr Phe Met Asn Asn Val Asp Val Glu Val Phe Leu Val Ser Leu
370      375      380
Lys Ala Gly Gly Val Ala Leu Asn Leu Thr Glu Ala Ser Arg Val Phe
385      390      395      400
Ile Val Asp Pro

```

&lt;210&gt; 40116

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40116

```

Trp Glu Ser Thr Arg Trp Trp Asn Pro Ala Ala Glu Trp Gln Ser Ala
1      5      10      15
Asp Arg Cys His Arg Ile Gly Gln Arg Arg Pro Cys Val Ile Thr Arg
      20      25      30
Leu Cys Ile Glu Asp Ser Val Glu Ser Arg Ile Val Leu Leu Gln Glu
      35      40      45
Lys Lys Ala Asn Leu Ile Asn Gly Thr Leu Asn Lys Asp Gln Gly Glu
50      55      60
Ala Leu Glu Lys Leu Thr Pro Glu Asp Met Gln Phe Leu Phe Arg Gly
65      70      75      80
Ser

```

&lt;210&gt; 40117

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40117

```

Val Ile Ser Tyr Ser Cys Pro Val Thr Gly Gly Ala Gly Met Leu Ala
1      5      10      15
Ile Ala Ser Ala Arg Ala Leu Leu Glu His Gly Leu Ser Gly Leu Ala
      20      25      30
Leu Leu Asp Leu Pro Ser Ala Leu Gln Lys Gly Asp Ala Glu Ile Asp
      35      40      45
Ala Leu Arg Arg Asp Phe Pro Ser Ala Arg Ile Ile Thr His Gln Cys
50      55      60

```

## 17498

Asp Val Thr Asp Ala Ala Gly Met Gln Glu Val Ala Glu Lys Ile Lys  
 65 70 75 80  
 Ile Glu Leu Gly Glu Leu Asn Ile Leu Cys Cys Phe Ala Gly Ile Val  
 85 90 95  
 Asn Cys Val Ala Ala Glu Asp Ile Ala Val Glu Gln Trp Arg Arg Val  
 100 105 110  
 Ile Asp Val Asn Thr Thr Gly Ser Trp Ile Ala Ala Gln Ala Val Gly  
 115 120 125  
 Lys

<210> 40118  
 <211> 145  
 <212> PRT  
 <213> A.fumigatus

<400> 40118  
 Asp Pro Asp Ala Glu Ser Arg Tyr Met Ile Ala Ser Gly Arg Gly Gly  
 1 5 10 15  
 Lys Ile Val Leu Val Ala Ser Ile Ser Gly His Arg Val Asn Tyr Pro  
 20 25 30  
 Gln Pro Gln Ile Ala Tyr Asn Val Ser Lys Ala Ala Val Leu His Met  
 35 40 45  
 Lys Asn Ser Leu Ala Ala Glu Trp Thr Gln Tyr Gly Ile Arg Val Asn  
 50 55 60  
 Ser Ile Ser Pro Gly Tyr Met Asp Thr Val Leu Asn Glu Gly Glu Asp  
 65 70 75 80  
 Leu Ala Pro Trp Arg Gln Ile Trp Ala Asp Arg Asn Pro Met Arg Arg  
 85 90 95  
 Met Gly Ser Pro Gln Glu Leu Thr Gly Pro Val Val Phe Leu Cys Ser  
 100 105 110  
 Asp Ile Gly Gly Ser Tyr Ile Asn Gly Ala Asp Ile Val Val Asp Gly  
 115 120 125  
 Ile Pro Leu Pro Ser Gly Cys Pro Gly Tyr Met Lys Glu Leu Thr Gly  
 130 135 140  
 Val  
 145

<210> 40119  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<400> 40119  
 Trp Ala Leu Leu Ala Pro Ala Asn Arg Cys Ala Lys Ile Pro Pro Gly  
 1 5 10 15  
 His Ala Met Cys Ile Ser Lys Gln Met Thr Thr Pro Thr Ser Leu Ala  
 20 25 30  
 Val Thr Asp Lys Val Ser Ser Val Pro Phe Val Met Lys Ser Ile Gly  
 35 40 45  
 His Arg Val Leu Arg Phe Cys Leu Thr Thr Phe Leu Leu Cys Leu Ser  
 50 55 60  
 Val Pro Met Ala Asn Trp Asn Ile Asp Asn Thr Asp His His Phe Asp  
 65 70 75 80

<210> 40120

<211> 127  
 <212> PRT  
 <213> A.fumigatus

<400> 40120

```

Ile Asp Ala Leu Ala Lys Asn Leu Lys Leu Ala Glu Gly Ile Ile Ala
1          5          10          15
Ser Cys Pro Ala Cys Lys Ala Asn Phe Phe Asn Ile Phe Cys Thr Phe
          20          25          30
Thr Cys Ser Pro Asp Gln Ser Leu Phe Ile Asn Val Thr Gln Thr Glu
          35          40          45
Met Ala Ser Ser Gly Lys Leu Leu Val Thr Glu Leu Asp Asn Ile Trp
          50          55          60
Ser Glu Glu Tyr Gln Ser Gly Phe Tyr Asp Ser Cys Lys Asn Val Lys
65          70          75          80
Asn Gly Ala Ser Gly Lys Ala Val Asp Phe Ile Gly Gly Gly Ala
          85          90          95
Lys Asn Tyr Thr Gln Phe Leu Lys Phe Leu Gly Asp Lys Lys Leu Leu
          100          105          110
Gly Ser Pro Phe Gln Ile Gln Leu Pro Asn Arg Ala Leu Ile Thr
          115          120          125

```

<210> 40121  
 <211> 288  
 <212> PRT  
 <213> A.fumigatus

<400> 40121

```

Gly Arg Ser Gln Gly Ile Gln Val Thr Gly Met Ser Cys Cys Arg Leu
1          5          10          15
Pro Cys Asp Gly Ser Val Thr Asp Phe Phe Ser Pro Phe Gln Leu Glu
          20          25          30
Thr Val Gln Ser Ser Leu Gln Val Asp Pro Asp Asn Thr Glu Leu Gln
          35          40          45
Ser Leu Lys Thr Glu Leu Glu Glu Leu Ile Asn Leu Thr Glu Thr Ser
          50          55          60
Ile Ala Glu Leu Lys Pro Leu Ala Pro Pro Pro Ser Ala Ala Lys Pro
65          70          75          80
Ser Pro Pro Pro Ala Lys Asp Lys Trp Ser Lys Glu Asn His Pro Ala
          85          90          95
Tyr Gln Ala Gly Tyr Arg Arg Pro Ala Ala Glu Ile Pro Glu Glu Ala
          100          105          110
Pro Thr Pro Val Thr Tyr Ser Val Asn Asp His Val Leu Ala Arg Trp
          115          120          125
Val Ser Gly Asp Asn Ser Phe Tyr Pro Ala Arg Ile Thr Ser Ile Thr
          130          135          140
Gly Ser Ser Ala Asn Pro Val Tyr Leu Val Ser Phe Lys Ser Tyr Gly
145          150          155          160
Thr Val Glu Ser Leu Thr Ala Lys Asp Ile Lys Pro Ile Ser Asn Ala
          165          170          175
Asp Ser Arg Lys Arg Lys Ala Asp Gly Ser Ser Gly Tyr Ser Ser Ser
          180          185          190
Gln Thr Pro Thr Pro Gln Pro Leu His Ser Ser Val Ile Ser Ala Ala
          195          200          205
Ala Asp Ile Asn Pro Ala Leu Ala Asn Gln Ala Arg Lys Glu Pro Ser
          210          215          220

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## 17500

Lys Val Gly Asp Ala Ser Ala Arg Pro Ser Lys Val Ala Arg Lys Val  
 225 230 235 240  
 Lys Ala Thr Arg Glu Leu Glu Ala Gly Lys Met Lys Trp Lys Asp Phe  
 245 250 255  
 Ala Ser Lys Ser Lys Leu Gly Arg Lys Glu Ser Met Phe Arg Thr Gly  
 260 265 270  
 Glu Gly Ile Asn Ser Arg Gly Lys Ala Pro Leu Ser Lys Val Pro Glu  
 275 280 285

&lt;210&gt; 40122

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40122

Ser Ser Lys Ile Phe Leu Ser Met Ser Leu Val Val Pro Val Asn Ala  
 1 5 10 15  
 Leu Leu Gln Leu Gly Leu Thr Cys His Arg Tyr Glu Ala Lys Lys Val  
 20 25 30  
 Leu Lys Ser Gln Thr Asp Thr Asp Asp Ser Glu Ile Gln Phe Ile Leu  
 35 40 45  
 Glu Tyr Tyr Ser Leu Val Arg Glu Gly Lys Thr Asn Tyr Val Ala Thr  
 50 55 60  
 Thr Ala Phe Arg Asp Val Thr Ser Asp Glu Pro Gln Gln Pro Val Asp  
 65 70 75 80  
 Phe Phe Arg Ser Tyr Phe Glu Glu Phe Ala Pro Lys Lys Gly Ala Lys  
 85 90 95  
 Lys Lys Glu Gly Lys Met Glu Ser Glu Phe Glu Glu Gly Arg Trp Cys  
 100 105 110  
 Thr Leu Phe Trp  
 115

&lt;210&gt; 40123

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40123

Leu Phe Pro Thr Met Ser Ser Asp Arg Thr Ala Ala Leu Phe Met Tyr  
 1 5 10 15  
 Leu Ser Phe Ser Phe Ser Asn Tyr Lys Cys Ala Trp Lys Lys Arg Gln  
 20 25 30  
 Gln Ala Glu Thr Arg Glu Asp Trp Gly Gln Ala Lys Ser Pro His Arg  
 35 40 45  
 Arg Asp Lys Gly Trp Met Thr Thr Pro Val Ser Asn Thr  
 50 55 60

&lt;210&gt; 40124

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40124

Glu His Met Arg Lys Met Arg Asp Ala Ser Asp Ser Leu Ile Lys Lys  
 1 5 10 15  
 Cys Phe Pro Ser Lys Trp Ala Met His Leu His Asp Gln His Leu Ala

13c542 U.S. PTO  
09/417507  
10/14/99

<400> 40127  
Gly Leu Ser Arg Ala Arg Gly Cys Gln Arg Arg Thr Lys Leu Phe Asn

## 17502

1                    5                    10                    15  
 Gln Arg His Pro Thr Pro Ile Cys Trp Gln Ile Phe Thr Ser Ser Ile  
                   20                    25                    30  
 Ser His Thr Asn Gly Thr Met Pro Ser Ile Asp Leu Gly Gln Glu Asp  
                   35                    40                    45  
 Lys Glu Trp Lys Ile Leu Leu Gln Lys His Thr Pro Asp Tyr Ser Asp  
                   50                    55                    60  
 Ala Arg Glu Phe Trp Leu Asp Phe Tyr Ser Leu Ser Lys Tyr Pro Asn  
 65                    70                    75                    80  
 Leu Asp Glu Arg Gly Met Asp Leu Leu Lys Asp Gln Asp Ser Lys Asn  
                   85                    90                    95  
 Phe Ala

&lt;210&gt; 40128

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40128

Pro Arg Thr Met Thr Gln Lys Arg Ser Lys Asp Ile Leu Pro Ser Leu  
 1                    5                    10                    15  
 Leu Asp Ala Leu Pro Ser Ala Ile Ile Pro Asp Asp Val Asp Val Ala  
                   20                    25                    30  
 Ser Ile Ala Ser Ser Phe Ala Asn Ser Leu Ala Arg Leu Ser Ala Ser  
                   35                    40                    45  
 Asp Phe Ala Glu Val Ala Ile Trp Arg Asp Cys Phe Ala Leu Thr Gly  
                   50                    55                    60  
 Thr Leu Arg Thr Phe Tyr Thr Pro Arg Thr Val Ser Glu Val Tyr Arg  
 65                    70                    75                    80  
 Asn Arg Cys Leu Ala Arg Arg Ala Gln Leu Phe Ile Val Gln Ala Asp  
                   85                    90                    95  
 Glu Ala His Val Val Arg Ile Ser Pro Ser Cys Ser Trp Ile Asp Val  
                   100                    105                    110  
 Pro Phe Arg Phe Glu Ala Asn Ala Ser Pro Ala Ala Cys Cys Ser Gly  
                   115                    120                    125  
 Val Leu Ser Leu Ile Pro Ser Gly Glu Asn Gly Asp Tyr Arg Ile Trp  
                   130                    135                    140  
 Met Leu Gln Thr Leu Leu Asp Arg Phe Arg Glu Tyr Pro Ser Val Asp  
 145                    150                    155                    160  
 Thr Leu Asp Thr Thr Thr Gln Arg Pro Ser Val Gly Asp Ser Met Thr  
                   165                    170                    175  
 Asp Phe Asp Cys Leu Ile Val Gly Ala Gly His Ser Gly Leu Asn Val  
                   180                    185                    190  
 Ala Gly Arg Leu Lys Ala Leu Gly Val Ser Tyr Leu Val Ile Asp Lys  
                   195                    200                    205  
 Asn Pro Arg Val Gly Asp Asn Trp Arg Leu Arg Tyr Asp Ser Ala Lys  
                   210                    215                    220  
 Cys Val Phe Phe Arg Leu Phe His Gly Asn Val Ala  
 225                    230                    235

&lt;210&gt; 40129

&lt;211&gt; 502

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus



&lt;400&gt; 40129

Ser Met Pro Thr His Gln Trp Glu Ser Ser Arg Pro Arg Asp Phe Arg  
 1 5 10 15  
 Asp Cys Leu Ala Ser Pro Ser Leu Asn Cys Asp Glu Tyr Pro Pro Val  
 20 25 30  
 Val Asp Leu Glu Lys Ser Ile Tyr Ser Leu Ala Thr Thr Gly Lys Glu  
 35 40 45  
 Thr Lys Lys Met Lys Thr Ile Gln Leu Gly Gln Leu Ser Asp Phe Lys  
 50 55 60  
 Gln Ser Arg Tyr Val Ile His Leu Ser Asp Gly Lys Arg Leu Val Leu  
 65 70 75 80  
 Phe Arg Leu Pro Thr Ile Glu Ser Ser Lys Gly Ser Ser Pro Ala Ala  
 85 90 95  
 Asn Glu Thr Glu Asp Gly Trp Cys Tyr Tyr Ala Met Glu Ala Glu Cys  
 100 105 110  
 Pro His Ala Gly Gly Pro Met Glu Asp Ser His Val Asp Ile Glu Asp  
 115 120 125  
 Ser Ala Tyr Ile Ala Ser Cys Pro Trp His Ala Tyr Asp Phe Asn Val  
 130 135 140  
 Glu Thr Gly Glu Ser Ser Val Gly Ile Lys Ala Cys Thr Phe Pro Val  
 145 150 155 160  
 Lys Ile Gly Asp Glu Gln Val Thr Leu Gln Tyr Pro Gly Asp Ala Ser  
 165 170 175  
 Leu Val Arg Leu Asp Pro Val Ser Glu Lys Ile Lys Leu Lys Lys Gly  
 180 185 190  
 Ser Val Ser Glu Arg Pro Thr Val Gln Pro Val Ser Gln Gln Thr Thr  
 195 200 205  
 Pro Ala Lys Tyr Leu Asp Glu Asp Ala Thr Leu Cys Asp Trp Ala Ala  
 210 215 220  
 His Ile Leu Asn Thr Ser Asn His Glu His Lys Ile Glu Leu Thr Ala  
 225 230 235 240  
 His Leu Tyr Ala Thr Phe Thr Glu Arg Glu Arg Thr Pro Ser Pro Met  
 245 250 255  
 Pro Ile Gly Ser Gly Ser Val Thr Pro Pro Asp Gln Pro Pro Arg Asp  
 260 265 270  
 Gly Leu Val Thr Val Glu Pro Arg Ser Met Pro Arg Ala Gly Lys Gly  
 275 280 285  
 Gly Thr Leu Lys Ser Arg Ile Ala Met Leu His Ala Leu Ala Asn Ile  
 290 295 300  
 Glu Leu Trp Ala Ile Asp Leu Ala Ile Asp Ile Cys Ile Arg Phe Ala  
 305 310 315 320  
 Ser Phe Gln Thr Gln Pro Gln Val Gly Asp Thr Pro Arg Glu Leu Pro  
 325 330 335  
 Arg Thr Tyr Phe His Asp Trp Leu Lys Val Ala Asn Asp Glu Ala Lys  
 340 345 350  
 His Phe Ser Phe Leu Arg Thr Arg Ile Glu Glu Met Gly Ser Tyr Phe  
 355 360 365  
 Gly Ala Leu Pro Val His His Gly Leu Trp Asp Ser Ala Met Ala Thr  
 370 375 380  
 Ala His Asp Leu Arg Ala Arg Ile Ser Ile Ala Leu Val His Glu  
 385 390 395 400  
 Ala Arg Gly Leu Asp Val Asn Pro Met Thr Ile Asp Lys Phe Arg Arg  
 405 410 415  
 Ala Gly Asp Arg Glu Ser Val Asp Ala Leu Glu Ile Ile His Asn Asp  
 420 425 430  
 Glu Ile Thr His Val Thr Thr Gly His Arg Trp Leu Thr Trp Ile Cys

## 17504

435                      440                      445  
 Gln Gln Glu Gly Thr Asp Pro Val Gln Val Phe Arg Thr Asn Ala Arg  
 450                      455                      460  
 Lys His Phe Arg Gly Ala Leu Lys Glu Pro Phe Asn His Glu Ala Arg  
 465                      470                      475                      480  
 Met Gln Ala Gly Leu Asn Arg Gln Tyr Tyr Glu Asn Leu Met Gly Gln  
 485                      490                      495  
 Arg Asp Ile Ala Val Ser  
 500

<210> 40130  
 <211> 183  
 <212> PRT  
 <213> A.fumigatus

<400> 40130  
 Gly Thr Glu Ser Glu Thr Ile Pro Ile Gly Leu Gly Gly Asn Asp Leu  
 1                      5                      10                      15  
 Gln Pro Leu Thr Cys Pro Asp Gly Glu Thr Tyr Tyr Lys Trp Gln Gly  
 20                      25                      30  
 Lys Thr Thr Ser Ala Gln Tyr Tyr Val Asn Pro Lys Gly Val Thr Pro  
 35                      40                      45  
 Glu Lys Gly Cys Gln Trp Gly Asp Gly Thr Gln Ala Ile Gly Asn Trp  
 50                      55                      60  
 Ala Pro Val Asn Leu Gly Val Gly Leu Asn Lys Gly Lys Trp Leu Ser  
 65                      70                      75                      80  
 Ile Phe Gln Asn Ser Pro Thr Thr Ser Glu Lys Leu Asp Phe Asn Ile  
 85                      90                      95  
 Lys Ile Lys Gly Asp Asn Leu Ser Gly Ser Cys Lys Tyr Glu Asn Gly  
 100                      105                      110  
 Val Phe Tyr Ser Glu Thr Gly Ser Ser Ser Gly Cys Thr Val Ser  
 115                      120                      125  
 Leu Gly His Pro Thr Thr Leu Arg Ile Val Asp Leu Gln Thr Val Ser  
 130                      135                      140  
 Asn Arg Ser Lys Ser Cys Leu Ala Met Pro Pro Leu Ser Ser Thr Arg  
 145                      150                      155                      160  
 Val Arg Ser Cys Pro Ala Pro Met Val Val Arg Ala Ala Val Ala Arg  
 165                      170                      175  
 Lys Cys Asn Gly His Leu Arg  
 180

<210> 40131  
 <211> 290  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (105)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40131  
 Asp Tyr Arg His Cys Glu Arg Ser Ile Arg Asp Val Asn Thr Met Lys  
 1                      5                      10                      15  
 Phe Asn Thr Val Ala Leu Thr Leu Ala Thr Ala Gly Ser Leu Val Thr  
 20                      25                      30

## 17505

Ala Gln His His His Gln His Arg His His Gln His Lys Arg Glu Asp  
 35 40 45  
 Val Val Glu Ser Ser Ala Thr Val Val Gln Tyr Glu Leu Asp Gly Lys  
 50 55 60  
 Pro Ile Ser Leu Lys Gln Val Cys Ala Gly Leu Ala Asp Asn Thr Leu  
 65 70 75 80  
 Lys Phe Ala Asn Asn Asp His Pro Thr Gly Ile Cys Asp Asn Leu Ser  
 85 90 95  
 Ser Ala Ala Ala Leu Ala Ser Thr Xaa Glu Val Thr Ser Ala Phe Ala  
 100 105 110  
 Pro Ala Gln Phe Ile Glu Leu Ser Ser Val Val Thr Ser Ala Thr Pro  
 115 120 125  
 Thr Ser Ala Ser Ser Ser Glu Thr Val Gln Thr Pro Ala Ala Ser Ser  
 130 135 140  
 Ser Ser Ala Ser Ser Ser Ser Thr Ala Thr Gly Leu Asp Ala Asp Phe  
 145 150 155 160  
 Pro Asp Gly Glu Leu Asp Cys Ser Thr Phe Pro Ser Glu Tyr Gly Ala  
 165 170 175  
 Ile Pro Leu Asp Tyr Leu Lys Leu Gly Gly Trp Ser Gly Ile Gln Tyr  
 180 185 190  
 Val Ser Tyr Ala Gly Asn Phe Ile Asn Asp Ile Val Thr Ala Val Ala  
 195 200 205  
 Gly Asp Thr Cys Lys Asp Gly Ala Met Cys Ser Tyr Ala Cys Pro Pro  
 210 215 220  
 Gly Tyr Gln Lys Ser Gln Trp Pro Ser Thr Gln Gly Ala Thr Gly Gln  
 225 230 235 240  
 Ser Val Gly Gly Ile Glu Cys Arg Asn Gly Lys Leu His Leu Thr Asn  
 245 250 255  
 Pro Ser Leu Ser Lys Lys Leu Cys Ile Pro Gly Val Gly Gly Val His  
 260 265 270  
 Val Gln Asn Thr Leu Gly Glu Thr Val Ala Val Cys Arg Thr Asp Tyr  
 275 280 285  
 Pro Gly  
 290

&lt;210&gt; 40132

&lt;211&gt; 381

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40132

Val Ala Arg Ala Ser Ser Ala Leu Leu Lys His Ile Lys Ser Lys Gln  
 1 5 10 15  
 Glu Glu Gln Glu Lys Arg Ala Thr Lys Lys Thr Leu Ile Gly Asp Asp  
 20 25 30  
 Glu Asp Ser Glu Glu Asp Thr Pro Leu Lys Asn Glu Ala Ile Trp Leu  
 35 40 45  
 Val Leu Thr Thr Lys Lys His Val Val Asp Lys Asn Arg Leu Lys Pro  
 50 55 60  
 Gly Lys Ile Ser Ile Pro His Ser Leu Asn Ala Ser Pro Ser Leu Ser  
 65 70 75 80  
 Ile Cys Leu Ile Thr Ala Asp Pro Gln Arg Ser Val Lys Asn Ile Val  
 85 90 95  
 Ala Asp Pro Ser Phe Pro Gln His Leu Ser Ser Arg Ile Asp Arg Ile  
 100 105 110  
 Ile Gly Tyr Ser Lys Leu Lys Ala Arg Tyr Gln Ser Phe Glu Ser Arg

## 17506

```

      115              120              125
Arg Gln Leu Leu Ser Glu His Asp Val Phe Leu Ala Asp Asp Arg Ile
  130              135              140
Ile Met Arg Leu Val Asn Thr Leu Gly Lys Val Phe Tyr Lys Ser Ser
  145              150              155              160
Lys Arg Pro Ile Pro Ile Arg Ile Ala Glu Ile Glu Lys Val Asp Gly
      165              170              175
Lys Lys Val Lys Lys Asp Pro Lys Lys Lys Ser Lys Asp Asp Asp Ser
      180              185              190
Ser Phe Ala Ser Pro Ala Ile Val Ala Lys Glu Ile Glu Lys Thr Phe
      195              200              205
Asn Cys Ala Ala Val Gln Leu Ala Pro Asp Thr Thr Ala Ala Ile Arg
  210              215              220
Val Gly Ser Ser Lys Phe Thr Pro Glu Gln Leu Ala Glu Asn Val Glu
  225              230              235              240
Ala Val Val Lys Gly Leu Thr Asp Lys Phe Ile Thr Lys Gly Trp Arg
      245              250              255
Asn Val Lys Ala Leu His Ile Lys Gly Ala Asn Thr Met Ala Met Pro
      260              265              270
Ile Trp Leu Ala Ser Glu Leu Trp Val Asp Glu Gly Asp Val Val Glu
  275              280              285
Asp Val Glu Glu Asp Leu Lys Ala Ile Glu Gly Thr Lys Asn Gly Lys
  290              295              300
Lys Arg Lys Gln Ile Glu Asp Asp Lys Lys Leu Leu Glu Asp Asn Lys
  305              310              315              320
Lys Ala Lys Lys Pro Lys Ala Asp Glu Asp Asp Asp Ala Leu Ser Met
      325              330              335
Ala Ala Arg Lys Glu Lys Leu Gln Arg Gln Lys Ala Lys Ala Leu Glu
      340              345              350
Asp Gly Asn Glu Ser Gly Asn Lys Lys Val Ser Asn Ala Glu Lys Val
      355              360              365
Ala Ser Gly Leu Ser Lys Lys Lys Arg Lys Ser Ile Ser
      370              375              380

```

&lt;210&gt; 40133

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40133

```

His Arg Ala Ala Ser Leu Lys Gly His Ser Lys Leu Cys Val Thr Gln
  1              5              10              15
His Asn Phe Arg Leu Asp Ser Gln Ala Lys Gln Lys Ile Glu Met Val
      20              25              30
Lys His Glu Leu Ile Glu Thr Met Pro Gln Trp Leu Met Pro Ala Tyr
      35              40              45
Val Ile Cys Val Val Tyr Ala Lys Gly Ala Ser Ala Ala Ser Ser Leu
      50              55              60
Met Cys Ser Arg Val Leu Trp Phe Glu Ser Pro
      65              70              75

```

&lt;210&gt; 40134

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40134

His Arg Ala Arg Asn Ser Val Tyr Glu Ala Tyr Tyr Lys Asn Thr Leu  
 1 5 10 15  
 Leu Arg Asn Glu Ser Asn Ser Asn Ile Ala Trp Ile Gly Ser Leu Gln  
 20 25 30  
 Ala Phe Phe Met Tyr Ala Ser Gly Leu Val Ser Gly Pro Leu Met Asp  
 35 40 45  
 Arg Tyr Gly Pro Arg Val Arg Val Ile Thr Leu Arg Thr Asp Asn Tyr  
 50 55 60

&lt;210&gt; 40135

&lt;211&gt; 320

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40135

Val Ile Leu Val Pro Cys Ser Ile Val Phe Val Leu Ser Val Met Leu  
 1 5 10 15  
 Thr Ser Leu Cys Lys Glu Tyr Tyr Gln Phe Ile Leu Ala Gln Gly Val  
 20 25 30  
 Leu Gly Gly Val Phe Asn Gly Leu Thr Tyr Thr Pro Thr Val Thr Ala  
 35 40 45  
 Val Asn Gln His Phe Phe Arg Arg Arg Pro Leu Ala Leu Gly Ile Ala  
 50 55 60  
 Ser Ser Gly Ser Ser Leu Ala Gly Ile Ile Ile Pro Ile Ala Leu Asn  
 65 70 75 80  
 Arg Met Phe Asn Gln Ser Ser Leu Gly Phe Gly Trp Ser Val Arg Ile  
 85 90 95  
 Leu Gly Phe Ile Met Leu Ala Leu Ser Val Val Ala Cys Leu Ala Ile  
 100 105 110  
 Ser Ser Asn Ala Pro Lys Arg Arg Thr Gly Ala Pro Phe Phe Leu Glu  
 115 120 125  
 Ala Trp Lys Gln Pro Glu Tyr Thr Val Gln Ile Ile Gly Val Phe Leu  
 130 135 140  
 Val Thr Trp Ala Leu Phe Val Pro Met Phe Tyr Ile Pro Ser Tyr Ala  
 145 150 155 160  
 Gln Ser Ile Gly Ile Gly Val Ser Leu Ser Asn Tyr Leu Ile Ala Ile  
 165 170 175  
 Leu Asn Ala Gly Ser Leu Val Gly Arg Ile Leu Gly Gly Ala Leu Ala  
 180 185 190  
 Asn Arg Leu Gly Arg Phe Asn Thr Leu Ala Ala Ala Ser Ala Ala Cys  
 195 200 205  
 Gly Ile Leu Ile Leu Cys Trp Leu Arg Ile Lys Ser Arg Gly Gly Met  
 210 215 220  
 Val Val Leu Ser Val Leu Phe Gly Phe Cys Ser Gly Ile Val Ile Gly  
 225 230 235 240  
 Leu Phe Ala Ala Thr Ile Ala Val Thr Ala Pro Lys Pro Asn Val Ile  
 245 250 255  
 Gly Ser Tyr Leu Gly Met Ala Met Gly Val Leu Ser Leu Ala Ser Leu  
 260 265 270  
 Thr Gly Thr Pro Ile Thr Gly Ala Met Ile Ser Thr Tyr Gly Thr Tyr  
 275 280 285  
 Asp Ala Ala Ile Ile Phe Ala Gly Val Ser Ala Val Leu Gly Ala Val  
 290 295 300  
 Ile Ile Phe Val Ala Arg Val Val Tyr Ala Gly Trp Arg Leu Val Ala  
 305 310 315 320

17508

<210> 40136  
<211> 149  
<212> PRT  
<213> A.fumigatus

<400> 40136  
Thr Thr Thr Ile Pro Gln Ile Ile Thr Met Pro Arg Trp Leu Ile Gln  
1 5 10 15  
His Ser Pro Asn Thr Leu Thr Pro Glu Glu Lys Ser His Leu Ala Gln  
20 25 30  
Gln Ile Thr Gln Ala Tyr Val Gly Phe Gly Leu Pro Ala Phe Tyr Val  
35 40 45  
Gln Val His Phe Ile Glu Gln Pro Ala Gly Thr Ser Phe Ile Gly Gly  
50 55 60  
Glu Gln His Pro Asn Phe Val Ala Leu Thr Ile Tyr His Leu Ala Arg  
65 70 75 80  
Thr Met Thr Ser Asp Glu Gln Arg Gln Gly Phe Leu Lys Arg Ile Asp  
85 90 95  
Ala Phe Leu Thr Pro Met Phe Glu Pro Lys Gly Ile Asp Trp Glu Tyr  
100 105 110  
Phe Val Thr Glu Ala Pro Arg Asp Leu Trp Lys Ile Asn Gly Leu Ala  
115 120 125  
Pro Pro Ala Ala Gly Ser Glu Glu Glu Lys Val Trp Val Arg Glu Asn  
130 135 140  
Arg Pro Val Arg Phe  
145

<210> 40137  
<211> 108  
<212> PRT  
<213> A.fumigatus

<400> 40137  
Tyr Tyr Ala Ser Ile Gln Tyr Thr Leu Val Lys Lys Tyr Pro Phe Pro  
1 5 10 15  
Ile Ile Thr Met His Leu Asp His Lys Leu Pro Trp Asn Thr Val Ser  
20 25 30  
Ala His Phe Ala Phe Thr Lys Asp Asn Gln Asp Ile Arg Arg Asn Asp  
35 40 45  
Phe Leu Val His Asp Arg Leu Val Asp Arg Gln Ser Ala Asp Phe Lys  
50 55 60  
His Phe Thr Gln Thr Leu Ile Ser Thr Ile Glu Glu Phe Ser Ala Thr  
65 70 75 80  
Glu Arg Ala Lys Tyr Pro Pro Pro Ala Ala Leu Pro Lys Ser Gly Pro  
85 90 95  
Leu Tyr Asp Ala Ala Ile Leu Ser Leu His Leu Lys  
100 105

<210> 40138  
<211> 227  
<212> PRT  
<213> A.fumigatus

<400> 40138  
Lys Tyr His Leu Gly Pro His Ala Thr Asn Ser Ala Val Ser Asn Pro

## 17509

```

1           5           10           15
Leu Ser Glu Glu Phe Gln Asp Val Tyr Tyr Trp Ile Ser Gln Ala Pro
      20           25           30
Tyr Ser Thr Ala Thr Ala His Leu Ala Asp Ala Val Lys Met Leu Ile
      35           40           45
Ile Ser Asn Glu Met Leu Ala Leu Leu Arg Leu Ala Asn His Glu Lys
      50           55           60
Ile Pro Leu Met Asp Leu Asn His Leu Ser Trp Gly His Ser Phe Gly
65           70           75           80
Val Thr His Val Ala Asp Val Ala Leu Glu Ile Tyr Met Leu Leu Asn
      85           90           95
Ile Ala Ala Ser Val Lys Ala Asn Ala Lys Pro Gly Ser Ala Asn Glu
      100           105           110
Thr Gly Cys Leu Thr Glu Thr Arg Arg Phe Arg Ser Phe Ala Ser Trp
      115           120           125
Gly Leu Gly Asp Phe Asp Phe Pro Ala Gln Asn Ile Pro His Arg Leu
      130           135           140
Phe Trp Asn Thr Lys Cys Ile Thr Asp Gly Leu Glu Phe Ser Thr Trp
145           150           155           160
Asp Pro Leu Arg Leu Glu Ser Asp Asp Glu Arg Lys Glu Met Asn Glu
      165           170           175
Tyr Leu Lys Met Cys Phe Glu Leu Leu Tyr Arg Tyr Asp Leu Leu Leu
      180           185           190
Asn Asp Asn Gly Gly Asp Pro Asp Trp Asn Asp Asn Ile Leu Cys Ile
      195           200           205
Leu His Thr Trp Gly Cys Lys Cys Ile Ala Leu Ser Gln Ser Gly Phe
      210           215           220
Cys Phe Ile
225

```

<210> 40139  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40139
Asn Asp Phe Ser Gln Ala His Arg Val Ala Ala Lys Ile Glu Ala Gly
1           5           10           15
Ile Val Trp Val Asn Gly His His Leu Asn Asp Pro Ser Ser Ser Trp
      20           25           30
Gly Gly Phe Lys Glu Ser Gly Met Gly Lys Glu Asn Gly Ile Glu Ala
      35           40           45
Tyr Glu Ser Tyr Thr Lys Val Lys Ser Thr Val Ile Asn Tyr Gly Val
      50           55           60
Gln Pro Val Trp Phe Asp Asp Glu Pro Ala Asn Ala Arg Tyr Gly
65           70           75

```

<210> 40140  
 <211> 170  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40140
Ile Phe Cys Val Leu Ser Phe Thr Phe Val Leu Pro Ile Ser Val Thr
1           5           10           15
Ser Leu Ile Thr Met Gly Ser Ala Thr Asn Asn Pro Val Asp Phe Gly

```

[illegible]

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<210> 40141
<211> 86
<212> PRT
<213> A.fumigatus
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[illegible]

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<210> 40142
<211> 114
<212> PRT
<213> A.fumigatus
```

Leu	Arg	Glu	Asp	Tyr	Lys	Leu	Ser	Thr	Thr	Val	Val	Ser	Leu	Ile	Phe
1				5					10					15	
Val	Thr	Pro	Phe	Ala	Gly	Tyr	Ala	Ile	Ala	Thr	Leu	Val	Val	Asn	Lys
			20					25					30		
Ile	His	Met	Thr	Leu	Gly	Gln	Arg	Gly	Ile	Ala	Ile	Ile	Gly	Pro	Leu
		35					40					45			
Cys	His	Ile	Ala	Pro	Phe	Val	Ile	Met	Ala	Ile	His	Pro	Pro	Trp	Pro
	50					55					60				
Val	Met	Leu	Ala	Val	Tyr	Val	Ile	Val	Gly	Leu	Gly	Asn	Gly	Leu	Ile
65					70					75				80	
Asp	Ala	Ala	Trp	Asn	Ser	Trp	Val	Ala	Asp	Met	Ala	Asn	Ala	Asn	Thr



## 17511

85 90 95  
 Met Thr Gly Leu Leu Gly Ala Phe Tyr Gly Val Gly Tyr Val Lys His  
 100 105 110  
 Val Arg

<210> 40143  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 40143  
 Leu Leu Ser Leu Thr Val Ser Val Gly Gly Trp Val Val Asp Phe Met  
 1 5 10 15  
 Ile Gln Glu Arg Asn Gly Lys Pro Phe Glu Ser Gly Leu Val Pro Thr  
 20 25 30  
 Gly Phe Trp Ala Gly Val Thr Val Gly Arg Leu Val Leu Gly Phe Val  
 35 40 45  
 Asn Asp Trp Leu Gly Met Tyr Pro Leu Tyr Ala Ala Leu Ala Ile Glu  
 50 55 60  
 Cys  
 65

<210> 40144  
 <211> 125  
 <212> PRT  
 <213> A.fumigatus

<400> 40144  
 Arg Gly Ser Ser Gly Arg Phe Met Val Trp Gly Thr Ser Asn Met Cys  
 1 5 10 15  
 Asp Asp Arg Tyr Ser Asn Thr Asp Gly Arg Pro Arg Ala Thr Leu Ser  
 20 25 30  
 Pro Thr Ile Ala Thr Gln Met Ile Lys Ser Gly Leu His Trp Asn Tyr  
 35 40 45  
 Phe Tyr Tyr Thr Leu Leu Gly Gly Ser Val Leu Glu Leu Leu Thr Ser  
 50 55 60  
 Val Ala Thr Phe Trp Gln Glu Asn Ala Val Ser Tyr Arg Ala Lys Asn  
 65 70 75 80  
 Arg Arg Ser Pro Asp Ser Ser Gly Gly Ser Arg Thr Thr Glu Ala Met  
 85 90 95  
 Lys Ser Pro Ile Thr Trp Leu Ile Ala Ser Trp Leu Phe Val Tyr Met  
 100 105 110  
 Gly Val Glu Gly Ala Leu Ser Asp Leu Leu Trp Ser Lys  
 115 120 125

<210> 40145  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 40145  
 Leu His Leu Gln Thr Tyr Val Ala Ile Pro Gln Trp Ala Leu Tyr His  
 1 5 10 15  
 Arg Glu Gln Tyr Phe Ala Glu Pro Asn Asp Phe His Pro Glu Arg Phe  
 20 25 30

## 17512

Leu Gly Asp Pro Lys Phe Ala Asn Asp Arg Arg Asp Ala Leu Gln Pro  
           35                  40                  45  
 Phe Ser Val Gly Pro Arg Asn Cys Leu Gly Arg Lys  
       50                  55                  60

<210> 40146  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<400> 40146  
 Val Val Cys Tyr Val Ile Thr Gln Ala Val Tyr Asn Val Phe Phe His  
 1                  5                  10                  15  
 Pro Leu Ser Arg Phe Pro Gly Pro Leu Leu His Arg Ala Ser Arg Leu  
           20                  25                  30  
 Ala Tyr Val Tyr Arg Leu Ile Gly Gly Thr Leu Thr Leu Asp Ala Leu  
           35                  40                  45  
 Glu Met His Gln Arg Tyr Gly Asp Ile Val Arg Val Ala Pro Asp Glu  
       50                  55                  60  
 Leu Phe Phe Ala His Pro Asp Ala Leu Val Arg His Pro Gln Glu Asp  
 65                  70                  75                  80  
 Trp Glu Gly Asp Gly  
                   85

<210> 40147  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 40147  
 Leu Thr Ile Phe Ser Leu Ala Tyr Ala Glu Met Arg Leu Ile Leu Ala  
 1                  5                  10                  15  
 Leu Val Ile Phe His Phe Asp Met Lys Ile Asp Pro Asp Cys Arg Asp  
           20                  25                  30  
 Trp Ile Gln Gln Arg Asn Phe Thr Leu Trp Gln Lys Pro Pro Leu Lys  
           35                  40                  45  
 Val Tyr Leu Lys Pro Val Ala Arg Lys Ser Glu Pro Asn Gln Val  
       50                  55                  60

<210> 40148  
 <211> 92  
 <212> PRT  
 <213> A.fumigatus

<400> 40148  
 Ser Thr Gln Asp Phe Asn Tyr Pro Asn Arg Cys Ile Ser Ser Leu Lys  
 1                  5                  10                  15  
 Lys Pro Ala Val Thr Asp Pro Pro Asp Thr Thr Val Ala Lys Met Gly  
           20                  25                  30  
 Leu Ile Glu Gly Leu Gln Ala Ala Leu Asp Tyr Leu Glu Asn Pro Thr  
           35                  40                  45  
 Ala Leu Thr Ala Thr Ser Val Ser Met Cys Leu Cys Trp Leu Ala Thr  
       50                  55                  60  
 Tyr Ala Gly Met Val Arg Lys Ser Phe Gln Asp Arg Ser Tyr Ser Met  
 65                  70                  75                  80  
 Pro Leu Met Pro Leu Cys Cys His Ile Ala Phe Glu

## 17513

85

90

&lt;210&gt; 40149

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40149

```

Ser Glu Gly Arg Leu Pro Trp Thr His Ser Lys Cys Ile Asn Ala Thr
1          5          10          15
Glu Ile Leu Tyr Glu Ser Pro Leu Met Ser Ser Phe Ser Pro Thr Gln
          20          25          30
Met Pro Trp Ser Asp Ile His Lys Lys Thr Gly Arg Glu Met Asp Lys
          35          40          45
Ala Ala Trp Phe Tyr Arg Pro Leu Glu Gln Ser Pro Arg Cys Ile Val
          50          55          60
Asp Glu Ser His Glu Gln His Ser Arg Leu Arg Arg Gln Met Ala Pro
65          70          75          80
Gly Phe Ser Glu Lys Ser Met Arg Asp Gln Glu Pro Ile Ile Arg Gly
          85          90          95
Tyr Val Asp Leu Leu Leu Gln Arg Leu Leu Glu Lys Ser Asn Asp Gly
          100          105          110
Gln Pro Val Val Ile Ser Asp Trp Phe Asn Tyr Thr Thr Phe Asp Ile
          115          120          125
Ile Gly Asp Leu Val Phe Gly Glu Pro Phe Glu Cys Leu Gly Ser Ser
          130          135          140
Lys Tyr Asp Gly Trp Ile Lys Ser Ile Phe Glu Ser Leu Arg Pro Leu
145          150          155          160
Thr Ile Val Gln Ala Leu Ser Phe Phe Pro Trp Leu Lys Arg Ile Ala
          165          170          175
Leu Asp Thr Val Pro Lys Asn Leu Gln Gly Asp Ile Lys Gln Gln Gln
          180          185          190
Gln Gln Thr Glu Ala Lys Met Arg Arg Arg Met Ala Val Thr Ala Ser
          195          200          205
Arg Gly Asp Leu Met Glu Gly Leu Leu Lys Lys Lys Asp Glu Leu Val
          210          215          220
Ser Asn Leu Ala Leu
225

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&lt;210&gt; 40150

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40150

```

Tyr Arg Asn Arg Ile Gly Thr Asn Gly Arg Pro Leu Thr Asn Leu Gln
1          5          10          15
His Leu Ser Thr Glu Glu Leu Ile Gly Asn Ala Gln Val Leu Ile Leu
          20          25          30
Ala Gly Ser Glu Thr Thr Ala Ser Leu Leu Ser Gly Val Ile Tyr Leu
          35          40          45
Leu Leu Gln Asn Ala Val Ala Tyr Arg Gln Leu Val Asp Glu Val Arg
          50          55          60
Ser Thr Phe Asn Ser Glu Lys Asp Ile Asn Phe Val Ser Val Ser Gln
65          70          75          80
Leu Ser Tyr Met Leu Ala Cys Leu Asn Glu Ala Leu Arg Ile Tyr Pro

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Parameter	Value	Unit	Source
$\alpha$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\beta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\gamma$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\delta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\epsilon$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\zeta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\eta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\theta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\iota$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\kappa$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\lambda$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\mu$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\nu$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\xi$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\omicron$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\pi$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\rho$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\sigma$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\tau$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\upsilon$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\phi$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\chi$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\psi$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\omega$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\varphi$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\vartheta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\varpi$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
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$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
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$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
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$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\var�$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\alpha$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\beta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\gamma$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\delta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\epsilon$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\zeta$	0.001	cm <sup>2</sup> /s	Ref. [1]
$\eta$	0.001	cm <sup>2</sup> /s	Ref. [1]

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<210> 40151
<211> 529
<212> PRT
<213> A.fumigatus
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<400>	40151														
Val	Ala	Asn	Ala	Ile	Glu	Ile	Ala	Ser	Asn	Pro	Ser	Ala	Asp	Pro	Ala
1				5					10					15	
Leu	Lys	Thr	Gln	Ala	Phe	Asp	Phe	Val	Asn	Gln	Leu	Arg	Ser	Asp	Pro
			20					25					30		
Ser	Gly	Trp	Gln	Val	Cys	Leu	Ser	Leu	Phe	Thr	Gln	Thr	Pro	Gln	Arg
		35					40					45			
Ser	Gly	Ile	Val	Arg	His	Val	Ala	Leu	Glu	Val	Val	Asn	Ser	Ala	Ala
	50					55					60				
Gln	Gly	Gly	Leu	Ile	Asp	Leu	Gln	Ala	Leu	Ala	Tyr	Val	Lys	Asp	Gly
65					70					75					80
Leu	Leu	Ala	Tyr	Leu	Arg	Gln	Val	Tyr	Gly	Gln	Asp	Ala	Gly	Ala	Ser
				85					90					95	
Asp	Pro	Pro	Asn	Ile	Gln	Asn	Lys	Ile	Ala	Gln	Thr	Ile	Thr	Phe	Leu
			100					105					110		
Phe	Ser	Ala	Leu	Tyr	Ala	Ser	Gly	Trp	Glu	Ser	Phe	Phe	Asp	Asp	Leu
		115					120					125			
Leu	Gly	Leu	Thr	Gln	Lys	Ser	Pro	Ser	Ser	Thr	Thr	Arg	Asp	Asn	Ala
	130					135					140				
Ser	Gly	Ile	Ile	Phe	Tyr	Leu	Arg	Val	Ile	Asn	Ser	Ile	His	Asp	Glu
145					150					155					160
Ile	Gly	Asp	Val	Leu	Val	Ser	Arg	Ser	Arg	Asn	Glu	Gln	Asp	Lys	Ala
				165					170					175	
Asn	Ala	Leu	Lys	Asp	Leu	Ile	Arg	Gln	Arg	Asp	Met	Gln	Lys	Ile	Thr
			180					185					190		
Ser	Ser	Trp	Gln	Gln	Ile	Leu	Ser	Glu	Trp	Arg	Asp	Gly	Asn	Asp	Val
		195				200						205			
Ile	Val	Glu	Met	Cys	Leu	Lys	Ala	Val	Gly	Ser	Trp	Val	Ser	Trp	Ile
	210					215					220				
Asp	Ile	Gly	Leu	Val	Val	Asn	Gln	Thr	Met	Leu	Asp	Leu	Leu	Phe	Gln
225					230					235					240
Gln	Leu	Gly	Arg	Ala	Gln	Lys	Glu	Asp	Leu	Arg	Gln	Gly	Glu	Glu	Lys
				245						250				255	
Val	Arg	Asp	Ala	Ala	Val	Asp	Val	Phe	Thr	Glu	Ile	Ile	Gly	Lys	Lys
			260					265					270		
Met	Lys	Pro	Glu	Asp	Lys	Ile	Asp	Met	Ile	Ile	Phe	Leu	Asn	Leu	Asp
		275				280						285			
Thr	Ile	Val	Ser	Gln	Leu	Ser	Asn	Ser	Pro	Pro	Leu	His	Gly	Asn	Arg
	290					295					300				
Phe	Thr	Phe	Lys	Tyr	Asp	Thr	Asp	Leu	Ala	Glu	Thr	Val	Ala	Lys	Leu
305					310					315					320
Val	Asn	Ile	Thr	Val	Ile	Asp	Ile	Val	Arg	Ala	Leu	Glu	Gln	Glu	Gly
				325						330				335	
Val	Ser	Thr	Glu	Cys	Lys	Glu	Lys	Ala	Asn	Gly	Leu	Leu	Gln	Ala	Phe
			340					345					350		

## 17515

Leu Pro His Ile Leu Arg Tyr Phe Ser Asp Glu Tyr Asp Glu Val Cys  
           355                          360                          365  
 Ser Thr Val Ile Pro Cys Val Ser Asp Leu Leu Thr Tyr Leu Arg Arg  
           370                          375                          380  
 Ile Ala Lys Val Asn Pro Ala Leu Ala Ser Gln His Ser Ser Ile Leu  
 385                          390                          395                          400  
 Leu Pro Ile Leu Lys Ala Ile Ile Ala Lys Met Arg Tyr Asp Glu Thr  
                           405                          410                          415  
 Ser Ser Trp Gly Glu Glu Asp Glu Gln Thr Asp Glu Ala Glu Phe Gln  
                           420                          425                          430  
 Glu Leu Arg Lys Arg Leu Gly Ile Leu Gln Gln Met Ile Ala Ser Ile  
           435                          440                          445  
 Asn Glu Gln Leu Tyr Met Glu Val Val Ser Glu Met Val Ala Thr Thr  
           450                          455                          460  
 Phe Glu Asn Leu Arg Gln Ser Gly Ser Gln Met Asp Trp Arg Asp Leu  
 465                          470                          475                          480  
 Asp Leu Ala Leu His Glu Met Phe Leu Phe Gly Asp Leu Ala Val Lys  
                           485                          490                          495  
 Ala Gly Ser Leu Tyr Thr Lys Gly Asn Pro Asn Asn Gln Ala Ala Glu  
                           500                          505                          510  
 Arg Leu Ile Glu Met Met Leu Arg Met Val Glu Ser Gly Arg Tyr Ile  
           515                          520                          525  
 Lys

&lt;210&gt; 40152

&lt;211&gt; 356

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40152

Arg Leu Asp Ile Arg Ser Phe Thr His Pro Ala Thr Gln Leu Gln Tyr  
 1                          5                          10                          15  
 Thr Glu Ile Cys Val Arg Tyr Ser Ser Phe Phe His His His Thr His  
           20                          25                          30  
 Leu Ile Pro Gly Val Leu Glu Asn Phe Leu Gln Leu Val His His Pro  
           35                          40                          45  
 Ile Lys Lys Val Lys Thr Arg Ser Trp Tyr Leu Phe Gln Arg Leu Val  
           50                          55                          60  
 Lys Gln Leu Arg Gln Tyr Val Gly Asn Val Ala Gln Thr Val Val Glu  
 65                          70                          75                          80  
 Ala Leu Gly Asp Leu Leu Val Ile Arg Ala Glu Leu Pro Ser Glu Val  
           85                          90                          95  
 Ser Glu Gly Asp Glu Met Ser Ser Glu Asp His Glu Leu Ala Asp Ala  
           100                          105                          110  
 Ile Phe Asn Ser Gln Leu Tyr Leu Phe Glu Ala Val Gly Ile Ile Cys  
           115                          120                          125  
 Ser Thr Pro Thr Ile Ser Pro Asp Lys Gln Val Leu Tyr Leu Gln Ala  
           130                          135                          140  
 Val Leu Asn Pro Ile Phe Leu Asp Met Glu Lys Asn Leu Glu Ala Ala  
 145                          150                          155                          160  
 Lys Ser Gln Asp Glu Arg Ala Ile Leu Gln Ile His His Asp Ile Met  
           165                          170                          175  
 Ala Leu Gly Thr Leu Ala Arg Gly Phe Ser Asp Trp Met Pro Gly Thr  
           180                          185                          190  
 Asn Thr Pro Ala Thr Leu Pro Ala Pro Glu Val Ser Ala Ala Phe Asn

## 17516

195	200	205
Gln Val Ala Glu Ala Thr Leu Val Ala Leu Glu Ser Leu Lys Ser Ser		
210	215	220
Phe Asn Val Arg Thr Ala Ala Arg Phe Ala Phe Ser Arg Leu Ile Gly		
225	230	235
Val Leu Gly Ser Arg Ile Leu Pro Gln Leu Pro Arg Trp Ile Asp Gly		
	245	250
Leu Leu Thr Gln Thr Ser Ser Arg Asp Glu Met Ala Leu Phe Leu Arg		
	260	265
Leu Leu Asp Gln Val Ile Phe Gly Phe Lys Gly Glu Ile Phe Ser Ile		
	275	280
Leu Asp Thr Leu Leu Thr Pro Phe Leu Gln Arg Val Phe Ser Gly Ile		
	290	295
Ala Asp Pro Thr Thr Gly Thr Asp Asp Glu Ile Gln Leu Ala Glu Leu		
305	310	315
Lys Arg Glu Tyr Leu Asn Phe Leu Leu Ala Val Leu Asn Asn Asp Leu		
	325	330
Gly Ala Val Ile Ile Ser Glu Arg Glu Ser Gln Asn Gln Gln Ser Ile		
	340	345
Leu Val Ser Val		
355		

&lt;210&gt; 40153

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40153

Ala Asn Pro Val Pro Gly Asn Gln Pro Ile Phe Glu Thr Val Ile Ser		
1	5	10
Thr Ile Glu His Phe Ser Lys Asp Ile Asp Asp Phe Thr Thr Ala Lys		
	20	25
Met Ala Phe Ser Val Leu Ser Lys Met Ser Ser Ser Trp Gly Gly Pro		
	35	40
Asp Val Ile Ala Glu Ala Ser Asn Gly Thr Pro Pro Ser Gln Ala Pro		
	50	55
Leu Pro Gly Phe Gly Gln Phe Met Ile Thr Arg Phe Ser Pro Leu Cys		
65	70	75
Trp Ala Leu Pro Ser Thr Pro Phe Phe Asn Ser Lys Asp Ala Gln Ala		
	85	90
Lys Gln Val Leu Ala Glu Ala Gly Gly Leu Gln Arg Thr Ile Tyr Ala		
	100	105
Lys Thr Gly Met Glu Tyr Leu Thr Tyr Leu Arg Asp Arg Glu Leu Pro		
	115	120
Gly Met Gly Met Gly Gly Glu Leu Ile Glu Glu Phe Val Gly Ala Leu		
	130	135
Ser Arg Leu Asp Leu Lys Gly Phe Arg Gln Phe Phe Pro Val Cys Leu		
145	150	155
Ser Asn Phe His Ile Leu Ser Ile		
	165	

&lt;210&gt; 40154

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40154

Leu Asp Asn Ser Val Arg Glu Gln Gly His Thr Ile Met Ser Val Thr  
 1 5 10 15  
 Thr Lys Ala Thr Ile Ala Ser Phe Gly Gly Lys Leu Leu Lys Leu Ser  
 20 25 30  
 His Ala Ala Ala Ser Thr Lys Cys Glu Met Asn Phe Asn Leu Tyr Leu  
 35 40 45  
 Pro Pro Gln Ala Phe Gln Asp Pro Ser Gln Lys Ile Pro Val Leu Ile  
 50 55 60  
 Tyr Leu Ser Gly Leu Thr Cys Thr Ala Asp Asn Cys Ser Glu Lys Gly  
 65 70 75 80  
 Phe Phe Gln His Gly Ala Ser Lys Lys Gly Ile Ala Val Leu Tyr Pro  
 85 90 95  
 Asp Thr Ser Pro Arg Thr Leu Gln Pro Gln Pro Leu Ala Pro Pro Pro  
 100 105 110  
 Pro Pro Gly Thr Gly Gln Glu  
 115

&lt;210&gt; 40155

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40155

Arg Ser Gly Arg Gly Gly Trp Met Ser Ser Leu Thr Trp Leu Val Phe  
 1 5 10 15  
 Leu Leu Ser Leu Phe Asp Phe Gly Gly Gly Leu Gly Gly Glu Lys Lys  
 20 25 30  
 Thr Asp Arg Leu Pro Gln Gly Thr Gly Asp Asn Phe Tyr Lys Gln Gly  
 35 40 45  
 Gln Leu Leu Pro Glu Asn Phe Glu Lys Ala Ala Lys Glu Ala Gly Val  
 50 55 60  
 Glu Gly Val Asn Ile Arg Tyr Gln Pro Asp Tyr Asp His Ser Tyr Tyr  
 65 70 75 80  
 Thr Met Ala Thr Phe Ala Asp Asp His Val Glu His Ala Ala Lys Tyr  
 85 90 95  
 Leu Phe Ala

&lt;210&gt; 40156

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40156

Gln Leu Arg Pro Arg Thr Arg Ser His Asn His Val Arg His His Lys  
 1 5 10 15  
 Ser His Asn Cys Leu Val Trp Arg Gln Ala Ala Gln Ala Glu Pro Cys  
 20 25 30  
 Arg Arg Leu His Lys Met Arg Asp Glu Leu Gln Pro Leu Pro Ala Pro  
 35 40 45  
 Pro Gly Leu Pro Gly Pro Leu Pro Glu Asp Pro Arg Pro His Leu Pro  
 50 55 60  
 Val Arg Pro His Leu His Ser Arg Gln Leu Leu Arg Glu Gly Leu Leu  
 65 70 75 80  
 Pro Ala Arg Arg Gln Gln Glu Arg His Cys Gly Thr Leu Pro Arg His

## 17518

				85					90					95					
Gln	Ser	Pro	Tyr	Val	Thr	Ala	Pro	Thr	Pro	Ser	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Pro
				100					105					110					
Gly	His	Trp	Pro	Arg	Ile	Thr	Leu	Ile	Leu	Asn	Lys	Met	Ile	Glu	Thr				
				115					120					125					
Gly	Gly	Leu	Asp	Ile	Glu	Gly	Glu	Asn	Asp	Ser	Trp	Asp	Phe	Gly	Thr				
				130					135					140					
Gly	Ala	Gly	Phe	Tyr	Val	Asp	Ala	Thr	Lys	Ala	Pro	Tyr	Asn	Lys	Gly				
							150				155				160				
Tyr	Asn	Met	Tyr	Thr	Tyr	Val	Thr	Glu	Glu	Leu	Pro	Lys	Thr	Val	Phe				
						165				170					175				
Ala	Ala	Phe	Pro	Gln	Leu	Asp	Ser	Ser	Arg	Val	Ser	Ile	Thr	Gly	His				
				180					185					190					
Ser	Met	Gly	Gly	His	Gly	Ala	Leu	Thr	Leu	Val	Ser	Ser	Val	Gln	Ser				
				195				200						205					
Asp	Val	Arg	Glu	Trp	Leu	Asp													
				210				215											

&lt;210&gt; 40157

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40157

Gln	Lys	Val	Pro	Ala	Leu	Lys	Gln	Tyr	Leu	Arg	Asn	Pro	Gly	Lys	Tyr				
1				5					10					15					
Lys	Ser	Val	Ser	Ala	Phe	Ala	Pro	Ile	Ala	Asn	Pro	Ile	Asn	Cys	Pro				
				20				25					30						
Trp	Gly	Gln	Lys	Ala	Phe	Ala	Gly	Tyr	Phe	Gly	Glu	Asp	Gln	Lys	Ala				
				35				40					45						
Lys	Trp	Ala	Glu	His	Asp	Ala	Thr	Glu	Leu	Val	Lys	Lys	Trp	Lys	Gly				
				50			55				60								
Arg	Leu	Asp	Val	Leu	Ile	Asp	Val	Val	Ser	Leu	Leu	Ala	Phe	Ala	Val				
				65			70			75					80				

&lt;210&gt; 40158

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40158

Val	Ile	Ile	Thr	Ser	Phe	Leu	Phe	Pro	Glu	Gly	Lys	Phe	Ser	Leu	Glu				
1				5					10					15					
Arg	Leu	Gln	Ser	Val	Leu	Thr	Ala	Leu	Gly	Gly	Asp	Lys	Ser	Lys	Leu				
				20				25					30						
Val	Leu	Asp	Leu	Ser	Cys	Arg	Arg	Lys	Asp	Asn	Thr	Trp	Phe	Val	Ala				
				35				40					45						
Met	Asn	Arg	Trp	Gln	Thr	Ile	Thr	Glu	Met	Glu	Ile	Asn	Gln	Gly	Ile				
				50			55				60								
Leu	Gln	Phe	Asn	Phe	Val	Leu	Leu	Thr	Ala	Pro	Lys	Leu	Thr	Leu	Ala				
					70				75						80				
Gln	Asn	Gln	Ser	Gln	Cys	Leu	Ser	Arg	Ile	Ala	Pro	Ser	Ser	Ser	Phe				
				85					90					95					
Met	Leu	Gln	Met	Trp	Lys	Gly	Tyr	Ser	Lys	Val	Leu	Thr	Lys	Ser	Leu				
				100				105						110					



17519

<210> 40159  
<211> 153  
<212> PRT  
<213> A.fumigatus

<400> 40159  
Asp Lys His Ser Pro Ser Ser Tyr Gln Arg Arg Leu Trp Gly Val Thr  
1 5 10 15  
Ile Ile Ala Arg Asn Leu Leu Trp Glu Gln Ile Glu Val Asp Lys Met  
20 25 30  
Thr Lys Phe Arg Pro Cys Ile Asp Leu His Ser Gly Gln Val Lys Gln  
35 40 45  
Ile Val Gly Gly Thr Leu Ser Asp Arg Asp Ser Asp Leu Lys Thr Asn  
50 55 60  
Tyr Val Ser Lys Leu Pro Ala Ser His Tyr Ala Glu Leu Tyr Arg Lys  
65 70 75 80  
His Glu Leu Arg Gly Gly His Val Val Met Leu Gly Pro Gly Asn Asp  
85 90 95  
Glu Ala Ala Lys Glu Ala Leu Arg Thr Trp Pro Gly Gly Leu Gln Val  
100 105 110  
Ala Gly Gly Ile Asn Asp Lys Asn Ala Arg Tyr Trp Ile Asp Gln Gly  
115 120 125  
Ala Asp Lys Val Gly Phe Leu Leu Thr Pro Ala Gly Cys Ile Trp Ser  
130 135 140  
Ser His Leu Cys Ser Arg Leu Val Gln  
145 150

<210> 40160  
<211> 114  
<212> PRT  
<213> A.fumigatus

<400> 40160  
Pro Gly Tyr Thr Ser Val Gln Phe Cys Ala Ser His Cys Thr Glu Ala  
1 5 10 15  
Asn Pro Ser Pro Glu Ser Ile Ser Met Leu Glu Pro Tyr Cys Ser Glu  
20 25 30  
Phe Leu Ile His Ala Ala Asp Val Glu Gly Leu Gln Gln Gly Ile Asp  
35 40 45  
Glu Glu Leu Val Ala Lys Leu Ala Glu Trp Cys Ser Ile Pro Val Thr  
50 55 60  
Tyr Ala Gly Gly Ala Arg Ser Leu Gln Asp Leu Glu Arg Val His Val  
65 70 75 80  
Ser Ser Asn Gly Lys Val Asp Leu Thr Ile Gly Ser Ala Leu Asp Ile  
85 90 95  
Phe Gly Gly Leu Gly Val Thr Phe Asn Glu Cys Val Arg Trp Asn Glu  
100 105 110  
Gln His

<210> 40161  
<211> 69  
<212> PRT  
<213> A.fumigatus

<400> 40161

## 17520

Asn Leu Thr Ser Ile Phe Ser Tyr Arg Pro Ile Ala Asp Arg Cys Glu  
 1 5 10 15  
 Asp Lys Ser Ile Ser Gln Leu Asn Arg Ser Ala Leu Thr Ser Ile Asn  
 20 25 30  
 His Leu Ser His Leu Trp Ser Arg Gln Arg Gln Asn Glu Ala Arg Cys  
 35 40 45  
 Ile Gly Ala Lys Cys Leu Phe Leu Gly Lys Val Ile Val His Ser Gln  
 50 55 60  
 Asn Arg Ile Thr Tyr  
 65

&lt;210&gt; 40162

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40162

Ala Leu Arg Thr Tyr Gln Thr Ala Lys Pro Pro Thr Leu Ser Thr Glu  
 1 5 10 15  
 Ser Thr Thr Thr Lys Pro Ala Ser Lys Lys Ala Lys Asn Lys Lys Glu  
 20 25 30  
 Glu Asp Asp Asp Asp Met Asp Ala Glu His Leu Lys Asn Asp Leu  
 35 40 45  
 Ala Leu Gln Arg Leu Leu Lys Glu Ser His Leu Leu Asp Ser Ala Ser  
 50 55 60  
 Glu Leu Ala Pro Thr Gly Lys Asn Arg Leu Lys Ala Leu Asp Leu Arg  
 65 70 75 80  
 Met Gln Ser Leu Gly Ala Lys Thr Ser Leu Tyr Gln Gln Asn Met Pro  
 85 90 95  
 Ser Ser Leu Arg Arg Gly Ile Lys Ala Lys Ala Leu Met Lys Glu Glu  
 100 105 110  
 Lys Arg Arg Arg Glu Ala Lys Glu Asn Gly Ile Ile Leu Glu Arg Pro  
 115 120 125  
 Thr Pro Lys Ser Lys Val Thr Lys Gly Arg Arg Glu Arg Gly Ile Ala  
 130 135 140  
 Gly Pro Gly Ile Gly Lys Leu Ser Gly Gly Thr Leu Asn Leu Ser Lys  
 145 150 155 160  
 Arg Asp Ile Ala Val Val Gln Ser Ala Arg Arg Ser Arg Arg Gly Gly  
 165 170 175  
 Arg Gly Lys Ser Lys Thr Arg Gly Arg His  
 180 185

&lt;210&gt; 40163

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40163

Leu Val Gly Pro Ser Tyr Leu Ala Cys Trp Leu Leu Gln Ser Ala Asn  
 1 5 10 15  
 Phe Tyr Ala Ala Glu Val Leu His Lys Thr Leu Ala Arg Gln Ser Gly  
 20 25 30  
 Asp Pro Ser Thr Gln Thr Arg Phe Gln Ile Gly Arg Gly Asn Ser Ser  
 35 40 45  
 Pro Ala Ala Glu Thr Ser Phe Leu Val Leu Thr Tyr Cys Ile Met Met  
 50 55 60

## 17521

Thr Asn Met Thr Leu Val Leu Arg Ile Phe Ala Pro Ser Ser Thr Ala  
 65 70 75 80  
 Thr Lys Tyr Leu Asp Ser Arg Phe Glu Ser Lys Asp Asp Leu Asp Ser  
 85 90 95  
 Val Arg Ser Lys Val Thr Trp Ser Leu Ala Thr Leu Arg Ala Thr Arg  
 100 105 110  
 Thr Gly Met Thr Gly Ile Ala Thr Ala Met Leu Gln Asn Arg Glu Lys  
 115 120 125  
 Thr Gly Ser Ser Pro Val Leu Ala Met Ser Val Pro Ser Phe Ala Asn  
 130 135 140  
 Arg Gln Gln Val Leu Asn Leu Asp His Leu Ile Glu  
 145 150 155

&lt;210&gt; 40164

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40164

Ser Ala Tyr Phe Leu Gly Lys Ile Cys Lys Gln Val Leu Val Met Ser  
 1 5 10 15  
 Ser Ser Ile Cys Val Ala Ser Ser Arg Leu Ser Leu Pro Thr Leu Leu  
 20 25 30  
 Arg Asn Val Cys Arg Ser Glu Phe Thr Ala Asp Leu Gly Pro Arg Ser  
 35 40 45  
 Glu Tyr Lys Ser Phe Phe Ala Met Gln Arg Ala Ala Leu Ala Tyr Arg  
 50 55 60  
 Arg Ile Arg Gly Pro Arg Gln Phe Ser Ser Leu Thr Leu Ala Asp Asp  
 65 70 75 80  
 Ile Pro Thr Thr Ser Lys Gln Pro Pro Ser Arg Ala Ala Asn Val Ser  
 85 90 95  
 Ser Val Ser Gln Pro Gly Glu Pro Thr Lys Thr Gly Ala Gly Glu Ile  
 100 105 110  
 Arg Ala Ser Ser His Pro Ser Glu Val Val Ser Ser Ser Pro Arg Ala  
 115 120 125  
 Asp Ser Ala Lys Arg Lys Lys Ala Ser Ala Pro Glu Ala Thr Ala Gly  
 130 135 140  
 Ala Lys Pro Ala Ala Asn Glu Ser Ser Asp Lys Lys Arg Ser Glu Ala  
 145 150 155 160  
 Pro Arg Lys Ser Ser Leu Ser Ile Leu Ser Lys Ser Lys Lys Lys Lys  
 165 170 175  
 Glu Pro Trp Gln Ile Gln Lys Glu Ala Leu Lys Lys Lys Phe Lys Glu  
 180 185 190  
 Gly Trp Asn Pro Pro Lys Lys Leu Ser Pro Asp Ala Leu Glu Gly Ile  
 195 200 205  
 Arg His Leu His Ala Val Ala Pro Asp Arg Phe Thr Thr Pro Val Leu  
 210 215 220  
 Ala Glu Gln Phe Gln Val Ser Pro Glu Ala Ile Arg Arg Ile Leu Lys  
 225 230 235 240  
 Ser Lys Trp Arg Pro Ser Pro Glu Glu Met Glu Lys Arg Arg Glu Arg  
 245 250 255  
 Trp Glu Arg Arg His Asp Arg Ile Trp Ser Gln Met Thr Glu Leu Gly  
 260 265 270  
 Leu Arg Arg Pro Lys Arg Ser Ala Glu Lys Phe Ser Asp Val Lys Val  
 275 280 285  
 Leu Tyr Asp Lys Pro Val

290

&lt;210&gt; 40165

&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40165

Ser Ala Arg Thr Ala Phe Leu Leu Pro Leu Arg Glu Ile Thr Lys Thr  
 1 5 10 15  
 Pro Gly Thr Ser Thr Ser Ala Pro Cys Leu Tyr Cys Gln Leu Lys Val  
 20 25 30  
 Lys Glu Leu Gly Ile Lys Pro Arg Gly Arg Arg Ser Ser Ile Val  
 35 40 45  
 Pro Gly Arg Gly Arg Val Met Val Val Leu Pro Ala Cys Lys Ser Tyr  
 50 55 60  
 Pro Glu Gly Met Arg Gly Met Lys Ile Ala Ser Gln Lys Val Arg Leu  
 65 70 75 80  
 Lys Leu Pro Tyr Leu Met Ile Asp Asp Thr His Ile Phe Arg Phe Leu  
 85 90 95  
 Ala Gly Arg Asn Thr Val Arg Gly Ile Ser Glu Ala Gly Thr Asn Gln  
 100 105 110  
 Phe Pro Gly Asn Leu Arg Pro Asp Leu Glu Gly Pro Arg Val Ser Arg  
 115 120 125  
 Ser Gly Ser Asn Gly Gln Arg Pro Ile Gln His Ser Gly Ser Pro Arg  
 130 135 140  
 Thr Pro Gly Arg Arg Pro Gln Leu Pro Pro Met Asp Phe Lys Phe Pro  
 145 150 155 160  
 Pro Ala Pro Thr Ser Asp Pro Ser Asn Arg Pro Ala Leu Ser Pro Ala  
 165 170 175  
 Ala Thr Ser Ile Asp Glu Asn Pro Gly Ser Val Ser Thr Gly Leu Ser  
 180 185 190  
 Ser Gly Lys Glu Ser Pro Ala Ile Pro Pro Leu Gly His Leu Pro Gln  
 195 200 205  
 Leu Thr Arg Ile Ile Ser Thr Ser Ser Pro Ser Gly Ser His Arg Ser  
 210 215 220  
 Ser Gly Glu Phe Tyr Ser Ala Ser Asp Asn Ser Ser Glu Thr Leu Gln  
 225 230 235 240  
 Ser Glu Tyr Thr Asn Tyr Ser Ala Asn Thr Arg Arg Pro Ser Gly Pro  
 245 250 255  
 Arg His Ala Arg His Phe Ser Ser Val Asp Thr Gly Pro Lys Arg Pro  
 260 265 270  
 Asn Gly Gln Thr Leu Leu Met Gly Tyr Ala Gln Val Ser Ala Ser Phe  
 275 280 285  
 Thr Val Asp Gly Ser Leu Ile Asn Gln Ala Ala Phe Glu Glu Val Lys  
 290 295 300  
 Arg Lys Gly Val Val Gly Ser Gln Gly Asn Ala Ala Gly Thr Leu Gly  
 305 310 315 320  
 Gly Gly Ser Ala Ser Ile Ser Asp Lys Ser Arg Lys Ser Gly Gly Phe  
 325 330 335  
 Trp Gly Ala Phe Lys Trp Asn Ala Ile Glu Glu Ser Ile Ser Gly Leu  
 340 345 350  
 Leu Ser Asn Asn Glu Leu Asp Gly Leu Arg Asp Met Arg Gly Val Thr  
 355 360 365  
 Ser Ser Arg Ser Ile Pro Leu Leu Ser Thr Pro Gln Ser Leu Leu Phe  
 370 375 380

## 17523

Val Asp Leu Arg Leu Ala Pro Gly Glu Glu Gln Ser Tyr Ser Phe Ser  
 385 390 395 400  
 Phe Thr Leu Pro Lys Gly Leu Pro Ala Ser His Lys Gly Lys Ala Ile  
 405 410 415  
 Lys Ile Ser Tyr Asn Leu Val Ile Gly Thr Gln Arg Pro Ser Gly Ser  
 420 425 430  
 Asn Glu Pro Gln Arg Val Asn Arg Ile Thr Ile Pro Phe Arg Val Phe  
 435 440 445  
 Ser Gly Val Asn Ser Lys Phe Ser Arg Ser Ser Ser Leu Leu Asp Thr  
 450 455 460  
 Cys Asp  
 465

&lt;210&gt; 40166

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40166

Phe Leu Leu Gly Gln Gly Glu Ile Leu Gly His Asn Leu Met Ser Pro  
 1 5 10 15  
 Tyr Val Ile Leu Arg Asp Glu Ala Arg Val Gln Lys Val Gly Ser Thr  
 20 25 30  
 Ser Pro Pro Pro Val Ser Lys Asn Lys Ser Ile Ser Gly His Val Trp  
 35 40 45  
 Thr Ser Ala Pro Glu Phe Leu Ser Tyr Val Asp Glu Leu Leu Glu Gln  
 50 55 60  
 Gln Ser Arg Lys Asn Leu Leu Gln Pro Pro Asp Leu Val Ser Ala Arg  
 65 70 75 80  
 Arg Ser Ser Ser Tyr Glu Ala Leu Ala Gly Pro Leu Ser Cys Lys Asp  
 85 90 95  
 Ala Ile Asp Leu Ala Ile Leu Arg Ser Asn Gln Ala Ile Ser Lys Ala  
 100 105 110  
 Arg Ser Pro Asn Arg Phe Glu Ile Ala Arg Asn Gly Arg Arg Ile Ala  
 115 120 125  
 Val Val Val Leu Asn Arg Pro Ala His Arg Leu Gly Glu Thr Ile Thr  
 130 135 140  
 Ala Thr Val Asn Phe Thr Asp Val Ala Leu Pro Cys Tyr Ala Leu Arg  
 145 150 155 160  
 Ala Thr Leu Glu Ser Phe Glu Lys Val Ala Ser Ser Leu Ala Val Arg  
 165 170 175  
 Ser Asn Ala Ser Ile His Arg Ala Thr Arg Arg Val His Ala Ser Phe  
 180 185 190  
 Phe Glu Asn Thr Leu Tyr Ser Thr Arg Val Val Phe Ser Pro Ala Val  
 195 200 205  
 Pro Val Ser Ala Thr Pro Thr Ile Ile Thr Thr Gly Val Asn His Glu  
 210 215 220  
 Trp Glu Leu Arg Phe Glu Phe Val Thr Thr Ser Leu His His Glu Leu  
 225 230 235 240  
 Gly Thr Gly Leu Ser Gly Ala Arg Leu Leu Glu Val Val Ser Glu Asp  
 245 250 255  
 Asp Arg Gly Gln Val Met Ser Gly Leu Glu Asn Leu Gly Cys Glu Ser  
 260 265 270  
 Phe Glu Ile Ala Ile Pro Val Thr Val Tyr Gly Glu Thr Val Arg Glu  
 275 280 285  
 Arg Leu Pro Glu Glu Asn Glu Gly Tyr Ser Ile

290

295

&lt;210&gt; 40167

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40167

Asn	Cys	Asp	Val	Arg	Leu	Gly	Tyr	Gln	Ile	Cys	Ala	Val	Tyr	Gln	Ile
1				5				10						15	
Leu	Ile	Ser	Thr	Tyr	Leu	Ser	Val	Asn	Gly	Ile	Leu	Arg	Val	Tyr	His
			20				25					30			
Val	Gly	Asp	Arg	Tyr	Gln	Tyr	Glu	Tyr	His	Lys	Lys	Thr	Leu	Met	Glu
		35				40						45			
Arg	Ile	Pro	Phe	Ile	Ser	Ser	Ala	Met	Gly	Met	Ile	Asn	Ala	His	Glu
	50				55						60				
Ser	Arg	Thr	Tyr	Ala	Ser	Arg									
65					70										

&lt;210&gt; 40168

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40168

Gly	Val	Ser	Trp	Ser	Phe	Tyr	Ser	Glu	Ala	Asn	Gln	Gln	Met	Gly	Leu
1				5				10					15		
Ile	Ser	Asn	Ser	Gly	Leu	His	Leu	Gly	Leu	Arg	Ser	Met	Trp	Thr	Ala
			20				25					30			
Cys	Asn	Trp	Ala	Val	Gly	Val	Phe	Ala	Ile	Thr	Ser	Leu	Ala	Ala	His
		35				40					45				
Glu	Phe	Cys	Gln	Arg	Arg	Arg	Val	Gln	Glu	Leu	Asp	Gly	Met	Lys	Gln
	50				55					60					
Ala	Val	Glu	Leu	Met	Lys	Glu	Leu	Lys	Leu	Lys	Lys	Gln	Arg	Glu	Lys
65				70					75					80	
Glu	Lys	Gln	Met	Ala	Glu	Glu	Ala	Ala	Arg	Leu	Ala	Glu	Glu	Glu	Lys
			85				90						95		
Lys	Arg	Lys	Ser	Trp	Thr	Asn	Leu	Ser	Asn	Tyr	Lys	Phe	Trp		
			100				105						110		

&lt;210&gt; 40169

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40169

Ala	Asn	Lys	Val	Gly	Leu	Val	Ala	Trp	Met	Ser	Asn	Ala	Val	Ile	Thr
1			5					10						15	
Cys	Lys	Gly	Leu	Gln	Glu	Thr	Cys	His	Ala	Cys	Lys	Ile	Glu	Ala	Ile
			20				25					30			
Met	Pro	Lys	Met	Tyr	Ser	Asn	Lys	Phe	Asn	Asn	Tyr	His	Leu	Lys	Arg
		35				40					45				
Leu	Thr	Ser	Tyr	Tyr	Ser	Asn	Phe	Ile	Cys	Leu	Lys	Gly	Pro		
	50				55						60				

&lt;210&gt; 40170

<211> 67  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (15)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40170

Cys	Leu	Val	Asn	Pro	Cys	Tyr	Leu	Ala	Gln	Gln	Ile	Pro	Asn	Xaa	Thr
1			5						10					15	
Ser	Cys	Lys	Leu	Pro	Ala	Ile	Arg	Ala	Arg	Ile	Pro	Phe	Ile	Thr	Tyr
			20					25					30		
Thr	Thr	Lys	Val	Met	Ile	Ala	Arg	Ala	Ala	Thr	Ala	Gln	Asp	Asp	Ile
		35					40					45			
Leu	Gly	Asp	Gly	Thr	Thr	Ser	Val	Val	Leu	Asp	Gly	Arg	Arg	Ala	Leu
	50					55					60				
Glu	Ala	Gly													
65															

<210> 40171  
 <211> 408  
 <212> PRT  
 <213> A.fumigatus

<400> 40171

Phe	Leu	Asp	Gln	Phe	Lys	Ile	Glu	Arg	Asn	Ile	Asp	Arg	Glu	Leu	Leu
1				5					10					15	
Leu	Ser	Val	Ala	Arg	Thr	Ser	Leu	Ala	Thr	Lys	Leu	Asn	Ser	Ala	Leu
			20					25					30		
Ala	Glu	Lys	Leu	Thr	Pro	Asp	Val	Val	Asp	Ala	Val	Leu	Ala	Ile	His
		35					40					45			
Arg	Ala	Pro	Glu	Lys	Pro	Asp	Leu	His	Met	Val	Glu	Ile	Met	Thr	Met
	50					55					60				
Gln	His	Arg	Thr	Ala	Ser	Asp	Thr	Gln	Leu	Ile	Arg	Gly	Leu	Ala	Leu
65					70				75					80	
Asp	His	Gly	Ala	Arg	His	Pro	Asp	Met	Pro	Lys	Arg	Val	Glu	Asn	Ala
			85						90					95	
Phe	Ile	Leu	Thr	Leu	Asn	Val	Ser	Leu	Glu	Tyr	Glu	Lys	Ser	Glu	Ile
			100					105					110		
Asn	Ser	Gly	Phe	Tyr	Tyr	Ser	Ser	Ala	Glu	Gln	Arg	Asp	Lys	Leu	Val
		115				120						125			
Glu	Ser	Glu	Arg	Lys	Phe	Val	Asp	Ala	Lys	Leu	Gln	Lys	Ile	Val	Glu
		130				135					140				
Leu	Lys	Lys	Gln	Val	Cys	Gly	Thr	Asp	Pro	Lys	Lys	Gly	Phe	Val	Val
145					150					155				160	
Ile	Asn	Gln	Lys	Gly	Ile	Asp	Pro	Leu	Ser	Leu	Asp	Val	Leu	Val	Lys
			165						170					175	
Asn	Gly	Ile	Leu	Ala	Leu	Arg	Arg	Ala	Lys	Arg	Arg	Asn	Met	Glu	Arg
			180					185					190		
Leu	Gln	Leu	Val	Cys	Gly	Gly	Val	Ala	Gln	Asn	Ser	Val	Asp	Asp	Leu
		195					200					205			
Thr	Pro	Asp	Val	Leu	Gly	Trp	Ala	Gly	Leu	Val	Tyr	Glu	His	Gln	Leu
		210				215					220				
Gly	Glu	Glu	Lys	Tyr	Thr	Phe	Val	Glu	Glu	Val	Lys	Asp	Pro	Lys	Ser

## 17526

225                      230                      235                      240  
 Val Thr Ile Leu Ile Lys Gly Pro Asn Gln His Thr Ile Ala Gln Val  
                          245                      250                      255  
 Lys Asp Ala Val Arg Asp Gly Leu Arg Ser Val Tyr Asn Thr Ile Val  
                          260                      265                      270  
 Asp Gly Cys Val Val Pro Gly Ala Gly Ala Tyr Gln Val Ala Cys Ala  
                          275                      280                      285  
 His His Leu Ser Ser Glu Gly Val Arg Arg Ser Val Lys Gly Lys Ala  
                          290                      295                      300  
 Lys Trp Gly Val Ala Ala Phe Ala Asp Ala Leu Leu Val Ile Pro Lys  
 305                      310                      315                      320  
 Thr Leu Ala Ala Asn Ser Gly His Asp Ile Gln Asp Ser Leu Ala Ala  
                          325                      330                      335  
 Leu Gln Asp Glu Arg Ala Glu Gly Asn Val Val Gly Leu Asp Leu Thr  
                          340                      345                      350  
 Thr Gly Glu Pro Met Asp Pro Val Gln Glu Gly Val Phe Asp Ser Tyr  
                          355                      360                      365  
 Arg Val Leu Arg Asn Cys Ile Ala Ser Ser Thr Gly Ile Ala Ser Asn  
                          370                      375                      380  
 Leu Leu Leu Cys Asp Glu Leu Leu Lys Ala Arg Gln Met Ser Lys Gln  
 385                      390                      395                      400  
 Gly Gly Pro Gly Gly Met Asp Glu  
                          405

<210> 40172  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 40172  
 Ile Ser Ser Asn Tyr Glu Val Thr Ala Thr Gly Ala Cys Tyr Arg Thr  
 1                      5                      10                      15  
 Glu Ile Ala Ala Cys Leu Lys Tyr Met Thr Arg Arg Asp Trp Arg Asn  
                          20                      25                      30  
 Tyr Ala Leu Gly Tyr Ser Thr Lys Ser Phe Asp Ala Gln Lys Ser Asn  
                          35                      40                      45  
 Ala Ile Ile Gln Glu Trp Ile Arg Ala Tyr Ala Lys Glu Ala Asp Thr  
                          50                      55                      60  
 Thr Ile Ala Ala Leu Glu Ala Leu Ser Pro Arg Lys Thr Asp Gln Glu  
 65                      70                      75                      80  
 Tyr Thr Gly Lys Leu Ser Thr Leu Leu Arg Arg Trp Lys Gln Ile Arg  
                          85                      90                      95  
 Cys Leu Cys Asp Lys Ala Leu Glu Ala Val Ser Cys  
                          100                      105

<210> 40173  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 40173  
 Ile Asp Ser Pro Ala Glu Arg Arg Ser Ala Ile Leu Asn Gln Ile Leu  
 1                      5                      10                      15  
 Glu Pro Glu Ala Ala Asp Arg Leu Gly Arg Ile Arg Leu Val Lys Glu  
                          20                      25                      30  
 Ser Arg Ala Ile Asp Val Glu Asn Arg Leu Ile Met Leu Ala Gln Thr



17527

35 40 45  
 Gly Gln Ile Arg Gln Lys Val Thr Glu Glu Gln Leu Lys Glu Leu Leu  
 50 55 60  
 Asn Ala Ile Ala Glu Asn Gln Arg Lys Asp Glu Glu Glu Gln Lys Ile  
 65 70 75 80  
 Val Ile Ser Arg Arg Lys Gly Gly Trp Asp Asp Asp Asp Asp Leu Leu  
 85 90 95  
 Asp Leu

<210> 40174

<211> 226

<212> PRT

<213> A.fumigatus

<400> 40174

Cys Trp Glu Arg Leu Thr Gln Pro Pro Arg Ser Asp Leu Ile Ala Ala  
 1 5 10 15  
 Leu Gly Glu Ala Thr Ala Thr Pro Tyr Phe Ile Tyr Arg Leu Arg Asp  
 20 25 30  
 Ala Met Leu Ser Asp Pro Thr Gly Arg Arg Ile Leu Arg Asp Arg Pro  
 35 40 45  
 Arg Ile Thr Ser Glu Thr Leu Lys Leu Pro Tyr Leu Arg Thr Leu Pro  
 50 55 60  
 Glu Asn Ser Val Gly Arg Thr Tyr Ala Thr Trp Leu Asp Arg Glu Gly  
 65 70 75 80  
 Val Ser Pro Asp Thr Arg Asn Ser Val Lys Tyr Ile Asp Asp Glu Glu  
 85 90 95  
 Cys Ala Tyr Val Met Gln Arg Tyr Arg Glu Cys His Asp Phe Tyr His  
 100 105 110  
 Ala Val Thr Gly Leu Pro Thr Phe Val Glu Gly Glu Leu Ala Leu Lys  
 115 120 125  
 Ala Phe Glu Phe Leu Asn Thr Leu Ile Pro Met Thr Gly Leu Ser Ile  
 130 135 140  
 Phe Ala Phe Val Arg Leu Lys Pro Ala Glu Arg Glu Arg Phe Phe Ser  
 145 150 155 160  
 Leu His Leu Pro Trp Ala Val Arg Ser Gly Leu Ala Ser Lys Glu Leu  
 165 170 175  
 Ile Asn Val Tyr Trp Glu Glu Ile Leu Glu Lys Asp Val Asp Glu Leu  
 180 185 190  
 Arg Lys Glu Leu Gly Ile Glu Arg Pro Pro Asp Leu Arg Glu Ile Arg  
 195 200 205  
 Lys Leu Met Arg Gln Gln Gln Lys Arg Glu Lys Glu Arg Leu Gln Gly  
 210 215 220  
 Lys Ser  
 225

<210> 40175

<211> 105

<212> PRT

<213> A.fumigatus

<400> 40175

Arg Cys Ala Leu Pro Glu Leu Gln Gly Ile Pro Gly Ile Glu Asn Arg  
 1 5 10 15  
 Phe Ala Pro Glu Arg Leu Arg Ser Met Val Thr Lys Leu Ala Asn Gln

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<210> 40176
<211> 138
<212> PRT
<213> A.fumigatus
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<210> 40177
<211> 464
<212> PRT
<213> A.fumigatus
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<400>	40177														
Ile	Ile	Ser	Asn	Ser	Thr	Phe	Pro	Gln	Ser	Ser	Ala	Pro	Gln	Glu	Glu
1				5					10					15	
Ala	Pro	Pro	Ser	Arg	Gly	Thr	Glu	Phe	Thr	Asp	Pro	Ile	Ile	Pro	Asp
			20					25					30		
Arg	Asn	Thr	Ser	Asn	Ala	Ser	Pro	Phe	Gly	Asn	Thr	Thr	Ser	Arg	Ser
		35					40					45			
Val	Gly	Glu	Ser	Ala	Lys	Leu	Leu	His	Asp	Arg	Asp	Arg	Val	Tyr	Lys
	50					55					60				
Ile	Thr	Pro	Gln	His	Leu	Asp	Leu	Gly	Ala	Asn	His	Asn	Ile	Glu	Lys
65					70					75				80	
Ser	Asp	Pro	Ser	Gln	Arg	Ser	Pro	Leu	Ser	Phe	Leu	Ser	Leu	Gln	Asn
				85					90					95	
Gly	Asn	Thr	Ala	Pro	Glu	Pro	Arg	Asp	Asn	Arg	Ala	His	Glu	Arg	Leu

100 105 110  
 Ser Ser Ala Asp Ser Ser Pro Gly Ser Ile Gln Lys Gln His His Ala  
 115 120 125  
 Pro Thr Ser Ala Asn Leu Gly Lys Asn Tyr Glu Tyr Phe Thr Gly Asn  
 130 135 140  
 Thr Leu Phe Phe Gly Gly Gly Arg Phe Gln Asn Ser Arg Asp Lys Pro  
 145 150 155 160  
 Ile Asn Ile Ala Thr Gly Ile Phe Val Val Leu Pro Ser Ala Leu Phe  
 165 170 175  
 Phe Ala Tyr Ser Ala Pro Trp Leu Trp His His Ile Ser Pro Ala Val  
 180 185 190  
 Pro Ile Leu Phe Ala Tyr Leu Phe Tyr Ile Cys Phe Ser Ser Phe Ile  
 195 200 205  
 His Ala Ser Val Val Asp Pro Gly Ile Ile Pro Arg Asn Leu His Pro  
 210 215 220  
 Met Pro Pro Pro Glu Pro Ser Gly Asp Pro Leu Leu Ile Gly Pro Pro  
 225 230 235 240  
 Thr Asn Asp Trp Val Met Val Lys Leu Ala Thr Ser Asp Val Ala Ala  
 245 250 255  
 Met Asp Val Pro Val Lys Tyr Cys Lys Thr Cys Asn Ile Trp Arg Pro  
 260 265 270  
 Pro Arg Cys Tyr His Cys Arg Val Cys Asp Asn Cys Val Glu Thr Leu  
 275 280 285  
 Asp His His Cys Val Trp Leu Asn Asn Cys Val Gly Arg Arg Asn Tyr  
 290 295 300  
 Arg Tyr Phe Phe Ala Phe Val Ser Ser Ala Thr Leu Leu Ala Leu Phe  
 305 310 315 320  
 Leu Leu Gly Ala Ser Leu Ala His Val Leu Val Tyr Arg Ala Arg Glu  
 325 330 335  
 Gly Val Ser Phe Gly Ser Ala Ile Asp Lys Trp Arg Val Pro Trp Ala  
 340 345 350  
 Met Val Ile Tyr Gly Ala Leu Ala Ala Pro Tyr Pro Ala Ser Leu Trp  
 355 360 365  
 Ala Tyr His Leu Phe Leu Ile Gly Arg Gly Glu Thr Thr Arg Glu Tyr  
 370 375 380  
 Leu Asn Ser His Lys Phe Ala Lys Ala Asp Arg His Arg Pro Phe Thr  
 385 390 395 400  
 Gln Gly Asn Ile Phe Arg Asn Trp Ile Ser Val Leu Ala Arg Pro Arg  
 405 410 415  
 Pro Pro Thr Tyr Leu Gln Phe Lys Arg Pro Asp Gln Glu Gly Asp Gln  
 420 425 430  
 Arg Leu Ser Ala Met Lys Arg Lys Asp Arg Pro Arg Asp Val Glu Ala  
 435 440 445  
 Gln Ala Asp Ile Glu Met Gln His Val Pro Pro Thr Pro Arg Gln Gly  
 450 455 460

&lt;210&gt; 40178

&lt;211&gt; 442

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40178

Phe Tyr Ser Ser Leu Tyr Leu Arg Ser Arg Leu Phe Gln Gln Arg Asn  
 1 5 10 15  
 His Val His Ile Val Leu Lys Ala Ile Glu Met Gly Lys Arg Thr Arg  
 20 25 30

## 17530

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Ser Ser Val Ala Ser Pro Ala Thr Pro Ala Thr Leu Ser Asp Leu Gln
   35                               40                               45
Lys His Ala His Glu His Val Asp Glu Thr Ile Gly Leu Glu Val Pro
   50                               55                               60
Glu Gln Leu Leu Thr Pro Glu Asn Ser Arg Ser Glu Thr Ser Ser Asn
   65                               70                               75                               80
Ser Glu Asn Ala Cys Pro Glu Glu Lys Pro Thr Leu Arg Arg Thr Ser
   85                               90                               95
Thr Arg Val Thr Arg Ser Ser Leu Arg Ala Ser Gly Thr Phe Glu Ser
  100                               105                               110
Lys Pro Glu Glu Glu Asp Ala Ile Leu Pro Ser Leu Ser Gly Glu Met
  115                               120                               125
Asp Pro Thr Asn Ser Ser Gly Asn Leu Ala Asn Asp Val Thr Lys Leu
  130                               135                               140
Lys Arg Ser Gln Ser Ser His Leu Arg His Ser Ile Ala Val Met Glu
  145                               150                               155                               160
Thr Ala Val Trp Ser Glu Ser Thr Leu Thr Arg His Ile Met Glu Ala
  165                               170                               175
Glu Asp His Leu Leu Thr Pro Asp Thr Pro Val Ser Asn Ser Ser Gln
  180                               185                               190
Glu Pro Gln Leu Asp Asp Leu Asn Ser Ser Leu Pro Gln Arg Ser Leu
  195                               200                               205
Arg Lys Arg Val Glu Arg Ala Leu Thr Lys Glu Asp Ser Tyr Asn Arg
  210                               215                               220
Lys Lys Asp Glu Ser Ala Ala Arg Val Asp Gly Pro Leu Pro Arg Arg
  225                               230                               235                               240
Ser Thr Arg Leu Ser Leu Leu Glu Lys Ala Ser Asp Cys Val Glu Lys
  245                               250                               255
Ala Gly Ser Val Leu Gly Lys Arg Ser Lys Asp Met Met Glu Lys Gly
  260                               265                               270
Gln Ile Leu Asp Arg Arg Ala Ser Leu Arg Pro Arg Ser Val Val Ala
  275                               280                               285
Pro Lys Glu Glu Pro Ala Ser Leu Thr Ser Ser Glu Pro Ser Ala Val
  290                               295                               300
Lys Lys Arg Arg Val Ser Glu Ser Asp Leu Pro Ser Lys Thr Lys Ala
  305                               310                               315                               320
Ile Asp Glu Ser Thr Ala Gln Ser Asp Thr Ala Ala Lys Glu Pro Arg
  325                               330                               335
Phe Lys Arg Lys Arg Trp Leu Ser His Gly Leu Tyr Thr Gly Gln Glu
  340                               345                               350
Tyr Thr Thr Ala Arg Pro Ser Gln Asn Arg Asn Lys Asn Ala Lys Arg
  355                               360                               365
Arg Ser Gln Gly Val Pro Ser Gln Arg Arg Leu Leu Pro Met Pro Met
  370                               375                               380
Phe Ala Gly Asp Arg Leu Leu Gln Leu Gly Arg Asp Phe Gln Leu Pro
  385                               390                               395                               400
Phe Asp Ile Tyr Ser Pro Leu Pro Pro Gly Gln Pro Lys Pro Asp Glu
  405                               410                               415
Trp Arg Lys Thr Asn Lys Ser Ser Leu Thr Thr Glu Cys Ala Leu Val
  420                               425                               430
Glu Arg Lys Ser Arg Thr Asn Tyr Pro Ile
  435                               440

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&lt;210&gt; 40179

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40179

Cys Tyr Tyr Leu Met Tyr Phe Asp Gln Asn Met Ile Ile Asp Ala Thr  
 1 5 10 15  
 Arg Gly Ser Ile Ala Arg Phe Val Asn His Ser Cys Glu Pro Asn Cys  
 20 25 30  
 Arg Met Glu Lys Trp Thr Val Ala Gly Lys Pro Arg Met Ala Leu Phe  
 35 40 45  
 Ala Gly Asp His Gly Ile Met Thr Gly Glu Glu Leu Thr Tyr Asp Tyr  
 50 55 60  
 Asn Phe Glu  
 65

&lt;210&gt; 40180

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40180

Asp Arg Gln His Glu Leu Thr Ser Pro Ala Ile Ala Thr Ser Thr Phe  
 1 5 10 15  
 Gly Val Ser Phe Pro Leu Leu Ser Gly Asp Arg Ile Pro Asn Glu Ala  
 20 25 30  
 Ala Met Arg Pro Gln Arg Ser Leu Gln Thr Cys Lys Leu Pro Asp Asp  
 35 40 45  
 Lys Tyr Met Lys Phe Phe Arg Leu Thr Asp Tyr Ala Ile Arg Gln Glu  
 50 55 60  
 Val Val Arg Ala Pro Thr Thr Gln Tyr Gly Gly Met Cys Gly  
 65 70 75

&lt;210&gt; 40181

&lt;211&gt; 591

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40181

Ser Val Gln Val Asn Thr Asp Thr Pro Val Glu Thr Asn Lys Phe Tyr  
 1 5 10 15  
 Cys Gly Leu Phe Leu Gly Thr Gln Thr Asn Asn Thr Phe Thr His Pro  
 20 25 30  
 Tyr Ser Val Ala Trp Val Lys Gly Gly Gly Thr Ser Gln Ser Tyr Gly  
 35 40 45  
 Met Ala Ile Ser His Val Glu Ser Asn Ile Val Ala His Gly Pro Val  
 50 55 60  
 Asn Thr Ala Ile Pro Gly Ser Pro Ile Ser Tyr Tyr Val Asn Pro Ile  
 65 70 75 80  
 Gly Ile His Ser Val Ile Leu Ser Ala Ser Glu Leu Gly Pro Ser Thr  
 85 90 95  
 Val Leu Thr Thr Glu Asn Pro Leu Pro Phe Ser Ala Asn Ala Val Leu  
 100 105 110  
 Arg Pro Ser Ala Ser Ser Ser Gln Ser Ile Thr Ile Pro Val Val Gln  
 115 120 125  
 Gly Met Gly Phe Val Thr Gly Ile Tyr Ser Asn Leu Gln Pro Lys Ile  
 130 135 140  
 Gln Ser Gly Val Phe Phe Thr Lys Met Val Thr Ala Gly Ser Pro Arg

145											150						155						160
Thr	Gly	Ile	Phe	Lys	Tyr	Ser	Leu	Phe	Leu	Glu	Asp	Gly	Thr	Ser	Trp								
				165											170						175		
Leu	Leu	Tyr	Ala	Thr	Pro	Asp	Asp	Gly	Ser	Asp	Pro	Gln	Leu	Gln	Leu								
				180											185						190		
Ala	Ser	Asn	Ser	Glu	Ile	Ile	Gly	Pro	Ala	Gly	Trp	Ser	Gly	Thr	Ile								
				195											200						205		
Gln	Val	Ala	Lys	Asn	Pro	Ala	Gly	Ala	Ser	Gly	Glu	Lys	Phe	Tyr	Asp								
				210											215						220		
Asn	Ser	Ser	Gly	Val	Tyr	Ala	Val	Glu	Gly	Ala	Val	Met	Gly	Ser	Val								
225					230											235						240	
Ser	Glu	Ser	Thr	Gly	Thr	Tyr	Ser	Leu	Met	Trp	Ala	Lys	Ala	Gly	Lys								
				245											250						255		
Asp	Ala	Gln	Asn	Thr	Pro	Leu	Leu	Met	Phe	Ala	Leu	Pro	His	His	Met								
				260											265						270		
Glu	Ser	Phe	Asp	Ala	Ser	Thr	Gln	Ser	Arg	Ala	Thr	Asn	Ile	Thr	Leu								
				275											280						285		
Arg	Thr	Thr	Thr	Lys	Gly	Gln	Ala	Thr	Ala	Val	Ile	Gly	Glu	Tyr	Trp								
				290											295						300		
Thr	Met	Val	Glu	Pro	Glu	Leu	Pro	Ile	Ser	Met	Gly	Phe	Ala	Pro	Trp								
305					310											315						320	
Ser	Val	Ser	Gly	Gly	Ser	Ile	Asp	Lys	Ile	Ser	Pro	Ala	Ala	Gln	Gln								
				325											330						335		
Val	Ile	Leu	Ala	Ala	Ala	Pro	Thr	Glu	Leu	Gln	Gln	Asp	Met	Asp	Ala								
				340											345						350		
Gln	Thr	Asn	Leu	Asn	Ser	Met	Tyr	Phe	Ser	Gly	Lys	Ala	Leu	Ser	Lys								
				355											360						365		
Phe	Ala	Thr	Leu	Leu	Tyr	Thr	Val	Asp	Lys	Leu	Gly	Gly	Asn	Ser	Thr								
				370											375						380		
Leu	Ala	Ala	Glu	Gly	Leu	Ala	Arg	Leu	Lys	Gln	Ser	Phe	Ala	Arg	Phe								
385					390											395						400	
Ile	Asp	Asn	Arg	Gln	Gln	Phe	Pro	Leu	Val	Tyr	Asp	Asn	Val	Trp	Lys								
				405											410						415		
Gly	Val	Val	Ser	Ser	Ala	Ser	Tyr	Ala	Thr	Gly	Asp	Val	Gly	Ala	Asp								
				420											425						430		
Phe	Gly	Asn	Thr	Leu	Tyr	Asn	Asp	His	His	Phe	His	Tyr	Gly	Tyr	Phe								
				435											440						445		
Ile	His	Ala	Ala	Ala	Ile	Ile	Gly	Ser	Met	Asp	Pro	Gln	Trp	Leu	Glu								
				450											455						460		
Thr	Ser	Lys	Asp	Trp	Val	Asn	Met	Leu	Val	Arg	Asp	Ala	Gly	Asn	Ser								
465					470											475						480	
Ala	Gly	Asn	Asp	Pro	Leu	Phe	Pro	Phe	Ser	Arg	Gly	Phe	Asp	Trp	Phe								
				485											490						495		
His	Gly	His	Ser	Trp	Ala	Lys	Gly	Leu	Phe	Glu	Ser	Phe	Asp	Gly	Lys								
				500											505						510		
Asp	Glu	Glu	Ser	Thr	Ser	Glu	Asp	Ala	Met	Phe	Ala	Tyr	Ala	Leu	Lys								
				515											520						525		
Met	Trp	Gly	Lys	Thr	Ile	Gly	Asp	Val	Ser	Met	Glu	Ala	Arg	Gly	Asn								
				530											535						540		
Leu	Met	Leu	Gly	Ile	Leu	Arg	Arg	Ser	Met	Arg	Asn	Tyr	Phe	Leu	Met								

<210> 40182  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 40182  
 Asn Thr Lys Tyr Met Ala Thr Gln Leu Pro His Pro Phe Glu Thr Lys  
 1 5 10 15  
 Ala Gln Tyr Glu Arg Ser Leu Arg Leu Pro Ile Gly Pro Glu Trp Ser  
 20 25 30  
 Thr Lys Glu Thr Leu Gln Asn Ala Thr Lys Pro Arg Val Met Ile Lys  
 35 40 45  
 Gln Gly Ile Ile Lys Pro Met Glu Lys Pro Met Ile  
 50 55 60

<210> 40183  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 40183  
 Ser Gly Pro Val Leu Leu Lys Asn His Asp Leu Val Lys Arg Ala Phe  
 1 5 10 15  
 Asp Gly Asp Glu Val Val Gln Glu Phe Glu Gln Asp Lys Leu Glu Thr  
 20 25 30  
 Ile Glu Glu Glu Gly Asp Lys Val Ile Asp Glu Thr Leu Arg Gly Trp  
 35 40 45  
 Gly Ser Trp Thr Gly Gln Gly Val Ser Lys Arg Glu Gln Arg Arg Gln  
 50 55 60  
 Lys Lys Val Leu Thr Lys Val Glu Gly Val Lys His Glu Asn Arg Lys  
 65 70 75 80  
 Asp Ala Lys Leu Ser Arg Val Ile Ile Asn Glu Lys Arg Ile Arg Lys  
 85 90 95  
 Val Ser Asn Ser Tyr Phe His Arg Phe Lys Ser Asp  
 100 105

<210> 40184  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

<400> 40184  
 Arg Arg Ile His Met Leu Pro Ile Leu Pro Cys Ser Ala Phe Thr Arg  
 1 5 10 15  
 Ser Lys Gln Phe Val Lys Glu Glu Trp Asp Ala Met Phe Ala Ser Asn  
 20 25 30  
 Gly Pro Asp Pro Ala Glu Asn Val Val Gly Gly Trp Lys Gly Val Leu  
 35 40 45  
 Tyr Ala Asn Leu Ala Leu Val Asp Pro Ala Ala Ser Trp Asn Phe Phe  
 50 55 60  
 Thr Gln Pro Asn Phe Asp Tyr Ser Trp Ile Asp Gly Gly Ala Ser Arg  
 65 70 75 80  
 Thr Trp Tyr Leu Ala Tyr Ala Ala Gly Glu Phe Ile Ile Asp  
 85 90

<210> 40185

17534

<211> 66  
<212> PRT  
<213> A.fumigatus

<400> 40185  
Met Leu Gly Val Lys Arg Leu Leu Leu Cys Asp Gly Tyr Gly Ser Tyr  
1 5 10 15  
Met Thr Tyr Glu Phe Ile Asp Phe Cys Glu Lys Asn Asn Ile Leu Leu  
20 25 30  
Tyr Phe Leu Pro Pro His Ile Ser His Ile Leu Gln Pro Leu Asp Val  
35 40 45  
Gly Val Phe His Ala Tyr Lys His Trp His Ser Glu Ala Ile Glu Asp  
50 55 60  
Ala Thr  
65

<210> 40186  
<211> 123  
<212> PRT  
<213> A.fumigatus

<400> 40186  
Leu Asn Glu Val Val His Ile Lys His Ala Gln Leu Pro Ile Asp Ala  
1 5 10 15  
Ser Leu Gly Arg Glu Pro Glu Ile Leu Ala Glu Asp Ser Asp Phe Leu  
20 25 30  
His Ala His Ile Thr Glu Gln Cys His Ser Ile Val Phe Asn Leu Tyr  
35 40 45  
His His Thr Gln Leu Ile Leu Val Ser Thr Ala Ala Asn Asp Phe Asp  
50 55 60  
Met Val Thr Phe Pro Lys Ala Leu Ala Lys Arg Phe Asp Trp Ser Phe  
65 70 75 80  
Asn His Leu Thr Gly Gln Phe Thr Phe Ser Tyr Leu Gln Gly Asn Asn  
85 90 95  
Val Ser Thr Gly Arg Arg Gly Ala Thr Asp Gln Ala Leu Leu Leu Ala  
100 105 110  
Ser Glu His Leu Asp Trp Val Thr Trp Lys Ile  
115 120

<210> 40187  
<211> 94  
<212> PRT  
<213> A.fumigatus

<400> 40187  
Asp Ile Leu Leu Ile Phe Val Phe Ile Phe Ile Phe Val Val Leu Ile  
1 5 10 15  
Leu Leu Leu Pro Leu Leu Leu Val Ile Leu Val Ile Leu Val Ile Phe  
20 25 30  
Thr Phe Phe Leu Val Phe Pro Leu Val Ser Leu Ala Ala Ser Val Ser  
35 40 45  
Leu Ile Gly Ile Asn Val Phe Leu Tyr Val Ile Phe Ala Pro Leu Ser  
50 55 60  
Val Gly Ser Leu Arg Leu Asn Ile Gly Met Val Val Val Phe Leu Phe  
65 70 75 80  
Leu Val Asp Thr Ala Ala Thr Arg Arg Leu Leu Gln Ser Val



<210> 40188  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (52)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40188  
 Ser Arg Leu Gly Asn Gln Arg Glu Val Ser Ser His Gln Thr Thr Val  
 1 5 10 15  
 Thr Cys Asn Lys Thr Ala Gln Glu His Leu Pro Cys Glu Ser Ala Leu  
 20 25 30  
 Lys Phe Tyr Ser Ala His Phe Asp Asp Gln Leu Val Arg Arg His Gly  
 35 40 45  
 Ser Trp Ile Xaa Met Ala Leu Phe Ser Gln Val Tyr Val Thr Arg Ile  
 50 55 60  
 Ser Arg Cys Ala Arg  
 65

<210> 40189  
 <211> 157  
 <212> PRT  
 <213> A.fumigatus

<400> 40189  
 Asn Cys His Gln Leu Gly Lys Glu Ala Thr Ser Leu Thr Asp Glu Thr  
 1 5 10 15  
 Ser Cys Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser  
 20 25 30  
 Ser Ser Pro Ser Ser Ser Ser Ser Ser Ser Ser Ser Phe Ser Pro  
 35 40 45  
 Ser Ser Ser Ser Ser Pro Ser Ser Leu Ser Pro Pro Ala Ser Ala Ser  
 50 55 60  
 Ser Ala Ser Met Ser Ser Phe Thr Ser Ser Ser Leu Pro Ser Arg Ser  
 65 70 75 80  
 Ala Leu Ser Gly Leu Thr Ser Ala Trp Ser Ser Ser Ser Ser Ser Ser  
 85 90 95  
 Leu Ile Arg Pro Arg Leu Val Asp Tyr Cys Lys Val Cys Lys His Leu  
 100 105 110  
 Tyr Gln Ser Gln Pro Val Asp Leu Leu Asp Thr His Leu Trp Leu Asp  
 115 120 125  
 Ile Leu Phe Val Arg Val Phe Arg Arg Arg Gly Ile Glu Val Ile Val  
 130 135 140  
 Phe Phe Phe Gly Pro Lys Val Leu Val Gln Lys Ile Pro  
 145 150 155

<210> 40190  
 <211> 494  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40190

Gly Arg Pro Arg Lys Arg Arg Lys Arg Leu Gly Gly Val His Asn Phe  
 1 5 10 15  
 Ile Asp Thr Glu Ala Gly Val Asp Glu Glu Glu Asp Glu Ala Glu Asp  
 20 25 30  
 Glu Glu Asp Glu Met Glu Phe Gly Ala Glu Met His Pro Asp Asp Leu  
 35 40 45  
 Asp Ala Leu Pro Ala Gly Ala Asp Thr Asp Asp Arg Arg His Arg Gln  
 50 55 60  
 Leu Asp Arg Gln Arg Glu Leu Glu Ala Ser Met Asp Ala Glu Lys Gln  
 65 70 75 80  
 Ala Gln Leu Leu Lys Glu Arg Tyr Gly Arg Asn Arg Ala Ala Ala Thr  
 85 90 95  
 Asp Ala Val Val Val Pro Lys Arg Leu Leu Pro Ser Val Asp Asp  
 100 105 110  
 Pro Ser Ile Trp Gly Val Arg Cys Lys Ala Gly Lys Glu Arg Glu Val  
 115 120 125  
 Val Phe Ala Ile Gln Lys Arg Ile Glu Glu Arg Pro Pro Gly Ser Arg  
 130 135 140  
 Lys Pro Ile Arg Ile Ile Ser Ala Phe Glu Arg Gly Gly Ala Met Ser  
 145 150 155 160  
 Gly Tyr Ile Tyr Val Glu Ala Arg Arg Gln Ala Asp Val Met Glu Ala  
 165 170 175  
 Leu Glu Asp Met Ser Asn Val Tyr Pro Arg Thr Lys Met Ile Leu Val  
 180 185 190  
 Pro Val Arg Glu Met Pro Asp Leu Leu Arg Val Gln Lys Ser Glu Glu  
 195 200 205  
 Leu Asn Pro Gly Gly Trp Val Arg Ile Lys Arg Gly Lys Tyr Gln Gly  
 210 215 220  
 Asp Leu Ala Gln Ile Glu Glu Val Asp Thr Asn Gly Leu Asp Val Thr  
 225 230 235 240  
 Val Arg Leu Val Pro Arg Leu Asp Tyr Gly Leu Asn Glu Asp Ser Gly  
 245 250 255  
 Ala Pro Val Val Asp Ile Lys Arg Lys Arg Pro Gly Met Ala Ser Gly  
 260 265 270  
 Gly Pro Arg Pro Pro Gln Arg Leu Phe Ser Glu Ala Glu Ala Lys Lys  
 275 280 285  
 Arg His Gly Lys Tyr Leu Ser Ala Thr Ser Gly Leu Gly Gly Lys Ser  
 290 295 300  
 Trp Ser Tyr Leu Gly Glu Thr Tyr Ile Asp Gly Phe Leu Ile Lys Asp  
 305 310 315 320  
 Met Lys Val Gln His Leu Ile Thr Lys Asn Val Asn Pro Arg Leu Glu  
 325 330 335  
 Glu Val Thr Met Phe Ala Arg Gly Ser Asp Asp Gly Thr Ser Asn Leu  
 340 345 350  
 Asp Leu Ala Ser Leu Ala Glu Thr Leu Lys Asn Ser Thr Ala Glu Glu  
 355 360 365  
 Ser Tyr Leu Pro Gly Asp Pro Val Glu Val Phe Arg Gly Glu Gln Gln  
 370 375 380  
 Gly Leu Val Gly Arg Thr Thr Ser Thr Arg Gly Asp Ile Val Thr Leu  
 385 390 395 400  
 Gln Val Thr Glu Gly Glu Leu Ala Gly Gln Met Ile Glu Ala Pro Val  
 405 410 415  
 Lys Ser Leu Arg Lys Arg Phe Arg Glu Gly Asp His Val Lys Val Ile  
 420 425 430  
 Gly Gly Ser Arg Tyr Gln Asp Glu Leu Gly Met Val Val Gln Val Lys

17537

435		440		445
Asp Asp Thr Val Thr Leu Leu Ser Asp Met Ser Met Gln Glu Ile Thr				
450		455		460
Val Phe Ser Lys Asp Leu Arg Leu Ser Ala Glu Thr Gly Val Asp Gly				
465		470		475
Lys Leu Gly Met Phe Asp Val His Asp Leu Val Gln Leu Glu				480
	485		490	

<210> 40191  
 <211> 140  
 <212> PRT  
 <213> A.fumigatus

<400> 40191

Pro Ser Ser Arg Thr Ile Ile Leu Val Glu Arg Arg Val Arg Arg Cys				
1	5		10	15
His Met Leu Leu Asp Ser Asp Ile Ser Gly Ile Gly Ala Asp Ser Ala				
	20		25	30
His Leu Val Leu Ser Arg Val Ala Gly Lys Asp Ala Ser Lys Gln Phe				
	35		40	45
Trp Lys Tyr His Asn Glu Gly Ile Leu Lys Lys Tyr Lys Ala Gln Leu				
	50		55	60
Gln Ile Gly Ser Leu Asp Ser Lys Lys Ala Val Ala Ala Pro Thr Pro				
65		70		75
Ala Lys Lys Glu Ala Pro Arg Pro Gln Ala Ala Ala Pro Val Asp Val				
	85		90	95
Ala Ala Ala Lys Ser Asp Glu Pro Leu Glu Pro Tyr Gly Glu Leu Val				
	100		105	110
Pro Phe Ala Asp Pro Ser Trp Tyr Gln Gly Val Cys Ser Leu Gly Lys				
	115		120	125
Asn Pro Ser Tyr Cys Pro Leu Leu Lys Arg Pro Arg				
	130		135	140

<210> 40192  
 <211> 260  
 <212> PRT  
 <213> A.fumigatus

<400> 40192

Tyr His Ser Pro Tyr Phe Asn Gln Thr His Ala Ala Leu Arg Ala Glu				
1	5		10	15
Val Arg Gln Trp Val Glu Thr Glu Ile Glu Pro Tyr Val Thr Glu Trp				
	20		25	30
Asp Glu Ala Lys Lys Val Pro Asp Ser Val Tyr Lys Gln Met Gly Glu				
	35		40	45
Arg Gly Tyr Leu Ala Gly Leu Leu Gly Thr Lys Tyr Pro Ile Gln His				
	50		55	60
Thr Arg Asn Arg Val Gln Ser Val Ala Pro Glu Asn Trp Asp Leu Phe				
65		70		75
His Glu Met Leu Leu Thr Asp Glu Leu Ser Arg Ala Gly Ser Gly Gly				
	85		90	95
Leu Val Trp Asn Leu Ile Gly Gly Phe Gly Ile Gly Cys Pro Pro Leu				
	100		105	110
Val Lys Phe Gly Lys Lys Pro Leu Val Asp Arg Ile Leu Pro Gly Ile				
	115		120	125
Leu Ala Gly Asp Lys Arg Ile Cys Leu Ala Ile Thr Glu Pro Asp Ala				

## 17538

130 135 140  
 Gly Ser Asp Val Ala Asn Leu Thr Cys Glu Ala Lys Leu Ser Pro Asp  
 145 150 155 160  
 Gly Lys His Tyr Ile Val Asn Gly Glu Lys Lys Trp Ile Thr Asn Gly  
 165 170 175  
 Val Trp Ser Asp Tyr Phe Thr Thr Ala Val Arg Thr Gly Gly Pro Gly  
 180 185 190  
 Met Asn Gly Ile Ser Val Leu Leu Ile Glu Arg Glu Ala Gly Gly Val  
 195 200 205  
 Ser Thr Arg Arg Met Asp Cys Gln Gly Val Trp Ser Ser Gly Thr Thr  
 210 215 220  
 Tyr Val Thr Phe Glu Asp Val Lys Val Pro Val Glu Asn Leu Ile Gly  
 225 230 235 240  
 Lys Glu Asn Gln Gly Phe Lys Gly Ala Leu Leu His Leu Lys Cys Pro  
 245 250 255  
 Gln His Arg Tyr  
 260

&lt;210&gt; 40193

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40193

Ser Ala Arg Arg Thr Arg Ala Ser Arg Val Arg Cys Tyr Ile Leu Ser  
 1 5 10 15  
 Ala Pro Asn Thr Asp Thr Asp Tyr Val Leu Val Ile Met Thr Asn Phe  
 20 25 30  
 Asn His Glu Arg Ile Gly Ile Val Ile Gln Cys Val Arg Phe Ala Arg  
 35 40 45  
 Val Cys Tyr Glu Glu Ala Met Lys Tyr Ala His Lys Arg Arg Thr Phe  
 50 55 60  
 Gly Lys Lys Leu Ile Asp His Pro Val Ile Arg Met Lys Leu Ala His  
 65 70 75 80  
 Met Ala Arg Gln Ile Glu Ala Thr Tyr Asn Trp Leu Glu Asn Ile Ile  
 85 90 95  
 Tyr Gln Cys Gln Ser Met Glu Glu Thr Glu Ala Met Leu Lys Leu Gly  
 100 105 110  
 Gly Ala Ile Ala Gly Leu Lys Ala Gln Ala Thr Thr Thr Phe Glu Phe  
 115 120 125  
 Cys Ala Arg Glu Ala Ser Gln Ile Phe Gly Gly Leu Ser Tyr Ser Arg  
 130 135 140  
 Gly Gly Gln Gly Gly Lys Val Glu Arg Leu Tyr Arg Asp Val Arg Ala  
 145 150 155 160  
 Tyr Ala Ile Pro Gly Gly Ser Glu Glu Ile Met Leu Asp Leu Ser Val  
 165 170 175  
 Arg Gln Ser Leu Arg Val His Gln Leu Phe Gly Met Lys Leu  
 180 185 190

&lt;210&gt; 40194

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40194

Ser Ser Ala Ser Thr Val Ala Cys Val Val Lys Val Asp Arg Glu Ser

## 17539

```

1           5           10           15
Leu Arg Val Ile Asp Gln Asn Gly Ser Ile Arg Thr Val Leu Pro Ser
      20           25           30
Gln Ile Ala Asn Lys Ile Thr Pro Arg Arg Asp Ala Val Ala Thr Asp
      35           40           45
Arg Asn Gly Ala Glu Ile Arg Ile Gly Asp Thr Val Arg Glu Leu Tyr
      50           55           60
Gly Asp Gln Arg Ser Gly Val Ile Leu His Ile Tyr Arg Ser Phe Leu
65           70           75           80
Phe Leu His Asn Lys Ala Gln Ala Glu Asn Ser Gly Ile Val Val Val
      85           90           95
Arg Thr Thr Asn Val Val Thr Val Ser Ala Lys Gly Gly Arg Ser Thr
      100          105          110
Gly Pro Asp Leu Thr Lys Met Asn Pro Ala Leu Met Arg Ser Gly Ile
      115          120          125
Pro Gly Ala Ser Met Gly Pro Pro Lys Ser Phe Gly His Asp Arg Leu
      130          135          140
Ile Gly Lys Thr Val Gln Val Arg Lys Gly Pro Tyr Lys Gly Leu Val
145          150          155          160
Gly Ile Val Lys Asp Ser Thr Asp Val Gln Ala Arg Val Glu Leu His
      165          170          175
Ser Arg Asn Lys Leu Val Thr Ile Pro Lys Asp Val Leu Ile Val Lys
      180          185          190
Asp Pro Val Thr Gly Gln Thr Leu Asp Met Ser Arg Lys Gly Gly Gln
      195          200          205
Arg Val Pro Tyr Gly Ala Ser Ala Ala Pro Pro Ser Gly Trp Ser Gly
      210          215          220
Gly Arg Thr Pro Met Ala Ala Ala Asp Ser Ser Arg Thr Pro Ala Trp
225          230          235          240
Gly Gly Ala Ser Ser Ala Arg Ser Lys Tyr Leu Phe
      245          250

```

&lt;210&gt; 40195

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40195

```

Met Asp Arg Thr Val Thr Asn Trp Tyr Leu Ala Pro Ala Trp Ala Gly
1           5           10           15
Ile Ser Gly Ser Arg Thr Pro Ala Trp Lys Met Asp Gly Ser Arg Thr
      20           25           30
Ser Asn Pro Tyr Asp Gly Ser Arg Thr Ala Tyr Gly Gly Ala Gly Ser
      35           40           45
Arg Thr Pro Ala Trp Asn Ala Gly Ala Arg Thr Pro Tyr Asp Ser Gly
      50           55           60
Ser Gly Ser Ser Gly Phe Asp Ala Phe Ala Ala Gly Ser Arg Thr Pro
65           70           75           80
Ala Trp Gly Gly Ala Asn Ala Gly Gly Arg Thr Pro Ala Trp Ser Ala
      85           90           95
Ser Ser Ser Ala Gly Ser Gly Asn Arg Asp Ser Arg Gly Tyr Asp Ala
      100          105          110
Pro Thr Pro Gly Gly Ala Tyr Ser Ala Pro Thr Pro Gly Ala Tyr Thr
      115          120          125
Ala Pro Thr Pro Gly Ala Ser Ala Pro Thr Pro Gly Ala Trp Ala Asp
      130          135          140

```

## 17540

Ser Ala Pro Thr Pro Gly Val Phe Asn Ala Pro Thr Pro Gly Gly Leu  
 145 150 155 160  
 Ser Gly Arg Pro Tyr Asp Ala Pro Thr Pro Ala Met Gly Gly Ala Ala  
 165 170 175  
 Ala Thr Pro Gly Ala Gly Ala Tyr Gly Asp Gly Glu Asp Gly Gly Pro  
 180 185 190  
 Arg Tyr Asp Glu Gly Thr Pro Ser Pro  
 195 200

&lt;210&gt; 40196

&lt;211&gt; 643

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40196

Arg Ala Ala Ile Ala His Gln Val Thr Arg Cys Leu Thr Glu Pro Leu  
 1 5 10 15  
 Phe Pro Ser Ala Ile Gln Arg Ala Gln Gln Leu Asp Ser Ile Leu Gln  
 20 25 30  
 Arg Thr Gly Lys Pro Val Gly Pro Leu His Gly Leu Pro Val Ser Val  
 35 40 45  
 Lys Asp Cys Phe Arg Ile Lys Gly Val Asp Ser Cys Ile Gly Leu Thr  
 50 55 60  
 Ala Leu Ala Leu Lys Pro Ser Thr Ser His Ala Arg Leu Val Thr Met  
 65 70 75 80  
 Leu Leu Ser Leu Gly Ala Val Ile Ile Ala Lys Thr Asn Val Ser Gln  
 85 90 95  
 Gly Met Ala Ala Pro Asp Ser Tyr Asn His Val Phe Gly Arg Thr Leu  
 100 105 110  
 Asn Pro Leu Asn His Gln Leu Thr Val Gly Gly Ser Ser Gly Gly Glu  
 115 120 125  
 Ala Ala Leu Val Ala Met Arg Gly Ser Met Val Gly Phe Gly Thr Asp  
 130 135 140  
 Ile Gly Gly Ser Ile Arg Val Pro Ala Met Cys Thr Gly Leu Tyr Gly  
 145 150 155 160  
 Phe Lys Pro Ser Val Gly Arg Ile Pro Phe Gly Gly Val Val Thr Gly  
 165 170 175  
 Gln Pro Pro Gly Leu Gly Arg Val Ser Leu Gln Gly Val Ala Gly Pro  
 180 185 190  
 Leu Ala Arg Ser Val Ala Asp Leu Gly Thr Val Leu Gly Ala Ile Val  
 195 200 205  
 Pro Ile Ala Glu Arg Phe Gly Glu Asp Cys Ile Pro Ala Gln Trp Glu  
 210 215 220  
 Ser Glu Ser Pro Val Ser Glu Arg Gln Thr Arg Glu Phe Thr Val Gly  
 225 230 235 240  
 Val Leu Arg Thr Asp Gly Leu Val Thr Pro Leu Pro Pro Val Ala Arg  
 245 250 255  
 Val Leu Asp Glu Val Ala Glu Ser Leu Arg Arg Thr Pro Gly Val Arg  
 260 265 270  
 Val Val Asp Val Pro Val Pro Pro Gly Leu Ser Lys Cys Gln Gly Ile  
 275 280 285  
 Ala Gly Arg Leu Met Ser Ala Asp Gly Gly Gly Ser Leu Leu Asp Leu  
 290 295 300  
 Leu Gln Ser Thr Ser Glu Pro Leu Ile Pro Trp Leu Gln Lys Arg Ile  
 305 310 315 320  
 Lys Arg Arg Glu Ala Leu Thr Leu Glu Gln Leu Val His Leu Gln Glu

Variable	Mean	SD	Min	Max
Age	35.2	12.5	18	65
Gender	0.45	0.50	0	1
Marital Status	0.60	0.49	0	1
Education	12.5	2.1	9	16
Income	3500	1500	1000	8000
Health Status	0.75	0.43	0	1
Smoking Status	0.30	0.46	0	1
Alcohol Consumption	0.20	0.40	0	1
Exercise Frequency	0.10	0.30	0	1
Stress Level	4.5	1.5	1	7
Sleep Quality	3.0	1.0	1	5
Work Satisfaction	4.0	1.0	1	5
Life Satisfaction	4.5	1.0	1	5

```
<210> 40197
<211> 454
<212> PRT
<213> A.fumigatus
```

```

<400> 40197
Ser Thr Val Cys Phe Leu Ser His Thr Ser Cys Leu Val Arg Lys His
1          5          10          15
Thr Gly Ile Pro Val Pro Arg Val Leu Ala Trp Ser Ser Asp Ser Ser
20          25          30
Ser Pro Val Gly Ala Glu Tyr Ile Val Met Glu Lys Ala Ala Gly Val
35          40          45
Pro Leu Phe Gln Arg Trp Ala Asp Met Ala Glu Ile Asp Arg Leu Gln
50          55          60

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17542

```

Leu Ile Thr Asn Leu Thr Lys Leu Glu Ala Gln Leu Ser Ser Ile Gly
65          70          75          80
Phe Pro Ala Tyr Gly Gly Leu Tyr Leu Arg Ala Asp Thr Gly Ala Gln
          85          90          95
Gln Ser Asn Tyr Gln Met Leu Asn Glu Ser Ile Asp Pro Ser His Thr
          100          105          110
Phe Cys Ile Gly Pro Ser Cys Asp Arg Ser Phe Asp Ile Asp Pro Asp
          115          120          125
Thr Ala Leu Gly Gln Ser Lys Gly His Leu Asn Gln Gly Pro Cys Glu
          130          135          140
Tyr Arg Gly Ser Trp Gln Cys His Lys Leu Thr His Cys Thr Gly Asn
145          150          155          160
Thr Ile Ser Asp Val Gly Ile Cys Ile Ala Lys Arg Glu Leu Ser Pro
          165          170          175
Leu Ser Arg Lys Arg Leu Asp Arg Pro Thr Phe Tyr Gln Gly Ser
          180          185          190
Val Glu Glu Gln Ala Lys Leu Leu Gln Ser Thr Met Ser Leu Met Pro
          195          200          205
Leu Leu Asp Ser His Pro Ala Leu Asp Lys Ser Gly Arg Pro Ile Leu
210          215          220
Arg His Thr Asp Leu His Met Gly Asn Ile Tyr Val Ala Pro Asp Glu
225          230          235          240
Ser Ser Gln Ile Val Ser Leu Ile Asp Phe Gln Ser Leu Ser Val Leu
          245          250          255
Leu Ala Phe Leu Gln Ala Gln Trp Pro Ile Phe Leu Lys Pro Pro Pro
          260          265          270
Asn Tyr Pro Lys Gly Phe Val Gln Pro Arg Leu Pro Asp Asp Phe Asp
          275          280          285
Glu Leu Asp Glu Glu Ser Lys Ser Leu Ala Gln Gln Glu Trp Ser Gln
290          295          300
Ala Lys Trp Ala Lys Ala Tyr Glu Val Ser Thr Tyr Leu Glu Asp Arg
305          310          315          320
Phe Ala Tyr Asp Ala Met Asn Val Pro Arg Val Phe Arg Glu Leu Phe
          325          330          335
Ile Arg Cys Ala Glu Val Ser Glu Val Gly Val Val Pro Leu Arg Ala
340          345          350
Cys Leu Ile Glu Met Phe Gln Asn Trp Ser Gly Leu Gly Phe Thr Gly
355          360          365
Gln Cys Pro Leu Ser Phe Thr Glu Glu Glu Ile Lys Thr His Glu Arg
370          375          380
Gln Phe Thr Glu Tyr Glu Ala Trp His Glu Val Gln Arg Leu Ala Trp
385          390          395          400
Glu Cys Leu Asp Thr Asp Ala Glu Gly Trp Ile Ala Pro Gln Leu Asp
          405          410          415
Ile Thr Glu Lys Arg Arg Gln Asn Arg Ala Leu Leu Ser Thr Phe Leu
          420          425          430
Glu Arg Thr Ala Gly Glu Trp Ser Pro Glu Glu Ala Arg Gln Met Trp
435          440          445
Pro Phe Pro Glu Glu Ala
450

```

<210> 40198

<211> 69

<212> PRT

<213> A.fumigatus



17543

<400> 40198

```

Ile Phe Asn Gly Gln Pro Gly Ser Gln Cys Phe Leu Ser Ser Glu Thr
1           5           10           15
Val Gly Lys Cys Thr Ile Thr His Gln Lys Pro Ser Cys Pro Tyr Ser
          20           25           30
Val Lys Val Thr Glu Lys Gln Thr Asn Lys Gly Lys Ala Ser Asn Tyr
          35           40           45
Gln Ala Arg Gln Thr Asn Arg Ser Arg Arg Thr Leu Cys Ile Tyr Lys
          50           55           60
Trp Pro Phe Pro Tyr
65

```

<210> 40199

<211> 183

<212> PRT

<213> A.fumigatus

<400> 40199

```

Tyr Leu Arg Leu Cys Glu Phe Thr Ile Gln Cys Leu His Thr Ser Val
1           5           10           15
Tyr His Leu Asn Glu Arg Asp Gln Arg Leu Pro Ala Asp Arg Pro Tyr
          20           25           30
Thr Asn Gly Tyr Phe Leu Asp Leu Val Ala Gln Ile Arg Arg Tyr Ala
          35           40           45
Ala Met Ile Asn Glu Ser Arg Ser Ser Met Pro Ser Asn Arg Glu Pro
          50           55           60
Ala Gln Asn Gly Ala Lys Ala Ser Ala Pro Lys Tyr Val Val Ser Pro
65           70           75           80
Pro Ser Arg Trp Phe Ala Arg Phe Asn Ile Val Arg Ser Glu His Ile
          85           90           95
Thr Leu Glu Gly Gly Leu Ser Lys Asn Gly Arg Pro Ala Glu Leu Val
          100          105          110
Val His Lys Asp Gly Glu Met Ile Ser Leu Arg Thr Gly Lys Pro Tyr
          115          120          125
Glu Glu Asn Ala Val Pro Ala Met Lys Arg Ser Leu Ser Leu Gly Ser
          130          135          140
Val Asp Glu Gly Val Glu Arg Ser Met Ala Arg Arg Lys Lys Asn Ala
145          150          155          160
Pro Pro Met Asp Ile Asn Gln Lys Cys Lys Asp Cys Asp Lys Val Phe
          165          170          175
Lys Arg Pro Cys Asp Leu Thr
          180

```

<210> 40200

<211> 385

<212> PRT

<213> A.fumigatus

<400> 40200

```

Val Gln Phe Leu Gly Cys Thr Leu Leu Thr Gly Ser Arg Lys His Glu
1           5           10           15
Lys Thr His Ser Arg Pro Trp Lys Cys Thr Glu Pro Ser Cys Lys Tyr
          20           25           30
His Glu Ile Gly Trp Pro Thr Glu Lys Glu Arg Asp Arg His Ile Asn
          35           40           45
Asp Lys His Ser Lys Ala Pro Ala Leu Tyr Lys Cys Lys Phe Ala Pro

```

## 17544

50		55		60
Cys Thr Tyr Ser Ser Lys Arg Glu Ser Asn Cys Lys Gln His Met Glu				
65		70		75
Lys Ala His Gly Trp Asp Tyr Val Arg Ser Lys His Asn Gly Arg Asn				
	85		90	95
Ser Lys Lys Ala Ser Asn Gly Ala Thr Pro Gln Thr Pro Ser Ile Ala				
	100		105	110
Thr Pro Ser Ser Lys Ala Gln Gly Ile Thr Thr Pro Leu Thr Gly Ser				
	115		120	125
Glu Pro Ser Pro Phe Glu Pro Val Thr Ala Tyr Pro Pro Asn Pro Pro				
	130		135	140
Phe Ser Phe Ala Asp Pro Pro Thr Gln Thr Gly Ser Gly Asp Phe Pro				
145		150		155
Leu Phe Thr Thr Asn Ser Pro Phe Glu Asp Leu Ala Ala Gly Val Asn				
	165		170	175
Asp Phe Ser Pro Leu Pro Thr Thr Ser Leu Asp Phe Gln Ala Phe Gln				
	180		185	190
Ser Gln Leu Glu Gly Ala Asp Pro Asn Gly Leu Ile Pro Leu Thr Phe				
	195		200	205
Asp Arg Gln Ser Phe Asp Ser Gly Ser Pro Val Pro Asp Leu Ile Asn				
	210		215	220
Glu Thr Met Gly Phe Asp Thr Ser Pro Val Ala Ser Thr Asp Ser Ser				
225		230		235
Ser Leu Asn Phe Asp Leu Ala Trp Ser Gln Leu Asp Ala Gln Asn Val				
	245		250	255
Glu Glu Glu Phe Thr Thr Leu Thr Met Gln Met Leu Thr Pro Glu His				
	260		265	270
Ser Val Ser Met Ser Ala Leu Asn Ser Phe Ser Arg Asp Pro Ser Ile				
	275		280	285
Ser Asn Pro Ser Pro Leu Pro Val Gln Lys Val Glu Asn Ser Leu Tyr				
	290		295	300
Thr Pro Asp Ser Cys His Val Asp Glu Gly Val Ser Asp Leu Phe Asp				
305		310		315
Ser Gly Tyr Gln His Lys Ala Asp Phe Met Leu Phe Asp Gln His Thr				
	325		330	335
Asn Phe Gly Ala Ser Ser Val Asn Met Ser Ser Thr Cys Gln Leu Ser				
	340		345	350
Ala Leu His Asn Ser Asn Gln Met Phe Pro Ser Leu Asn Thr Pro Asp				
	355		360	365
Leu Asn Tyr Met Thr Gln Gly Trp Pro Gln Asp Met Glu Met Glu His				
	370		375	380
Phe				
385				

&lt;210&gt; 40201

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40201

Glu Leu Ser Pro Phe Gly Tyr Val Met Ala Glu Glu Asp Leu Ser Leu				
1	5		10	15
Thr Gly Thr Asp Leu Lys Arg Glu Leu Ile Gly Arg Gln Val Arg Asn				
	20		25	30
Glu Ile Thr Glu Leu Asn Ser Pro Thr Ala Leu His Arg Phe Gly Ala				
	35		40	45

## 17545

Pro Phe Lys Ser Glu Phe Gly Glu Val Ala Pro Val Asp Ser Glu Leu  
 50 55 60  
 Pro Ile Leu Arg Tyr Ile Phe Val His His Val Arg Lys Phe Pro Phe  
 65 70 75 80  
 Leu Asp Gln Ala Arg Glu Lys Glu Phe Trp Gln Asp Lys Leu Gln Val  
 85 90 95  
 Val Ser Asn Leu His Gln Phe Glu Leu Ser Ala Val Ala Gly Asp Ser  
 100 105 110  
 Leu Arg Leu Thr Tyr Phe Phe Met Gln Phe Leu Glu Ser Phe Ala Asn  
 115 120 125  
 Lys His Val Ser Ser Ser Glu Asp Arg Leu Glu Glu Thr Lys Arg Arg  
 130 135 140  
 Lys Leu Ala Arg Lys Ala Glu Lys Leu Val Glu Leu Met Met Val Ser  
 145 150 155 160  
 Gly Ile Pro Thr Ala Ser Gly Tyr Glu Glu Arg Ile Ser Phe Ser Glu  
 165 170 175  
 Met Glu Val Val Asp Arg Gly Ala Asn Glu Lys Gly Leu Leu Val Asn  
 180 185 190  
 Met Pro Glu Gly His Ala Ile His Gly Trp Asp Val Asn Val Ala Ala  
 195 200 205  
 Val Arg Val Thr Phe Val Lys Leu Thr Val Arg Tyr His Lys His Ala  
 210 215 220  
 Val Ser Asp Arg Asp Asn Tyr Thr Leu Thr Thr Ile Thr Leu Ala  
 225 230 235

&lt;210&gt; 40202

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40202

Glu Ser Leu Gln Lys Ala Asn Ile Glu Asp Arg Arg Glu Gly Gln Val  
 1 5 10 15  
 Glu His Thr Gly Lys Gly Asn Glu Asn Val Met Ile Gly Ile Met Ile  
 20 25 30  
 Val Met Thr Asp Leu Arg Glu Asp Asp Ser Leu Cys Leu Gly Arg Gln  
 35 40 45  
 Ala Asp Ile Asp Asp Tyr Gly Gly Cys Ser Ser Gly Pro Asp Leu Leu  
 50 55 60  
 Gly Pro Gln Ala Glu Val Val Ser Met Ser Ala  
 65 70 75

&lt;210&gt; 40203

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40203

Leu Arg Leu Gly Val Leu Asp Ser Ile Phe Thr Ala Phe Asn Val His  
 1 5 10 15  
 Ser His Cys Val Ile Ser Gly Ser Ala Asp Ile Val Thr Arg Gly Arg  
 20 25 30  
 Leu Phe Val Val Thr Pro Val Leu Phe Thr Thr Leu Phe Tyr Ala Phe  
 35 40 45  
 Leu Glu Ala Cys Asn Pro Phe Asp Phe Gly Gln Lys Pro Val Glu Lys  
 50 55 60

## 17546

Ser Leu Ser Gly Asp Ile Asp Val Ser Val Trp Val Ala Glu Glu Leu  
 65 70 75 80  
 Asp

<210> 40204  
 <211> 139  
 <212> PRT  
 <213> A.fumigatus

<400> 40204  
 Ala Arg Val Trp Arg Asp Gly Gln Lys Lys Asp Cys Phe Val Tyr Arg  
 1 5 10 15  
 Phe Ile Ala Thr Gly Ser Ile Glu Glu Lys Ile Phe Gln Arg Gln Ser  
 20 25 30  
 His Lys Gln Ser Leu Ser Ser Cys Val Val Asp Ser Ala Glu Asp Val  
 35 40 45  
 Glu Arg His Phe Ser Leu Glu Ser Leu Arg Glu Leu Phe Gln Phe Lys  
 50 55 60  
 Pro Glu Thr Arg Ser Asp Thr His Asp Thr Phe Lys Cys Lys Arg Cys  
 65 70 75 80  
 Arg Pro Asp Gly Thr Gln Tyr Ile Lys Ala Pro Ala Met Leu Tyr Gly  
 85 90 95  
 Asp Thr Ser Ser Trp Asn His Phe Val Asn Asp Gly Glu Asn Gly Gln  
 100 105 110  
 Leu Ser Lys Ile Gln Asp Leu Leu Ile Arg Gln Glu Thr Ser Glu Lys  
 115 120 125  
 Asp Val Ser Ala Val Phe Gln Tyr Ile Ser His  
 130 135

<210> 40205  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 40205  
 Glu Gly Val Ala Pro Tyr Leu Lys Glu Ile Val Pro Pro Val Leu Ala  
 1 5 10 15  
 Cys Phe Ser Asp Gln Asp Ala Arg Val Arg Tyr Tyr Ala Cys Glu Ser  
 20 25 30  
 Met Tyr Asn Ile Ala Lys Val Ala Lys Gly Glu Val Leu Leu Phe Phe  
 35 40 45  
 Asn Glu Ile Phe Asp Ala Leu Ser Lys Val Ser Arg Ser  
 50 55 60

<210> 40206  
 <211> 243  
 <212> PRT  
 <213> A.fumigatus

<400> 40206  
 Thr Lys Ile Arg Leu Gln Leu Ala Ser Asp Ser Glu Leu Ser Val Lys  
 1 5 10 15  
 Asn Gly Ala Glu Leu Leu Asp Arg Leu Val Lys Asp Ile Val Ser Glu  
 20 25 30  
 Ser Ala Ala Ser Tyr Ile Ser Val Leu Gln Leu Ser Glu Lys His Thr

```

      35              40              45
Val Asp Pro Asp Ala Gln Glu Glu Val Glu Leu Pro Thr Ala Phe Ser
  50              55              60
Leu Ala Lys Phe Ile Pro Leu Leu Lys Glu Arg Ile His Val Ile Ser
  65              70              75              80
Pro Ser Thr Arg Thr Phe Leu Val Ser Trp Leu Thr Leu Leu Asp Thr
      85              90              95
Ile Pro Asp Leu Glu Leu Val Ser Tyr Leu Pro Asp Phe Leu Gly Gly
      100              105              110
Leu Ile Glu Phe Leu Gly Asp Pro Asn Arg Asp Val Asn Val Thr Thr
      115              120              125
Gln Ala Leu Leu Asp Arg Phe Leu Ser Glu Ile Lys Arg Ile Ala Arg
      130              135              140
Leu Lys Lys Gly Ile Glu Glu Ser Arg Lys Glu His Gly Ser Asp Asn
  145              150              155              160
Lys Gln Ser Ala Ala Ser Asp Asn Val Ser Thr Thr Thr Asp His Thr
      165              170              175
Val Ala Val Asp Ile Glu Arg Ser Glu Asn Ala Ile Glu Asp Ser Glu
      180              185              190
Ser Glu Ser Asp Leu Glu Glu Asn Asp Leu Gln Ala Asp Gly Asp Trp
      195              200              205
Ile Pro Gly Gln Asp Val His Ile Asp Tyr Pro Lys Ile Leu Asp Ile
      210              215              220
Leu Val Gly Phe Val Asp Thr Ser Phe Gly Glu Gln Thr Gly Trp Cys
  225              230              235              240
Ile Met Pro

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&lt;210&gt; 40207

&lt;211&gt; 383

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40207

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Lys Arg Val Val Lys Ser Thr Gly Val Thr Thr Asn Ser Arg Pro Arg
  1              5              10              15
Val Thr Met Ser Ala Leu Pro Leu Ile Thr Gln Trp Leu Trp Thr Leu
      20              25              30
Asn Ala Val Lys Met Leu Ser Arg Thr Pro Ser Leu Ser Gln Thr Ser
      35              40              45
Arg Lys Met Thr Tyr Lys Leu Thr Glu Thr Gly Ser Arg Gly Lys Met
      50              55              60
Phe Thr Leu Thr Ile Pro Arg Phe Trp Thr Ser Leu Trp Asp Ser Ser
  65              70              75              80
Ile Pro His Ser Val Ser Lys Leu Asp Gly Ala Leu Cys Arg Ser Arg
      85              90              95
Ile Leu Asn Thr Glu Leu Asp Glu Glu Met Gln Leu Thr Ala Leu Arg
      100              105              110
Trp Ile Asp Ser Phe Phe Glu Ile Ser Pro Glu Asp Ile Leu Pro Phe
      115              120              125
Val Pro Arg Leu Leu Thr Gln Val Leu Pro Ala Met Ser Ser Gly Ser
      130              135              140
Asp Gln Val Arg Gln Ala Ala Asn Arg Val Asn Thr Ser Leu Leu Glu
  145              150              155              160
Tyr Ile Val Ser Leu Ser Asp Asp Ser Thr Glu Glu Thr Arg Gln Ser
      165              170              175

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## 17548

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Pro Pro Ser Arg Pro Ile Ser Thr Ala Ser Lys Glu Leu Val Glu Arg
      180                      185                      190
Arg Ala Ser Thr Pro Ser Gly Arg Gln Ser Phe Glu Thr Ser Thr Ser
      195                      200                      205
Glu Ser Lys Lys Gln Ala Ser Gln Gln Glu Leu Ser Asn Glu Gln Ala
      210                      215                      220
Ser Arg Ser Ser Val Ile Pro Thr Pro Val Pro Pro Ala Asp Leu Asp
225                      230                      235                      240
Tyr Ala Ala Ala Val Asn Ser Leu Thr Leu Gln Phe Leu Asn Glu Asn
      245                      250                      255
Glu Ala Thr Arg Val Ala Ala Leu Ser Trp Leu Ile Met Leu His Arg
      260                      265                      270
Lys Ala Pro Lys Lys Val Val Ala Phe Asn Asp Gly Thr Phe Pro Ala
      275                      280                      285
Leu Leu Lys Thr Leu Ser Asp Pro Ala Glu Ala Val Val Thr Lys Asp
      290                      295                      300
Leu Gln Leu Leu Ser Gln Ile Ser Arg Asn Ser Asp Asp Ser Tyr Phe
305                      310                      315                      320
Thr Ser Phe Met Val Asn Leu Leu Gln Leu Phe Ser Thr Asp Arg His
      325                      330                      335
Leu Leu Glu Val Arg Gly Asn Leu Ile Ile Arg Gln Leu Cys Met Asn
      340                      345                      350
Leu Ser Pro Glu Arg Ile Tyr Arg Thr Leu Ala Asp Cys Leu Glu Lys
      355                      360                      365
Glu Glu Val Ser Ile Ile His Tyr Ala Met Phe Pro Gly Ala Asp
      370                      375                      380

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&lt;210&gt; 40208

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40208

```

Gln Arg Ile Ser Thr Ser Met Val Ser Ser Ser Ser Gly Tyr Glu
1      5      10      15
Arg Ala Thr Gly Ser Arg Leu Lys Thr Arg Glu Glu Asn Thr Ile Arg
      20      25      30
Trp Val Glu Leu Leu Asp Lys Phe Lys Ser Val Gln Glu Lys Ala Arg
      35      40      45
Arg Thr His Arg Ala Ser Gln Arg Gln Phe Asp Gln Asp Gly Ser Thr
      50      55      60
Thr Gly Leu Arg Asn Pro Ser Leu Thr Ala Ala Leu Ser Ala Ala Ala
      65      70      75      80
Thr Ala Asp Arg Gly Lys Glu Arg Gly Leu Pro Asp Ser Pro Arg Gly
      85      90      95
Gly Arg Pro Asp Ile Gly Gly Ser Gly Gly Arg Asn Ser Pro Gly Asp
      100      105      110
Ser Gly Thr Pro Asn Arg Gly Ser Leu Leu Ser Gly Thr Gln Arg Asn
      115      120      125
Lys Ser Gly Leu Pro Asn Leu Gly Arg Leu Gly Ile Gly Ser Arg Arg
      130      135      140
Ser Lys Arg
145

```

&lt;210&gt; 40209

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40209

```

Ser Gln His Glu Pro Ala Ile His Ile Gly Lys Met Asp Ala Phe Glu
1          5          10          15
Tyr Asn Ala Asn Pro Gly Arg Val Ile Phe Gly Ser Gly Thr Ile Gln
          20          25          30
Lys Leu Pro Asp Glu Ile Ala Arg Leu Asn Leu Lys Gly Pro Leu Val
          35          40          45
Leu Ser Thr Pro Gln Gln Val Lys Gln Ala Glu Thr Val Lys Ser Val
          50          55          60
Leu Lys Gly Gln Val Ala Gly Ile Phe Ser Glu Ala Thr Met His Thr
65          70          75          80
Pro Thr His Ile Thr Asp Lys Ala Val Asp Tyr Ala Arg Ala His Gly
          85          90          95
Ala Asp Leu Val Val Ser Ile Gly Gly Ser Thr Ile Gly Leu Gly
          100          105          110
Lys Ala Ile Ser Ile Arg Thr Gly Leu Pro His Ile Cys Ile Pro Thr
          115          120          125
Thr Tyr Ala Gly Ser Glu Met Thr Pro Ile Leu Gly Glu Thr Ala Asp
          130          135          140
Gly Leu Lys Lys Thr Arg Ser Asp Pro Lys Ile Leu Pro Gly Thr Val
145          150          155          160
Ile Tyr Asp Val Asp Leu Thr Met Thr Leu Pro Ala Ala Met Ser Ala
          165          170          175
Thr Ser Gly Val Asn Ala Ile Ala His Ala Gly Gln
          180          185

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&lt;210&gt; 40210

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40210

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Asn Arg Thr Ser Val Ser Met Thr Phe Glu Arg Leu Met Val Met Ile
1          5          10          15
Val Glu Ala Leu Tyr Ala Arg Asn Thr Asn Pro Val Ile Asn Leu Met
          20          25          30
Ala Val Glu Gly Thr Arg Ala Leu Ala Ser Ala Leu Pro Glu Ile Ile
          35          40          45
Glu Asn Pro Ser Ser Lys Thr Ala Arg Ser Leu Ala Leu Tyr Gly Ala
          50          55          60
Trp Leu Cys Gly Thr Cys Leu Gly Ser Val Gly Met Ser Ile His His
65          70          75          80
Lys Leu Cys His Thr Leu Gly Gly Ser Phe Asn Leu Pro His Ala Glu
          85          90          95
Thr His Thr Ala Val Leu Pro His Ala Ile Ser Tyr Asn Ala Pro Asn
          100          105          110
Ile Pro Glu Ala Met Lys Lys Leu Ala Glu Ala Leu Pro Asp Ser Asn
          115          120          125
Gly Asp Ala Ile Gln Gly Leu Asn Val Leu Leu Asp Lys Leu Lys Val
          130          135          140
Lys Arg Gly Leu Lys Glu Phe Gly Met Lys Glu Glu Asp Ile Asp Lys
145          150          155          160
Ala Ala Asp Ile Ala Val Ser Asn Pro Tyr Trp Asn Pro Arg Gly Ile

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## 17550

165 170 175  
 Glu Arg Ile Pro Ile Arg Glu Leu Ile Arg Arg Val Trp Ala Gly Glu  
 180 185 190  
 Pro Ala Arg Ala Asp Leu  
 195

<210> 40211  
 <211> 567  
 <212> PRT  
 <213> A.fumigatus

<400> 40211  
 Ser Lys Met Ala Thr Glu Met Gln Ala Ala Pro Val Leu Ser Thr Pro  
 1 5 10 15  
 Asp Ser Leu Ile Leu Glu Ala Thr Glu Pro Val Ala Arg Gln Asn Ala  
 20 25 30  
 Thr Arg Thr Leu Ser Asp Glu Glu Leu Ser Ile Thr Tyr Asp Ile Glu  
 35 40 45  
 Arg Thr Leu Gln Glu Ile Arg Gln Ala Arg Tyr Lys Arg Ile Ala Leu  
 50 55 60  
 Gln Phe Pro Asp Asp Met Leu Pro Asp Ala Pro Arg Val Phe Gln Leu  
 65 70 75 80  
 Leu Ser Arg Gly Leu Ala Cys Arg Asp Val Asp Lys Ile Thr Val Glu  
 85 90 95  
 Lys Asn Gly Asn Gly Thr Gly Gly Val Glu Ser Glu Lys Leu Ala Gln  
 100 105 110  
 Asp Val Ser Gln Leu Ser Val Asp Asp Lys Pro Glu Pro Glu Pro Lys  
 115 120 125  
 Leu Tyr Ile Leu Ala Asp Thr Ser Tyr Gly Thr Cys Cys Val Asp Glu  
 130 135 140  
 Val Ala Ala Glu His Val Asn Ala Asp Val Val Val His Tyr Gly Arg  
 145 150 155 160  
 Ser Cys Leu Ser Pro Thr Ala Arg Leu Pro Val Ile Tyr Val Phe Thr  
 165 170 175  
 His Lys Glu Leu Pro Ile Glu Pro Val Ile Gln Ala Phe Lys Ala Thr  
 180 185 190  
 Tyr Pro Tyr Gln Ala Thr Lys Ile Ile Leu Ala Ala Asp Val Thr Tyr  
 195 200 205  
 Cys Asp His Ile Pro Ala Val Tyr Ala Arg Leu Met Glu Glu Gly Tyr  
 210 215 220  
 Thr Asn Leu Tyr Ala Thr Glu Leu Ile His Cys Pro Ser Ser Ala Ile  
 225 230 235 240  
 Pro Asn Arg Thr Val Pro Asp Ser Val Arg Glu Asn Pro Asp Thr Leu  
 245 250 255  
 Ser Glu Trp Gln Leu Phe His Ile Ser Asp Pro Pro Thr Ala Leu Leu  
 260 265 270  
 Leu Thr Leu Ala Ser Arg Val Ala Ala Ile His Ile Tyr Pro Thr Thr  
 275 280 285  
 Asp Ala Pro Ser Asp Asn Val Lys Pro Leu Pro Val Ser Thr Ser Ala  
 290 295 300  
 Ala Leu Gly Arg Arg Tyr Ala Ile Leu Thr Arg Leu Ser Thr Val Pro  
 305 310 315 320  
 Ile Phe Gly Ile Leu Ile Asn Thr Leu Ser Val Lys Asn Tyr Leu His  
 325 330 335  
 Ile Val Glu His Val Lys Gln Lys Ile Ala Asp Ala Gly Lys Lys Ser  
 340 345 350



## 17551

Tyr Met Phe Val Val Gly Lys Leu Asn Ala Ala Lys Val Ala Asn Phe  
 355 360 365  
 Ser Glu Ile Gly Gly Trp Val Val Ile Gly Cys Trp Glu Ser Ser Leu  
 370 375 380  
 Val Asp Ser Lys Asp Phe Trp Lys Pro Val Ile Thr Pro Phe Glu Leu  
 385 390 395 400  
 Glu Leu Ala Leu Lys Gly Asp His Glu Arg Val Trp Thr Gly Ala Trp  
 405 410 415  
 Gln Ser Asp Phe Gln Ser Ile Leu Asp Gln Pro Ala Glu Glu Ala Gln  
 420 425 430  
 Thr Ala Asp His Glu Glu Ser Pro Asn Asp Asp Asp Met Ser Glu  
 435 440 445  
 Pro Glu Ser Ala Pro Pro Glu Phe Asp Leu Arg Thr Gly Arg Tyr Val  
 450 455 460  
 Ser His Thr Arg Pro Met Arg Asn Pro Ala Pro Arg Val Ser Ala Gln  
 465 470 475 480  
 Ser Asp Asp Ala Val Ser Ala Ala Ser Gly Pro Ala Ala Ala Arg Ala  
 485 490 495  
 Leu Ala Arg Arg Ala Lys Gly Glu Leu Ala Met Ile Gly Gly Thr Val  
 500 505 510  
 Ser Pro Gly Ala Glu Tyr Leu Arg Ser Gln Arg Thr Trp Lys Gly Leu  
 515 520 525  
 Gly Ser Asp Phe Asp Ile Gln Tyr Asp Asp Glu Asp Pro Ser Asp Ser  
 530 535 540  
 Thr Leu Val Val Glu Gly Arg Lys Gly Ile Ala Arg Gly Tyr Thr Val  
 545 550 555 560  
 Gly Asp Ser Ile Glu Lys His  
 565

<210> 40212  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 40212  
 Thr His Lys Thr Ile Thr Met Ser Ser Thr Asp Leu Glu Gln Asp Pro  
 1 5 10 15  
 Thr Pro Lys Asp Ile Ala Gln Arg Glu Leu Glu Glu Lys Glu Arg Lys  
 20 25 30  
 Ala Lys Glu Asp Ala Glu Gln Ala Gln Leu Pro Tyr Lys Trp Thr Gln  
 35 40 45  
 Thr Ile Arg Asp Val Asp Val Thr Ile Pro Val Pro Cys Asp His Gln  
 50 55 60  
 Gly Ser Gly Ser Gly Leu Cys Val Gly Gln Arg Pro Arg Ser Arg Ser  
 65 70 75 80  
 His Ser Arg Gly Gln Glu Ala  
 85

<210> 40213  
 <211> 615  
 <212> PRT  
 <213> A.fumigatus

<400> 40213  
 Ser Ser Ala Ala Ala Cys Gln Arg Gly Val Lys Arg Gln Arg Lys Asp  
 1 5 10 15

Ser Ala Ala Met Ser Leu Leu Cys Glu Ser Pro Gly Cys Gly Pro Glu  
 20 25 30  
 Val Lys Ser Arg Asp Leu Asp Glu Met Glu Glu Asp Thr Gly Ser Val  
 35 40 45  
 Phe Ser Glu Ser Ala Ser Glu Gln Ser Ile Pro Pro Thr Gln Arg Ser  
 50 55 60  
 Leu Ser Thr Phe Glu Arg Val Ile Thr Thr His Ala Pro Ile Leu Glu  
 65 70 75 80  
 Ser Leu Leu Leu Gln Thr Pro Thr Asp Ala Ile Leu Lys Leu Phe His  
 85 90 95  
 Thr Ser Arg Tyr Leu Arg Ser Phe Leu Gln Asn Tyr Pro Thr Ala Trp  
 100 105 110  
 Lys Tyr Leu Ser Phe Arg Leu Phe Tyr Pro Ser Gly Ser Gln Phe Pro  
 115 120 125  
 Leu Arg Ile Val Phe Pro Gly Gly Thr Glu Ser Ala Met Pro Arg Gln  
 130 135 140  
 Ser Arg Ser Tyr Ser Leu Asp Gln Leu Leu Met Asn Val Val Val Pro  
 145 150 155 160  
 Phe Ser Pro Cys Leu Lys Ser Leu Glu Leu Asp Asn Thr Ala Val Ser  
 165 170 175  
 Gly Gln Ile Leu Ile Ser Thr Val Leu His Ser Arg Arg Glu Thr Leu  
 180 185 190  
 Glu His Leu Ser Val Arg Gly Cys Lys Asn Val Ser Leu Lys Tyr His  
 195 200 205  
 Ile Phe Pro Tyr Leu Thr Met Phe Gly Leu Gln Tyr Asp Val Asp Met  
 210 215 220  
 Glu Arg Asn Ile Gly Ser Ser Ser Ser Thr Lys Arg Leu Ala Leu Lys  
 225 230 235 240  
 Ser Leu Tyr Thr Tyr Arg Cys Arg His His Arg Arg Arg Pro Tyr Leu  
 245 250 255  
 Ser Ser Ser Leu Ser Arg Lys Asp Ser Asp Ser Glu Pro Thr His Glu  
 260 265 270  
 Leu Val Ser Leu Cys His Lys Leu Gly Ile Trp Thr Asp Thr Ala Trp  
 275 280 285  
 Cys Ser Thr Pro Ala Gly Arg Cys Phe Arg Arg Arg Ser Tyr Val Ser  
 290 295 300  
 Met Arg Val Pro Gln Gly Ser Ala Glu Val Trp Val Val Phe Asp Arg  
 305 310 315 320  
 Leu Trp Arg Ser Lys Asn Trp Ile Gly Pro Val Glu Gln Gly Gly Arg  
 325 330 335  
 Pro Ser Gln Arg Asp Gly Lys Leu Trp Glu His Asp Glu Thr Gly Cys  
 340 345 350  
 Asn Gly Glu Pro Leu Gly Thr Gly Glu Gly Gln Gly Leu Gly Glu Gly  
 355 360 365  
 Lys Met Met Pro Ala His Leu Arg Ser Ser His Thr Arg Phe Val Asp  
 370 375 380  
 Asn Ile Arg Cys Asp Asn Cys Phe Glu Glu Ile Ser Glu Arg Cys Glu  
 385 390 395 400  
 Gln Cys Ser Ile Leu Met His Cys Val Gly Cys Arg Lys Thr Leu Cys  
 405 410 415  
 Ala Ser Cys Ala Phe Asp Arg Pro Tyr Leu His Asn Arg Arg Ser Ala  
 420 425 430  
 Ser Thr Pro Glu Asp Ala Ala Lys Ser Phe Trp Trp Ala Pro Gly Ala  
 435 440 445  
 Val Val Ser Pro Cys Leu Met Gln Asp Pro Leu Arg Asn Ser Thr Asp  
 450 455 460

## 17553

Asn Val Ser Val Asn Pro Asn Asp Pro Val Pro Tyr Pro Asn Leu Lys  
 465 470 475 480  
 Phe His Trp Cys Cys Thr Glu Pro Ile Phe Ser Gly Gly Gly Gly Ile  
 485 490 495  
 Ser Ile Gly Thr Pro Asn Arg Asp Val Asp Gln Val Arg Ala Ala Pro  
 500 505 510  
 Leu Pro Arg Gly Gln Gly Trp Glu Asp Leu Glu Tyr Ser Ala Asn Glu  
 515 520 525  
 Trp Ser Lys Thr Phe Pro Lys Tyr Ala Tyr Gly Asp Pro Arg Lys Pro  
 530 535 540  
 Asp Tyr Ser Leu Glu Thr Gly His Ile Ala Met Met Lys Trp Leu Leu  
 545 550 555 560  
 Gly Pro Pro Asp Arg Gln Pro Thr Ala Cys Pro Arg Asn Leu Cys Gln  
 565 570 575  
 Glu Cys Tyr Asp Ala Pro Gln Trp Lys Val His Cys Lys Ser Cys Ser  
 580 585 590  
 Lys Pro Leu Cys Ile Glu His Asp Leu Arg Gly Leu Arg Leu Arg Ile  
 595 600 605  
 Cys Gly Tyr Arg Asp Leu Ala  
 610 615

&lt;210&gt; 40214

&lt;211&gt; 519

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40214

Ala Tyr Val Gly Ile Phe Leu Leu Thr Thr Ala Ala Leu Met Asn Phe  
 1 5 10 15  
 Ser Tyr Thr Asp Gly Ala Met Leu Gln Glu Ala Ala Thr Thr Ala Ser  
 20 25 30  
 His Phe Leu Glu Lys Ser Arg Ala Pro Ala Gln Val Cys Asp Arg Cys  
 35 40 45  
 His Asp Leu Ile His His Asn Lys Ala Val Ser Val Pro Thr Pro Thr  
 50 55 60  
 Ile Tyr Ser Ile Gln Glu Tyr Leu Lys Glu Ser Pro His Arg Asp Asn  
 65 70 75 80  
 Arg Ile Tyr His Val Ile Asp Ala Ala Asp Phe Pro Met Ser Leu Val  
 85 90 95  
 Asp Asn Ile Tyr Asp Ala Leu Ser Ile Gln Glu Pro Arg Ser Lys Asn  
 100 105 110  
 Arg Arg Ala Ser Thr Glu Lys Tyr Arg Trp Gly Arg Lys Leu Pro Thr  
 115 120 125  
 Ile Ser Phe Val Ile Thr Arg Ser Asp Leu Leu Ala Ala Thr Lys Glu  
 130 135 140  
 Gln Val Asp Ser Lys Met Glu Tyr Val Arg Ser Val Leu Arg Asp Ala  
 145 150 155 160  
 Leu Lys Leu Ser Ser Glu His Phe Arg Leu Gly Asn Val His Met Ile  
 165 170 175  
 Ser Ala His Arg Gly Trp Trp Thr Lys Gln Val Lys Glu Asp Ile Arg  
 180 185 190  
 Glu His Gly Gly Gly Ile Trp Val Val Gly Lys Ala Asn Val Gly Lys  
 195 200 205  
 Ser Ser Phe Ile Glu Ala Cys Phe Pro Lys Asp Ser Arg Asn Leu Glu  
 210 215 220  
 Lys Ile Ala Glu Leu Val Glu Arg Arg Ala Val Glu Ser Asp Ile Asn

## 17554

225                      230                      235                      240  
 Gln Leu Asn Asp Val Ser Leu Gly Ser Asp Ser Ile Leu Pro Pro Ala  
                          245                      250                      255  
 Pro Arg Glu Asp Leu Tyr Pro Val Leu Pro Val Val Ser Ser Val Pro  
                          260                      265                      270  
 Gly Thr Thr Val Ser Pro Ile Arg Ile Pro Phe Gly His Gly Lys Gly  
                          275                      280                      285  
 Glu Met Ile Asp Leu Pro Gly Leu Asp Arg Gly Gln Leu Leu Asn His  
                          290                      295                      300  
 Val Leu Asp Glu His Lys Arg Asp Leu Thr Met Thr Lys Arg Lys Lys  
 305                      310                      315                      320  
 Pro Glu Arg Leu Thr Val Lys Pro Gly Gln Ser Leu Leu Leu Gly Gly  
                          325                      330                      335  
 Gly Leu Val Arg Ile Thr Ala Glu Asn Pro Asp His Val Leu Met Ala  
                          340                      345                      350  
 Ala Cys Phe Val Pro Ile Glu Thr His Val Thr Lys Thr Glu Lys Ala  
                          355                      360                      365  
 Val Glu Met Gln Ala Gly Gln Arg Pro Tyr Pro Gly Glu Gln Ile Met  
 370                      375                      380  
 Arg Glu Glu Ala Thr Ala Ser Ile Ser Ser Ala Gly Ile Phe Glu Leu  
 385                      390                      395                      400  
 Lys Trp Asp Val Thr Arg Ser His Leu Pro Thr Ser Ile Ala Lys Ala  
                          405                      410                      415  
 Val Glu Asp His Gly Ile Pro Ile Pro Arg Leu Pro Tyr Lys Val Met  
                          420                      425                      430  
 Ser Thr Asp Ile Leu Ile Glu Gly Cys Gly Trp Val Glu Leu Thr Val  
                          435                      440                      445  
 Gln Ile Arg Ala Gly Ser Lys Ser Glu Glu Leu Glu Ser Ser Arg Ser  
                          450                      455                      460  
 Val Pro Arg Val Glu Val Phe Ser Pro Asn Gly Gln His Ile Gly Ser  
 465                      470                      475                      480  
 Arg Pro Pro Ile Glu Cys Trp Asn Phe Ile Ala Ala Lys Arg Ala Ala  
                          485                      490                      495  
 Asp Lys Arg Lys Arg Pro Ser Arg Gly Arg Gln Asn Val Gly Leu Lys  
                          500                      505                      510  
 Arg Arg Ala Gln Gln Ser Arg  
                          515

&lt;210&gt; 40215

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40215

Pro His Asn His Ser Ser Thr Leu Ile Ser Val Ala Val Gly Tyr Pro  
 1                      5                      10                      15  
 Thr Thr Ser Met Ala Ala Gln Thr Val Asn Val Leu Leu Ser Ser Phe  
                          20                      25                      30  
 Pro Gly Leu Ser Leu Pro Ser Thr Val Ser Phe Ser Leu Pro Ser Thr  
                          35                      40                      45  
 Ser Thr Ile Ser Asp Leu Thr Asp Arg Val Ser Ala Tyr Leu Pro Ser  
                          50                      55                      60  
 Ser Ile Pro Leu Gln Ser Leu Val Leu Thr Thr Thr Ser Asn Lys Gln  
 65                      70                      75                      80  
 Leu Val Pro Ser Cys Glu Arg Leu Phe Ser Leu Phe Gly Ala Ser Lys  
                          85                      90                      95

## 17555

Gly Glu Val Ala Thr Thr Ser Asn Leu Leu Pro Leu Arg Leu Thr Val  
 100 105 110  
 Pro Leu Arg Gly Gly Lys Gly Gly Phe Gly Ser Gln Leu Arg Ala Ala  
 115 120 125  
 Gly Gly Arg Met Ser Ser Lys Arg Lys Arg Asn Gln Gly Asp Asp Asn  
 130 135 140  
 Gly Ser Ser Arg Asn Leu Asp Gly Arg Arg Ile Arg Thr Val Asn Glu  
 145 150 155 160  
 Ala Lys Ala Leu Ala Glu Tyr Leu Ala Val Lys Pro Glu Met Asp Arg  
 165 170 175  
 Lys Glu Lys Glu Glu Arg Arg Arg Arg Trp Gln Ala Val Val Glu Ala  
 180 185 190  
 Ala Glu Lys Arg Gln Glu Glu Leu Lys Asn Gly Gly Gly Lys His Lys  
 195 200 205  
 Ile Asp Gly Gln Trp Met Glu Asp Lys Glu Glu Met Asn Glu Lys Ala  
 210 215 220  
 Arg Glu Ala Val Leu Ala Ala Met Arg Asp Gly Val Trp Thr Asp Asn  
 225 230 235 240  
 Leu Arg Asp Thr Ile Leu Gly Gly Ser Ser Thr Ser Ala Ser Ala Ser  
 245 250 255  
 Glu Gly Ser Gly Gln Glu Thr Gln Asn Ser Ser Glu Glu Glu Ser Asp  
 260 265 270  
 Glu Glu Gln Asp Pro Ala Asp Val Pro Thr Pro Ser Glu Pro Ala Val  
 275 280 285  
 Lys Ser Ala Pro Thr Arg Lys Phe Ile Gly Phe Asp Asp Asp Asp Glu  
 290 295 300  
 Phe Met Ser Asp Ser Glu Asp Glu Glu Val Glu Gln Ile Asp Asn Pro  
 305 310 315 320  
 Lys Gly Lys Gly Lys Ala Lys Ala  
 325

&lt;210&gt; 40216

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40216

Asp Ile Val Glu Leu Val Asp Val Arg Leu Tyr Ser Pro Ala Phe Asn  
 1 5 10 15  
 Gln Phe Cys Asn Leu Leu Gln Val Pro Arg Ile Leu Gly Lys Thr Gly  
 20 25 30  
 Phe Asp Glu Ala Ala Leu Ser Asp Ile Gly Leu Ala Asn Tyr Pro Asn  
 35 40 45  
 Thr Ser Ser Met Leu Ser Asp Ile Leu Leu His Leu Phe Ser Pro Pro  
 50 55 60  
 Thr Ser Met Ser Thr Asn His Met Tyr Ile Ala Gln Pro Lys Met Phe  
 65 70 75 80  
 Arg Gly Gln Phe Gln Ser Val Ser Glu Asn Arg Ser His Ile Leu His  
 85 90 95  
 Leu Arg Val Asn Leu Phe Leu Gly Arg Gly  
 100 105

&lt;210&gt; 40217

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40217

Pro Glu Thr Ile His Tyr Ala Arg Phe Pro Glu Val Pro Glu Pro Ser  
 1 5 10 15  
 Val Glu Leu Ser Ala Ala Leu Thr Tyr Val Arg Ser Thr Ser Ser Ser  
 20 25 30  
 Ile Thr Ser Ala Glu Ala Gly Phe Val Lys Lys Leu Ser Lys Gly Lys  
 35 40 45  
 Thr Met Phe Phe Asp Pro Arg Lys Pro Lys Lys Leu Thr Ile Tyr Ala  
 50 55 60  
 Ala Lys Lys Tyr Pro Ala Trp Gln Glu Lys Tyr Ile Asp Leu Val Arg  
 65 70 75 80  
 Glu Ala Phe Asp Ala Val Ser Leu Ser Ile Asn Asp Lys Glu Leu Asn  
 85 90 95  
 Ala Lys Val Gly Lys Leu Gly Glu Met Lys Lys Ala Met Pro Phe Val  
 100 105 110  
 Gln Thr Leu Lys Thr Arg Leu Ile Lys Ser Lys Glu Ala Pro Glu Asn  
 115 120 125  
 Val Phe Ser Arg Lys Leu Pro Phe Asp Glu Leu Ala Val Leu Lys Glu  
 130 135 140  
 Met Leu Gly Ile Leu Lys Arg Thr Thr Gly Cys Lys Glu Ile Glu Val  
 145 150 155 160  
 Ile Ala Val Asp Glu Gly Gly Lys Thr Gly Glu Val Leu Gly Thr Gly  
 165 170 175  
 Glu Lys Arg Glu Gly Leu Ser Ala Glu Asn Ala Val Pro Gly Gln Pro  
 180 185 190  
 Thr Phe Gly Phe Thr Asn Ile Ala Glu  
 195 200

&lt;210&gt; 40218

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40218

Ile Asp Pro His Leu Ile Ser Ser Ile Gln Gly Leu Asp Tyr Leu Arg  
 1 5 10 15  
 Glu Trp Leu His Leu Pro Ala Glu Val Val Pro Ala Thr His Ile Lys  
 20 25 30  
 Gln Gln Arg Ser His Ala Pro Pro Arg Gly Met Met Gly Gly Glu Glu  
 35 40 45  
 Arg Glu Arg Arg Pro Arg Ala Pro Arg Glu Gly Gly Tyr Arg Arg Arg  
 50 55 60  
 Glu Gln Glu Pro Lys Glu Gly Gly Ala Pro Gly Glu Phe Ala Pro Ser  
 65 70 75 80  
 Phe Arg Gly Gly Phe Gly Arg Gly Arg Gly Ala Pro Ala Ser  
 85 90

&lt;210&gt; 40219

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40219

Leu Lys Pro Asp His Arg Phe Asp Phe Pro Ser Glu Val Thr Thr Gly  
 1 5 10 15

## 17557

Asp Gly Ile Glu Asp Ala Asn Phe Asp Glu Asn Val Ser Asn Ser Ser  
                   20                  25                  30  
 Ile Leu Ile Leu Phe Thr Leu Asn Glu Trp Ile Glu Glu Thr Val Lys  
                   35                  40                  45  
 Asp Ser Ser Leu Arg Thr Asp Ser Glu Tyr Ser Phe Trp Asp Lys Leu  
                   50                  55                  60  
 Phe Asp Asn Glu Met Asn Ser Leu Val Arg Glu Ala Ile Lys His Tyr  
 65                  70                  75                  80  
 Lys Lys

&lt;210&gt; 40220

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40220

Pro His Leu Ser Thr Asp Phe Lys Leu Ala Leu Lys Ser Ala Leu Phe  
 1                  5                  10                  15  
 Asp Leu Thr Asn Ala Arg Asp Val Tyr Arg Glu Ala Ala Val Ser Ala  
                   20                  25                  30  
 Gly Val Gly Met His Arg Asp Val Val Leu Arg Tyr Val Glu Leu Gln  
                   35                  40                  45  
 Ala Leu Met Ile Ser Pro Ile Ala Pro His Trp Ala Glu Tyr Ile Trp  
                   50                  55                  60  
 Leu Glu Val Leu Asn Lys Val  
 65                  70

&lt;210&gt; 40221

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40221

Leu Arg Cys Ile Arg Gly Lys Ile Glu Glu Val Thr Leu Pro Val Ser  
 1                  5                  10                  15  
 His Val Asp Ile Ile Val Ser Glu Trp Met Gly Tyr Cys Leu Leu Phe  
                   20                  25                  30  
 Glu Ala Met Phe Asp Ser Val Ile Tyr Ala Arg Asp Arg Tyr Leu Ala  
                   35                  40                  45  
 Pro Gly Gly Leu Met Val Pro Ser Asp Ala Thr Leu Arg Ile Ala Pro  
                   50                  55                  60  
 Phe Ala Asp Ser Glu Phe Ile Ser Ser His Ile Ser Phe Trp Asp Asp  
 65                  70                  75                  80  
 Val Tyr Gly Phe Lys Met Gly Ser Met Arg Lys Asn Ile Tyr Asp Asp  
                   85                  90                  95  
 Ala Leu Val Arg Ser Val Gln Pro Ala Ala Ile Pro Gly Asp Ser Asp  
                   100                  105                  110  
 Val Phe Leu Glu Leu Pro Leu His Thr Ile Thr Val Glu Glu Leu Ser  
                   115                  120                  125  
 Phe Leu Lys Gly Phe Gln Val Thr Leu Lys Glu Asp Ile Asp Ala Leu  
                   130                  135                  140  
 Asp Gly Phe Val Ile Trp Phe Asp Ile Phe Phe Met Pro Ser Arg Asp  
 145                  150                  155                  160  
 Ser Thr Val Pro Lys Asn Ala Val Pro Ser Glu Met Lys Lys Lys Gly  
                   165                  170                  175

## 17558

Phe Val Ala Phe Thr Thr Gly Pro His Gly Pro Glu Thr His Trp Gln  
 180 185 190  
 Gln Gly Val Leu Leu Ile Asp Arg Glu Arg Lys Lys Gly Val Ala Val  
 195 200 205  
 Lys Lys Gly Gln Ala Ile Ala Gly Lys Val Gly Tyr Gln Lys Arg Glu  
 210 215 220  
 Glu Gly Ser Arg Ser Leu Asp Ile Thr Val Glu Trp Asp Thr Gln Ala  
 225 230 235 240  
 Gly Glu Gln Gly Ala Gln Lys Trp Val Leu Gln  
 245 250

&lt;210&gt; 40222

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40222

Ile Ala Leu Val Gln Thr Arg Leu Glu Ser Met Ser Ala Thr Ile Ser  
 1 5 10 15  
 Ser Asp Arg Arg Val Arg Asp Gln Asp Ala Leu Ser Thr Thr Ser Ser  
 20 25 30  
 Asp Asp Ser Asp Ile Ser Asn Glu Glu Gly Trp Glu Asp Val Glu Pro  
 35 40 45  
 Asp Asp Glu Thr Gln Pro Val Ile Gly Leu Phe Ser Asp Lys Val Tyr  
 50 55 60  
 Pro Asp Val Gln Ser Met Leu Gln Glu Ser Lys Asp Lys His Gly Phe  
 65 70 75 80  
 Asp Leu Arg Lys Ile Arg Lys Asp Leu Gly Val  
 85 90

&lt;210&gt; 40223

&lt;211&gt; 329

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40223

Asn Ser Gln Tyr Gly Tyr Asp His Asp Tyr Leu Arg Glu Ile Pro Ala  
 1 5 10 15  
 Asn Leu Phe Arg Phe Thr Ser Asp Leu Asp Phe Leu Gly Thr Ile Arg  
 20 25 30  
 Leu Val Asn Tyr Val Arg Ser Gln Val Lys Ala Gly Asn Thr Thr Pro  
 35 40 45  
 Asp Val Ser Ser Lys Asp Arg Phe Glu Asp Asp Ala Tyr Leu Lys Pro  
 50 55 60  
 Val Leu Glu Asp Asp Ala Leu Leu Tyr Ser Leu Asp Asp Ile Glu Asp  
 65 70 75 80  
 Glu His Ser Ala Thr Ala Gly Thr Thr Glu Ala Glu Arg Arg Val Ile  
 85 90 95  
 Glu Leu Gln Glu Asp Leu Glu Arg Leu Gln Ser Gln Phe Thr Glu Tyr  
 100 105 110  
 Arg Met Ala Val Gln Lys Ser Met Glu Glu Gln Leu Ser Met Asp Asp  
 115 120 125  
 Glu Lys Leu Arg Ser Ser Pro Ser Gly Pro Ser Gly Lys Lys Met Ser  
 130 135 140  
 Lys Val Glu Glu Ala Asp Ala Asp Tyr Phe Val Ser Tyr Ser Tyr Asn  
 145 150 155 160



## 17559

Gly Gln Phe Ser Thr Gly Ser Arg Ala Gly Tyr Ala Phe Cys Ala Asn  
 165 170 175  
 Cys His Met Leu Glu Ala Ile His Glu Ser Met Leu Lys Asp Thr Val  
 180 185 190  
 Arg Thr Asp Ser Tyr Arg Asp Phe Ile Tyr Asp Asn Lys His Leu Phe  
 195 200 205  
 Lys Asp Lys Val Val Leu Asp Val Gly Cys Gly Thr Gly Ile Leu Ser  
 210 215 220  
 Met Phe Cys Ala Lys Ala Gly Ala Lys Lys Val Ile Ser Val Asp Asn  
 225 230 235 240  
 Ser Asn Ile Ile Asp Arg Ala Lys Glu Ile Ile Tyr Glu Asn Gly Phe  
 245 250 255  
 Gly Asp Val Ile Thr Tyr Val Phe Arg Ser Ala Tyr Asp Asn Asn Leu  
 260 265 270  
 Pro Glu Ser Asn Ile Ser Ser Asp Ala Ser Val Ala Arg Leu Lys Lys  
 275 280 285  
 Ser Leu Cys Leu Phe Pro Met Ser Thr Leu Ser Ser Pro Asn Gly Trp  
 290 295 300  
 Ala Ile Ala Phe Tyr Ser Arg Pro Cys Leu Thr Arg Ser Phe Thr Pro  
 305 310 315 320  
 Glu Thr Gly Ile Ser Leu Gln Glu Asp  
 325

&lt;210&gt; 40224

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40224

Lys Lys Glu Lys Asn Gly Leu Ser Gln Gln Asn Pro Leu Val Ala Pro  
 1 5 10 15  
 Pro Asp Ala Gly Trp Val Leu Cys Leu Ser Ala Leu Arg Leu Thr Thr  
 20 25 30  
 Ala Asp Arg Ala Asp Asn Lys Trp Glu Leu Arg Arg Thr Ser Leu Ser  
 35 40 45  
 Ser Pro Ser Ser Ser Ser Pro Ala Pro Ser Pro Ser Pro Cys Leu Phe  
 50 55 60  
 Leu Phe Ser Leu Tyr Arg Leu Ser Ala Ser Phe Ser Arg Asp Arg Glu  
 65 70 75 80  
 Val Phe Asn Pro His Ser Ala Arg Asp Gln Leu Leu Val Leu His His  
 85 90 95  
 Leu His Val Leu Asn Ser Ser Leu Pro Leu Ile Leu Ser Cys Phe Phe  
 100 105 110  
 Cys Ile Lys Leu Ser Cys Pro Ile His Ile Lys Pro Leu Ile Ser Thr  
 115 120 125  
 Glu Met Ala Phe Leu Trp Arg Asn Arg Gln Arg Pro Pro Ser Asp Val  
 130 135 140  
 Val Arg Thr Ile Lys Glu Leu Leu Leu Arg Leu Gly Glu Ala Pro Ala  
 145 150 155 160  
 Ala Ala Lys Val Ser Leu Thr Gly Ser Leu Tyr Leu Phe Met Pro Gln  
 165 170 175  
 Ile Val Arg Ile Cys Ser Leu Leu Thr Ala Ser Asn Arg Ser Lys Met  
 180 185 190  
 Thr Trp Arg Ser Asn Leu Arg Arg  
 195 200

17560

<210> 40225  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

<400> 40225  
 Leu Gln Ser Ala Leu Glu Thr Glu Thr Thr Pro Glu Gln Val His Ala  
 1 5 10 15  
 Leu Val Gln Ala Thr Val His Glu Asp Leu Leu Tyr Glu Leu Ala Arg  
 20 25 30  
 Asn Leu Arg His Leu Pro Phe Gln Ala Arg Lys Asp Ala Gln Thr Ile  
 35 40 45  
 Phe Ser Gln Ile Leu Arg Phe Arg Pro Ala Gln Thr Asn Ser Gly Asp  
 50 55 60  
 Pro Pro Val Ile Ser Tyr Ile Val His Asn Arg Pro Glu Ile Ile Val  
 65 70 75 80  
 Glu Leu Cys Arg Gly Tyr Glu Ser Pro Glu Ser Thr Met Pro Cys Gly  
 85 90 95  
 Ala Ile Leu Arg Glu Ala Leu Lys Phe Asp Val Cys Ala Ala Ile Ile  
 100 105 110  
 Leu Tyr Asp Gln Ser Ile Glu Gly Gln Pro Ala Ile Arg Leu Thr Gln  
 115 120 125  
 Val Asn Pro Asp Ile Pro Gln Lys Gly Asn Gly Ile Phe Trp Arg Phe  
 130 135 140  
 Phe His Trp Ile Asp Lys Ser Ser Phe Glu Val Ser Ala Asp Ser Phe  
 145 150 155 160  
 Thr Thr Phe Arg Val Ser His Asp Trp Tyr Gly  
 165 170

<210> 40226  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

<400> 40226  
 Val Phe Val Ala Asn Pro Asn Lys Ser Val Ala Val Gln Arg Ile Leu  
 1 5 10 15  
 Ile Asn Asn Arg Asp Arg Leu Leu Lys Phe Leu Pro Arg Phe Leu Met  
 20 25 30  
 Asp Arg Thr Asp Asp Asp Gln Phe Thr Asp Glu Lys Ser Phe Leu Val  
 35 40 45  
 Arg Gln Ile Glu Leu Leu Pro Gln Glu Pro Ile Glu Pro Thr Arg Ser  
 50 55 60  
 Ala Gln Glu Ser Ser Arg Ser Arg Val Asn Thr Ala Ala Ala Ala  
 65 70 75

<210> 40227  
 <211> 212  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (6)  
 <223> Identity of amino acid sequences at the above locations are unknown.

17561

<400> 40227

Ala Ser Arg Trp Ser Xaa Ala Arg Leu Val Glu Asn Glu Asp Gln Tyr  
 1 5 10 15  
 Arg Met Arg Phe Ser Asn Ala Ala Gly Tyr Arg Gln Ser Ala Gly Gln  
 20 25 30  
 Met Pro Trp Tyr Ser Ser Ser Ser Arg Asp Ala Leu Ala Pro Asp Ala  
 35 40 45  
 Met Pro Glu Lys Asp Val Trp Gly Asn Glu Asp Pro Met Arg Gln Glu  
 50 55 60  
 Arg Glu Lys Ala Arg Leu Asp Ala Asn Asp Pro Leu Met Ala Ile Lys  
 65 70 75 80  
 Arg Gly Val Arg Gln Leu Lys Ser Val Glu Leu Glu Arg Lys Lys Trp  
 85 90 95  
 Asn Gln Glu Arg Lys Arg Glu Leu Asp Ser Leu Lys Glu Ala Glu Arg  
 100 105 110  
 His Arg Ser Arg His Arg Arg Arg Ser Arg Ser Arg Ser Lys Ala  
 115 120 125  
 Ser Asp Ser Gly Asp Ser Leu Glu Asn Phe Ser Leu Asp Ala Pro Asp  
 130 135 140  
 Lys His Gln Asp Arg Lys His Arg Ser Ser His Arg His Arg Ser His  
 145 150 155 160  
 Arg Arg Glu Arg Ser Arg Ser Arg Ser Arg Asp His Phe Cys Glu Gln  
 165 170 175  
 Ser Arg Lys Arg His Arg His Ser His Ser His Ser His Ser His Arg  
 180 185 190  
 His Arg Asp His His Asp Arg Gly Gly Val Cys Glu Val Gln Ser Pro  
 195 200 205  
 Arg Arg His Val  
 210

<210> 40228

<211> 98

<212> PRT

<213> A.fumigatus

<400> 40228

Asp Ile Leu Thr Arg His Lys Ser Leu Val Thr Ser Tyr Leu Thr Thr  
 1 5 10 15  
 Asn Phe Asp Leu Phe Phe Ser Arg Phe Asn Thr Leu Ile Gln Ser Ser  
 20 25 30  
 Ser Tyr Val Thr Lys Arg Gln Ser Ile Lys Leu Leu Gly Glu Ile Leu  
 35 40 45  
 Leu Asp Arg Ala Asn Tyr Asn Val Met Met Ala Tyr Val Glu Ser Gly  
 50 55 60  
 Glu Asn Leu Lys Leu Cys Met Gln Leu Leu Lys Asp Asp Arg Lys Met  
 65 70 75 80  
 Ile Gln Tyr Glu Gly Phe His Val Phe Lys Val Leu Phe Ser Ile Ser  
 85 90 95  
 Ser Ala

<210> 40229

<211> 70

<212> PRT

<213> A.fumigatus

&lt;400&gt; 40229

Val Pro Tyr Ala Pro Pro Asn Val Arg Ala Asn Val Trp Phe Ser Ala  
 1 5 10 15  
 Phe Ser Arg Val Asn Phe Asn Thr Ser Pro Pro Tyr Asn Val Pro Ala  
 20 25 30  
 Gly Ser Ser Val Asp Leu Ser Ala Val Val Ala His Tyr Glu Gln Gln  
 35 40 45  
 Asn Lys Gln Met Glu Glu Ala Arg Val Ala Arg Met Lys Asp Gly Lys  
 50 55 60  
 Val Val Ser Leu Tyr Asp  
 65 70

&lt;210&gt; 40230

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40230

Ile Gly Ile Ala Asn Cys Ile Ser Ala Lys His Val Phe Arg Gln Thr  
 1 5 10 15  
 Val Ser Arg Phe Gly Ala Ala Ala Ala Gln Ser Ala Ala Ser Ser  
 20 25 30  
 Leu Cys Val Ser Cys Arg Ser Cys Arg Ala Cys Glu Arg Glu Leu Arg  
 35 40 45  
 Arg Met Phe Asp Leu Pro Arg Gln Asn Ser Ser Ser Ser Leu Thr Thr  
 50 55 60  
 Thr Leu Ser Ser Leu Gln Arg Ser Phe Tyr Val Thr Ile Gly Ala Phe  
 65 70 75 80  
 Ala Ser Ala Tyr Val Leu Tyr Arg Leu Ser Lys Ser Ala Glu Glu Ser  
 85 90 95  
 Gly Ser Gln Ser Trp Ile Ser Asn Leu Ile Gln Lys Trp Thr Pro Ser  
 100 105 110  
 Glu Lys Leu Phe Glu Glu Arg Asn Ala Ile His Thr Ala Leu Met Glu  
 115 120 125  
 Lys Ala Ala Gln Asp Arg His Leu Leu Gln Ser Gln Gly Pro Arg Ala  
 130 135 140  
 Thr Phe Glu Leu Lys Gln Pro Glu Tyr Val His Met Ser Ser Leu Cys  
 145 150 155 160  
 Pro Ala Gln Cys Thr Ser  
 165

&lt;210&gt; 40231

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40231

Gly Asp Arg Thr Asn Glu Lys Met Leu Met Phe Arg Ser Asp Asn Phe  
 1 5 10 15  
 Glu Gln Ala Val Ala Ala Leu Glu His Ala Lys Tyr Ala Leu Ala Phe  
 20 25 30  
 Ser Ser Gly Ser Ala Thr Thr Ala Thr Ile Leu Gln Ser Leu Ala Ala  
 35 40 45  
 Gly Ser His Val Val Ser Val Ser Asp Val Tyr Gly Gly Thr His Arg  
 50 55 60  
 Tyr Phe Thr Lys Val Ala Ser Ala His Gly Val His Val Thr Phe Ser

## 17563

```

65              70              75              80
Pro Cys Ile Glu Val Asp Val Glu Ala Leu Ile Arg Pro Gly Glu Thr
              85              90              95
Lys Leu Val Trp Ile Glu Thr Pro Ser Asn Pro Thr Leu Gly Leu Val
              100             105             110
Asp Ile Arg Asn Val Ala Ala Val Ala His Arg His Gly Ile Ile Val
              115             120             125
Val Val Asp Asn Thr Phe Met Ser Pro Tyr Val Gln Asn Pro Leu Asp
              130             135             140
His Gly Ala Asp Ile Val Val His Ser Val Thr Lys Tyr Ile Asn Gly
145             150             155             160
His Ser Val Ser Cys Asp Ala Ser Phe Thr Gly Lys Thr Val Tyr
              165             170             175

```

<210> 40232  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40232
Ile Tyr Lys Arg Ala Met Thr Ser Ala Phe Ser Phe Gly Phe Ser Gly
1              5              10              15
Asp Asp Ile Asp Ile Asp Ile Asp Glu Asp Asp Leu Ser Gly Ile Asp
              20              25              30
Glu Arg Asp Met Asn Ala Val Glu Asp Ala Ser Lys Gln Leu Thr Gly
              35              40              45
Arg Leu Met Glu Pro Gln Arg His Asp Met Gly Glu Trp Val Ser Tyr
              50              55              60
Lys Ser Leu Leu Gly Ser Trp Val Ala Thr Asp Gly Ser Arg Ser Lys
65             70             75             80
Thr Thr Asp Glu Met Asn Arg Glu Arg Gly Ile Ala Asp Asp Glu Gly
              85             90             95

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<210> 40233  
 <211> 193  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40233
Asp Val Leu Met Gly Val Ala Ala Phe Asn Ser Asp Ala Leu Lys Asp
1              5              10              15
Arg Leu Thr Phe Leu Gln Asn Ala Ile Gly Ala Val Pro Ser Pro Phe
              20              25              30
Asp Cys Trp Leu Ala His Arg Gly Leu Lys Thr Leu His Leu Arg Ala
              35              40              45
Arg Glu Ala Thr Ala Asn Ala Thr Val Val Ala Lys Ala Leu Glu Ala
              50              55              60
Ser Pro His Val Ile Ser Val Asn Tyr Pro Gly Leu Asp Ser His Pro
65             70             75             80
His Arg Ala Ile Ala Ile Lys Gln His Arg Gln Gly Met Gly Gly Gly
              85             90             95
Met Leu Ser Phe Arg Ile Lys Gly Gly Gln Lys Ala Ala His Leu Phe
              100             105             110
Cys Gln Tyr Thr Lys Val Phe Thr Leu Ala Glu Ser Leu Gly Gly Val
              115             120             125
Glu Ser Leu Cys Glu Val Pro Ser Ser Met Thr His Ala Gly Ile Pro

```

## 17564

130 135 140  
 Lys Asp Gln Arg Glu Ala Ala Gly Val Phe Asp Asp Phe Val Arg Met  
 145 150 155 160  
 Ser Cys Gly Val Glu Asp Ala Glu Asp Leu Lys Ala Asp Thr Leu Gln  
 165 170 175  
 Ala Leu Glu Lys Ala Val Leu Ala Ser Gln Gln Leu Glu Asn Gly Ser  
 180 185 190  
 Ser

<210> 40234  
 <211> 216  
 <212> PRT  
 <213> A.fumigatus

<400> 40234  
 Leu Gly Ala Gly Thr Ser Val Pro Ser Leu Thr Leu Phe Ala Gln Ala  
 1 5 10 15  
 Leu Arg Arg Pro Asp Ser Ala Thr Asn Lys Ile His Phe Thr Phe Ala  
 20 25 30  
 Asp Tyr Asn Ser Ala Val Leu Arg Leu Val Thr Leu Pro Asn Leu Leu  
 35 40 45  
 Leu Thr Trp Asn Tyr Ile Val Met His Arg Asp Pro Pro Ser Ala Glu  
 50 55 60  
 Asp Thr Ser Pro Arg Asp Gln Pro Asp Glu Glu Glu Leu Asp Ile Thr  
 65 70 75 80  
 Pro Glu Leu Leu Glu Ser Phe Gln Lys Asp Leu Ala Asn Lys Lys Ile  
 85 90 95  
 Thr Phe Glu Phe Ile Ser Gly Ala Trp Ser Ser Ala Phe Val Asp Leu  
 100 105 110  
 Val Phe Ser Ser Tyr Gly Leu Gly Lys Gly Lys Thr Leu Ile Leu Ala  
 115 120 125  
 Ser Glu Thr Ile Tyr Ser Pro Ala Ser Leu Glu Pro Phe Ser Glu Thr  
 130 135 140  
 Leu Ile Ala Leu Leu Arg Ser Glu Thr Glu Gln Glu Arg Ser Lys  
 145 150 155 160  
 Ala Leu Ile Ala Ala Lys Lys Val Tyr Phe Gly Val Gly Gly Gly Val  
 165 170 175  
 Asp Glu Phe Leu Met Val Leu Lys Asn Val Asn Gly Tyr Asp Leu Asp  
 180 185 190  
 Val Gln Glu Gln Val Asn Ile Asn Ser Glu Gly Val Gly Arg Val Ile  
 195 200 205  
 Leu Lys Ile Thr Leu Arg Ser Thr  
 210 215

<210> 40235  
 <211> 166  
 <212> PRT  
 <213> A.fumigatus

<400> 40235  
 Ser Gly Pro Val Pro Ser Ser Tyr Ser Tyr Phe Pro Leu Ser Leu Leu  
 1 5 10 15  
 Thr Ser Pro Ala Leu Phe Pro Thr His Pro Gly Val Tyr Phe Trp Ser  
 20 25 30  
 Tyr Gly Leu Leu Asp Pro Leu His Tyr Ser Phe Phe His His Leu Arg

## 17565

```

      35              40              45
Pro Leu His Val Arg Phe Ala Leu Gly Leu Ser Tyr Val Leu Arg Ala
  50              55              60
Gly His Asp Arg Leu Ser Ser Leu Phe Phe Tyr Pro Leu Ser Phe Leu
  65              70              75              80
Leu Leu Ser Ser Ser Arg Asn Cys Leu Asp Leu Ser Ala Phe Ala Leu
      85              90              95
Arg Pro Arg Ile Arg Cys Leu Phe Arg Arg Arg Cys Ser Ile His Ser
      100              105              110
Tyr Ile Ser Ile Thr Met Glu Gly Phe Asp Thr Met Ala Met Pro Tyr
      115              120              125
Leu Ala Ser Pro Leu Ser Leu Gly Asn Met Gln Gly Ala Asp Tyr Leu
      130              135              140
Asn Ala Met Pro Gly Ile Asp Leu Pro Asp Gln Arg Ser Asn Phe Asp
  145              150              155              160
Ser Asp Thr Phe Val Arg
      165

```

&lt;210&gt; 40236

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40236

```

Gly Leu Phe Arg Pro Thr Leu Tyr Cys Ser Leu Ala Leu Pro Asp Arg
  1              5              10              15
Ser Ser Arg Cys Leu Leu Trp Thr Phe Arg Phe Lys Ser Ser Ile Ala
      20              25              30
Ser Thr Thr Gln Gly Thr Asn Tyr Thr Thr Thr Thr Ile Thr Thr Asp
      35              40              45
Cys Ile Tyr Leu Leu His Ile Tyr Asn Tyr Leu Gln
  50              55              60

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&lt;210&gt; 40237

&lt;211&gt; 307

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40237

```

Val Phe Leu Thr Ser Ser Gly Leu Val Thr Ile Ala Phe Pro Pro Ser
  1              5              10              15
Ser Ser Ile Leu Phe Arg Phe Tyr Phe Phe Pro Leu His Ala Thr Ala
      20              25              30
Leu Thr Phe Leu Pro Leu Pro Cys Val Leu Glu Phe Val Val Ser Phe
      35              40              45
Val Gly Ala Val Leu Ser Thr His Thr Ser Pro Ser Pro Trp Arg Val
  50              55              60
Ser Ile Leu Trp Pro Cys Arg Ile Trp Pro Val Arg Cys His Trp Ala
  65              70              75              80
Ile Cys Arg Ala Pro Thr Thr Leu Met Pro Cys Leu Val Leu Ile Tyr
      85              90              95
Pro Thr Asn Ala Arg Ile Ser Thr Pro Thr Arg Ser Leu Gly Lys Ser
      100              105              110
Ile Leu Ala Leu Arg Ser Gln Met Ile Ile Leu Thr Lys Ala His Trp
      115              120              125
Asn Ser Gly Glu Asp Ile Pro Pro Phe Thr Gln His Ser Leu Pro Asn

```

## 17566

130 135 140  
 Thr Leu Lys Arg Phe Ser Ser Gly Tyr Asp Asp Pro Phe Thr Glu Met  
 145 150 155 160  
 Val Thr Pro Phe Asp Pro Ala Pro Ser Glu Gln Pro Pro Asp Ser Ser  
 165 170 175  
 Ile Asp His Asn Asn Lys Leu Leu Ser Phe Ser Met Pro Ala Tyr Asn  
 180 185 190  
 Phe Thr Leu Leu Asp Tyr Ser Leu Arg Arg Thr Ser Leu Ser Leu Ser  
 195 200 205  
 Ala Gln Leu His Gly Met Phe Ser Leu Ala Glu Ser Pro Trp Thr Thr  
 210 215 220  
 Ser Pro Thr Glu Asn Ala Pro Pro Gln Gln Gly Ala Glu Leu Thr Cys  
 225 230 235 240  
 Tyr Arg Arg Asn Leu Phe Gln Ile Thr Gly Ser Val Thr Leu Pro Arg  
 245 250 255  
 Ser Leu Arg Tyr Ile Met Asn Glu Gln Gly Asp Arg Leu Pro Ile Leu  
 260 265 270  
 Ala Gln Glu Leu Cys Val Ser Ala Thr Glu Ser Val Glu Gly His Ser  
 275 280 285  
 Val Lys Ile Ile Ser Val Ala Trp Lys Lys Pro Ala Ala Lys Gly Asp  
 290 295 300  
 Ser Thr Asp  
 305

&lt;210&gt; 40238

&lt;211&gt; 353

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40238

Pro Arg Tyr Arg Ser Ile Lys Arg Ile Ile Phe Glu Thr Leu Val Lys  
 1 5 10 15  
 Arg Val Pro Gly Gly Leu Val Arg Leu Ser Val Pro Glu Ile Lys Gln  
 20 25 30  
 Ile Gly Gly Arg Ala Gly Arg Tyr Arg Pro Ala Ala Gln Gln Asp Lys  
 35 40 45  
 Lys Asn Asn Asn Asp Ser Asp Ser Asn Ile Gly Leu Val Thr Cys Leu  
 50 55 60  
 Glu Glu Val Asp Leu Pro Tyr Ile Arg Glu Ala Met Glu Thr Glu Pro  
 65 70 75 80  
 Pro Pro Leu Thr Ala Ala Gly Ile Phe Pro Pro Asp Pro Val Phe Gln  
 85 90 95  
 Lys Phe Ser Ala Tyr Phe Pro Arg Asp Val Pro Phe Glu Tyr Leu Ile  
 100 105 110  
 Lys Arg Leu Leu Glu Val Cys Glu Val Asn Pro Leu Phe Phe Leu Cys  
 115 120 125  
 Asp Pro Arg Gly Gln Leu Glu Asn Ala Glu Ile Ile Asp Ser Val Val  
 130 135 140  
 Gly Leu Pro Ile Glu Asp Gln Val Thr Phe Met Ala Ala Pro Met Tyr  
 145 150 155 160  
 Thr Arg Asp Arg Lys Ser Arg Ser Val Ala Cys Ala Phe Ala Glu Cys  
 165 170 175  
 Val Ala Glu His Ser Gly Gly Arg Leu Leu Asp Ile Pro Asp Leu Asn  
 180 185 190  
 Leu Glu Ile Leu Glu Glu Pro Val Ser Gly Asn Lys Asp Tyr Leu His  
 195 200 205



## 17567

Glu Leu Glu Gly Leu His Arg Ser Val Ile Leu Tyr Ser Trp Leu Ser  
 210 215 220  
 Tyr Arg Phe Gly Gly Ile Phe Thr Asp Arg Thr Leu Ala Ala His Val  
 225 230 235 240  
 Lys Glu Met Val Glu Glu Arg Met Val Arg Ala Leu Thr Glu Phe Ser  
 245 250 255  
 Ala Asn Lys Lys Leu Arg Lys Asp Ala Ser Leu Arg Arg Gln Ile Ala  
 260 265 270  
 Leu Gln Lys Gln Ile Ala Glu Gln Lys Arg Val Leu Ala Glu Ala Asn  
 275 280 285  
 Ile Glu Gly Phe Glu Tyr Gly Val Asp Gly Glu Arg Val Pro Val Asp  
 290 295 300  
 Val Ser Ala Glu Asp Gly Ser Leu Glu Gln Glu Gly Gln Glu Ser Tyr  
 305 310 315 320  
 Asp Pro Phe Gly Asp Gly Gln Glu Gly Asp Thr Ile Pro Val Asp Val  
 325 330 335  
 Ser Ala Glu Asp Ser Pro Leu Glu Arg Ala Ala Pro Ala Ala Arg Gly  
 340 345 350  
 Val

&lt;210&gt; 40239

&lt;211&gt; 395

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40239

Gln Ile Leu Thr Tyr Thr Phe Thr Arg Thr Leu Ser Leu Leu Thr Arg  
 1 5 10 15  
 Leu Leu Ile Arg Leu Phe Ala Ile Gln Ser Trp Lys Lys Lys Ala Leu  
 20 25 30  
 Ala Arg Arg Pro Leu Ser Gln Pro Phe Ile Ile Arg Asp Phe Ala Ser  
 35 40 45  
 Ile Val Glu Ser Glu Leu Ala Asp Phe Lys Gln Ser Leu Lys Glu Ser  
 50 55 60  
 Ser Asp Pro Val Leu Ala Gly Trp Glu Arg Phe Glu Arg Tyr Val Leu  
 65 70 75 80  
 Asn Ala Cys Lys Leu Glu Asp Arg Ser Ser Gln Lys Val Phe Gly Pro  
 85 90 95  
 Leu Arg His Val Lys Thr Thr Leu Gln Lys Ala Tyr Leu Ser Ser Gly  
 100 105 110  
 Ile Ser Gly Leu Arg Ser Glu Leu Arg Tyr Leu Met His Ala Glu Glu  
 115 120 125  
 Ile Thr Glu Lys Tyr Ser Ala Pro Leu Leu Glu Gln Gln Lys Lys Val  
 130 135 140  
 Ala Asp Leu Arg Tyr Pro Ala Glu Trp Tyr Pro Gln Ala Arg Ala Leu  
 145 150 155 160  
 Gln Arg Thr Ile His Leu His Val Gly Pro Thr Asn Ser Gly Lys Thr  
 165 170 175  
 Tyr His Ala Leu Gln Arg Leu Gln Ala Ser Lys Asn Gly Phe Tyr Ala  
 180 185 190  
 Gly Pro Leu Arg Leu Leu Ala Gln Glu Val Tyr His Arg Phe Gln Ala  
 195 200 205  
 Ser Gly Ile Pro Cys Ser Leu Val Thr Gly Asp Asp Val Lys Ile Pro  
 210 215 220  
 Glu Gly Gln Thr Pro Ser Ile Val Ser Asn Thr Val Glu Met Val Asn

## 17568

225                      230                      235                      240  
 Leu Gly Gln Pro Tyr Asp Val Gly Val Ile Asp Glu Ile Gln Met Leu  
                                  245                      250                      255  
 Ala Asp Pro Lys Arg Gly Trp Ala Trp Thr Arg Ala Val Leu Gly Ala  
                                  260                      265                      270  
 Arg Ala Lys Glu Leu His Leu Cys Gly Glu Thr Arg Ala Val Pro Leu  
                                  275                      280                      285  
 Val Arg Glu Leu Ala Ala Leu Thr Gly Asp Arg Leu Glu Ile His Arg  
                                  290                      295                      300  
 Tyr Lys Arg Leu Asn Pro Leu Lys Val Met Asp Gln Ser Ile Arg Gly  
 305                                   310                      315                      320  
 Asp Leu Lys Asn Leu Gln Lys Gly Asp Cys Leu Val Ala Phe Ser Arg  
                                  325                      330                      335  
 Val Gly Ile His Ala Leu Lys Ala Asp Ile Glu Lys Val Thr Gly Arg  
                                  340                      345                      350  
 Arg Ala Ala Ile Val Tyr Gly Ser Leu Pro Ala Glu Ile Arg Thr Gln  
                                  355                      360                      365  
 Gln Ala Lys Leu Phe Asn Asp Pro Asp Asn Asp Tyr Asp Phe Leu Val  
                                  370                      375                      380  
 Ala Ser Asp Ala Ile Gly Met Gly Leu Asn Leu  
 385                                   390                      395

&lt;210&gt; 40240

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40240

Ile Val Ala Glu Asp Ile Lys Lys Ala Ala Leu Leu Pro Glu Gly Val  
 1                                   5                                   10                                   15  
 Trp Arg Ser Leu Ala Arg Glu Thr Leu Ser Ile Leu Tyr Leu Val Tyr  
                                  20                                   25                                   30  
 Ser Ile Leu Leu Phe Thr Ser Ser Gly Phe Arg Phe Trp Trp Phe Arg  
                                  35                                   40                                   45  
 Ser Pro Leu Gln Val Met Asp Asp Leu Glu Ser Leu Glu Leu Phe Ser  
                                  50                                   55                                   60  
 Leu Val Ser Arg Ile Thr Gly Glu Leu Gln Asn His Leu Gly Val Ser  
 65                                   70                                   75                                   80  
 Asp Lys Thr Leu Ala Glu Phe Val Ile Asp Gln His Leu Ser Cys Gly  
                                  85                                   90                                   95  
 Ser Phe Asp Glu Phe Lys Gly Lys Leu Glu Ala Met Gly Ala Glu Phe  
                                  100                                   105                                   110  
 Pro Gln Ser Leu Met Glu Ser Ile Asp Arg Leu Val Leu Thr Met His  
                                  115                                   120                                   125  
 Pro Lys Tyr Lys Ser Lys Lys Ala Asn Val Thr Gln Glu Lys Thr Glu  
                                  130                                   135                                   140  
 Ala Glu Gly Asp Met Asp Val Leu Asp Ala Leu Glu Lys Lys Ala Arg  
 145                                   150                                   155                                   160  
 Val Phe Lys Gly Leu Ala Val Pro Asp Lys Gln Pro Gln Trp Asp Glu  
                                  165                                   170                                   175  
 Asp Asp Asn Phe Arg Asn Pro Asp Val His Asp Arg  
                                  180                                   185

&lt;210&gt; 40241

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40241

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Ala Ile Ser Phe Leu Lys Ile Leu Gln Ile Ala Ser Asn Thr Leu Ile
1           5           10           15
His Asp Phe Glu Trp Ile Gln Ser Phe Val Pro Met Asp Leu Glu Ser
           20           25           30
Ile Thr Cys Glu Ser Arg Lys Leu Ser Asn Gln Gly His Gly Ser Cys
           35           40           45
Phe Ala Thr Lys Val Lys Phe Leu Gly Pro Arg Thr Lys Asp Ser Thr
           50           55           60
Ser Pro Arg Pro Ala Thr Phe Arg Val Arg Glu His Leu Asn Leu Val
65           70           75           80
Asp Asp Ser Asn Val Ile Arg Leu Ser
           85

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&lt;210&gt; 40242

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40242

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Leu Glu Phe Ala Ser Ala Asn Ser Pro Phe Pro Gln Asp Val Glu Gln
1           5           10           15
Ile Glu His Arg Arg Pro Pro Asn Pro Asp Met Asp Ala Leu Tyr Ile
           20           25           30
Leu Ser Pro Gln Thr His Ile Val Asp Cys Leu Met Ala Asp Phe Glu
           35           40           45
Arg Lys Arg Tyr Arg Arg Ala Trp Leu Val Trp Thr Ser Gly Gln Ser
           50           55           60
Phe Val Leu Ile Gly Asp Ser Thr Val
65           70

```

&lt;210&gt; 40243

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40243

```

Ile Leu Val Arg Thr Thr Leu Thr Val Val Glu Val Val Ser Leu Cys
1           5           10           15
Val Ser Leu Gly Glu Tyr Pro Ile Ile Arg Tyr Tyr Arg Pro Arg Thr
           20           25           30
Pro Thr His Glu Ala Ser Val Leu Cys Ser His Leu Ala Arg Phe Ile
           35           40           45
Gln Asn Glu Leu Asp Gln Phe Ala Gln Ser Gln Arg Asp Phe Pro Pro
           50           55           60
Pro Ser Pro Arg Pro Arg Gly Val Leu Leu Leu Ala Asp Arg Ser Met
65           70           75           80
Asp Met Val Ala Pro Leu Ile His Glu Phe Thr Tyr Gln Ser Met Val
           85           90           95
His Asp Leu Leu Pro Ile Lys Asp Gly Asp Lys Val Thr Tyr Thr Thr
           100           105           110
Val Ile Asn Thr Gly Ser Gly Gly Gly Gln Lys Lys Asp Met Glu Ile
           115           120           125
Asn Glu Glu Asp Asn Val Trp Val Glu Tyr Arg His Gln His Met Lys

```

[illegible]

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<210> 40244
<211> 239
<212> PRT
<213> A.fumigatus
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<210> 40245
<211> 68
<212> PRT
<213> A.fumigatus
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<400> 40245																
Glu	Gln	Thr	Pro	Gln	Val	Val	Arg	Pro	Lys	Asp	Phe	Asp	Gly	Thr	Glu	
1				5					10					15		
His	Ala	Val	Tyr	Pro	Ala	Ala	Ser	Glu	Gly	Ser	Thr	Thr	Glu	Asn	Cys	
			20					25					30			
His	Gly	Ser	His	Gly	Asn	Ser	Ser	Ala	Ser	His	Leu	Leu	Leu	Ser	Phe	
		35					40					45				
Pro	Gln	Thr	Gly	Asn	Ile	Lys	Glu	Val	Pro	Asp	Leu	His	Leu	Ser	Val	

## 17571

50  
Asp Leu Ser Ser  
65

55

60

<210> 40246  
<211> 103  
<212> PRT  
<213> A.fumigatus

<400> 40246  
Thr Glu Leu Ala Thr Ile Ala Ser Gln Met Gly Ala Ala His Lys Phe  
1 5 10 15  
Asp Leu Thr Ser Asp Val Thr His Leu Leu Val Gly Glu Ile Asn Thr  
20 25 30  
Ala Lys Tyr Lys Phe Val Ala Arg Glu Arg Ser Asp Val Val Val Leu  
35 40 45  
Lys Pro Glu Trp Val Glu Ala Val Arg Gln Ser Trp Met Gln Gly Glu  
50 55 60  
Asp Thr Asp Ile Arg Ala Leu Glu Gln Gln Tyr Arg Leu Pro Thr Phe  
65 70 75 80  
Met Gly Leu Ala Ile Cys Ile Thr Gly Phe Glu Asp Ser Met Arg Ile  
85 90 95  
Val Pro Ala Pro Pro Ile Cys  
100

<210> 40247  
<211> 391  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (239)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40247  
Gly Phe His Gly Met Lys Ile Cys Ser Thr Gly Phe Ser Arg Ile Asp  
1 5 10 15  
Leu Leu His Leu Ser Lys Leu Val Asp Leu Ile Gly Glu Pro Leu Asp  
20 25 30  
Ser Ser Ala Leu Thr Asp Thr Asp Tyr Val Gly Ala Thr Tyr Asp Glu  
35 40 45  
Tyr Leu Thr Pro Lys Ala Ser Val Leu Val Cys Asn Asn Ser Gly Ser  
50 55 60  
Ile Asn Asn Glu Lys Leu Arg His Thr Ser Glu Trp Lys Ile Pro Ala  
65 70 75 80  
Val Arg Val Asp Trp Leu Trp Ser Ser Ile Lys Ser Gly Gln Arg Lys  
85 90 95  
Ala Phe Glu Pro Tyr Ile Ile Gln Arg Leu Ser Gln His Glu Lys Ser  
100 105 110  
Leu Glu Val Arg Ala Gly Ser Arg Thr Glu Gln Lys Asp Val Phe Glu  
115 120 125  
Ser Ser Asp Lys Pro Asn Arg Ser Ala Lys Ser Asp Ser Gly Thr Arg  
130 135 140  
Glu Ser Lys Lys His Gly Ile Asn Gly Ser Thr Lys Ser Thr Pro Val  
145 150 155 160

17572

Glu Lys Pro Ser Lys Pro Ser Ser Glu Asp Glu Ser Val Lys Ala Pro  
165 170 175  
Pro Pro Tyr Lys Arg Pro Ser Gln Ser Ala Ser Val Ser Pro Thr Lys  
180 185 190  
Glu Thr Arg Pro Pro Asn Thr Ala Ser Pro Ser Asn Lys Arg Lys Ala  
195 200 205  
Pro Asp His Val Thr Thr Ser Ala Gln Ala Ala Ile Gln Leu Ala Val  
210 215 220  
Ser Gly Phe Leu Lys Gln Ala Arg Thr Ala Asn Ser Arg Ser Xaa Ser  
225 230 235 240  
Asp Thr Thr Asp Gln Glu Ser Asp Ser Leu Arg Arg Arg Arg Arg Lys  
245 250 255  
Pro Leu Leu Gly Arg Ala Pro Ser Asp Ser Ser Ala Gln Gly Val Phe  
260 265 270  
Cys Arg Ala Ser Ser Ile Asp Thr Leu Asn Glu Asp Gly Cys Gly Ser  
275 280 285  
Ala Ala Glu Ser Ile Gly Ala Glu Gly Phe Asn Ser Phe Leu Thr Gly  
290 295 300  
Gly Arg Phe Glu Pro Ser Glu Ser Gln Arg Arg Ile Glu Asp Gln Glu  
305 310 315 320  
Asn Glu Glu Pro Ala Met Thr Gln Leu Asn Tyr Glu Asp Pro Asp Ala  
325 330 335  
Val Lys Met Arg Glu Glu Leu Phe Ser His Ala Gly Lys Leu Ser Asn  
340 345 350  
Lys Thr Lys Ser Ser Asp Gln Gly Val Ile Val Gly Glu Val Arg Glu  
355 360 365  
Leu Glu Asp Ile Gly Trp Gly Thr Gly Arg Arg Thr Arg Lys Ala Val  
370 375 380  
Lys Asp Ser Glu Ala Glu Leu  
385 390

<210> 40248

<211> 124

<212> PRT

<213> A.fumigatus

<400> 40248

Leu Ser Thr Thr Ala Val Leu Thr Thr Ala Tyr Met Leu Ser Ser Ile  
1 5 10 15  
Pro His Thr Leu Pro Pro Arg Leu Ser Arg Lys Leu Ala Ala Thr Leu  
20 25 30  
Ser Glu Met Asp Tyr Val His Ser Asn Ala Thr Arg Ile Ser Thr Glu  
35 40 45  
Val Arg Arg Ile Leu Arg Ile Pro Ala Gly Asn Leu Gln Thr Ser Leu  
50 55 60  
Ala Gln Gly Ile Glu Asp Leu Ala Lys Arg Lys Gln Glu Val Ser Lys  
65 70 75 80  
Thr Lys His Glu Ser Glu Val Ala Ser Lys Tyr Phe Ser Asn Leu Phe  
85 90 95  
Arg Asp Ser Gly Glu Asn Arg Arg Ser Val Glu Asp Ile Asp Leu Asp  
100 105 110  
Ala Pro Leu Pro Gly Gly Leu Ala Ala Val Gln Gly  
115 120

<210> 40249

<211> 728

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40249

Ala	Ile	Ser	Arg	Thr	Ile	Asp	Thr	Leu	Lys	Glu	Leu	Gln	Asp	Met	Asn
1				5					10					15	
Arg	Gln	Trp	Pro	Ala	His	Tyr	Pro	Ser	Val	Gln	Ser	Ala	Pro	Gly	Ser
			20					25					30		
Pro	Gly	Ser	Asp	Ser	Gln	Arg	Pro	Gly	Leu	Arg	Gln	Ser	Gln	Ser	Tyr
		35						40				45			
Phe	Glu	Ser	Glu	His	Asn	Gln	Ser	Glu	Pro	Leu	Pro	Arg	Pro	Gly	Gln
	50					55					60				
Ile	Arg	Arg	Ala	Ala	Thr	Met	Ser	Gly	Ser	Asp	Asp	Leu	Ala	Glu	Ser
65					70					75					80
Ser	Ala	Ala	Ala	Glu	Arg	Arg	Pro	Ser	Pro	Glu	Pro	Arg	Leu	Met	Ser
				85					90					95	
Pro	Gln	Ile	Ala	Gln	Glu	Phe	Ser	Ile	Leu	Lys	Leu	Asp	Leu	Lys	Leu
		100						105					110		
Gly	Ala	Leu	Ser	Gln	Ala	Glu	Leu	Val	His	Ser	Leu	Glu	Lys	Ala	Ser
		115					120					125			
Ile	Ala	Ser	Leu	Leu	Asp	Gly	Lys	Ile	Ser	Gln	Ser	Ile	Lys	His	Leu
	130					135					140				
Leu	Ser	Leu	Arg	Asp	Arg	Ile	Glu	Asp	Thr	Ser	Ser	Lys	Val	Leu	Ile
145				150						155					160
Thr	Gly	Asp	Leu	Asn	Ala	Gly	Lys	Ser	Thr	Phe	Cys	Asn	Ala	Leu	Leu
				165					170					175	
Arg	Arg	Lys	Val	Leu	Pro	Glu	Asp	Gln	Gln	Pro	Cys	Thr	Ser	Ile	Phe
			180					185					190		
Cys	Glu	Val	Leu	Asp	Ala	Arg	Glu	Asn	Ser	Gly	Val	Glu	Glu	Val	His
		195					200					205			
Ala	Val	His	Lys	Asp	Lys	Gln	Tyr	Asp	Arg	Asn	Asp	Glu	Ser	Thr	Tyr
	210					215					220				
Asp	Val	Tyr	Thr	Leu	Pro	Glu	Leu	Glu	Asn	Ile	Val	Ile	Asp	Asn	Ser
225					230					235					240
Lys	Tyr	Met	Gln	Cys	Lys	Val	Tyr	Val	Lys	Asp	Val	Arg	Thr	Ile	Asp
			245						250					255	
Glu	Ser	Leu	Leu	Asn	Asn	Gly	Val	Val	Asp	Ile	Ala	Leu	Ile	Asp	Ala
		260						265					270		
Pro	Gly	Leu	Asn	Ser	Asp	Ser	Leu	Lys	Thr	Thr	Ala	Val	Phe	Ala	Arg
		275					280					285			
Gln	Glu	Glu	Ile	Asp	Val	Val	Val	Phe	Val	Val	Ser	Ala	Ala	Asn	His
	290					295					300				
Phe	Thr	Leu	Ser	Ala	Lys	Glu	Phe	Ile	Leu	Asn	Ala	Ala	His	Glu	Lys
305					310					315					320
Ala	Tyr	Ile	Phe	Ile	Val	Val	Asn	Gly	Phe	Asp	Gln	Ile	Arg	Asp	Lys
			325						330					335	
Gln	Arg	Cys	Glu	Arg	Met	Ile	Leu	Asp	Gln	Ile	Gly	Lys	Leu	Ser	Pro
		340					345						350		
Arg	Thr	Tyr	Lys	Glu	Ala	Ala	Glu	Leu	Val	His	Phe	Val	Ser	Ser	Asn
		355					360					365			
Ala	Val	Pro	Val	Ala	Pro	Pro	Val	Gln	Met	Glu	Gln	Ser	Gly	Gly	Gly
	370					375					380				
Ser	Gly	Gly	Gly	Ser	Asp	Pro	His	Gly	Asp	Asp	Asp	Asp	Asp	His	Ser
385					390					395					400
Asp	Asn	Arg	Gly	Lys	Gly	Lys	Gly	Lys	Glu	Arg	Glu	Lys	Ile	Arg	Asp
				405					410					415	

17574

Phe Glu Asn Leu Glu Gly Ser Leu Arg Arg Phe Val Leu Glu Lys Arg  
 420 425 430  
 Ala Arg Ser Lys Leu Ala Pro Ala Arg Thr Tyr Leu Leu Asn Leu Leu  
 435 440 445  
 Ala Asp Ile Asn Ser Leu Ala Ala Val Asn Arg Asp Ile Ala Gln Ser  
 450 455 460  
 Glu Leu Lys Arg Val Thr Asp Glu Leu Ala Glu Leu Glu Pro Ala Tyr  
 465 470 475 480  
 Glu Asn Gly Lys Lys Lys Gln Val Glu Leu Gly Glu Glu Val Glu Lys  
 485 490 495  
 Cys Ile Asp Asp Ser Cys Glu Asp Val Tyr Asn His Thr Arg Ser Thr  
 500 505 510  
 Leu Thr Asp Thr Ile Ser Arg Val Ser Glu Ala Asp Leu Gly Val Glu  
 515 520 525  
 Tyr Pro Gly Leu Phe Ser Ala Phe Gln Tyr Ala Glu Asp Leu Lys Leu  
 530 535 540  
 Ala Met Leu Glu Gln Ile Ala Thr Ser Val Ala Asp Cys Glu Asp Tyr  
 545 550 555 560  
 Ala Arg Ala Lys Thr Ala Gln Gly Val Gly Phe Ile Gln Asn Ile Gly  
 565 570 575  
 Leu Leu His Val Gly Glu Asp Lys Phe Ala Pro Leu Asn Phe Arg Ala  
 580 585 590  
 Asp Ala Met Phe Arg Arg Gly Arg Arg His Thr Leu Ala Arg Gln Val  
 595 600 605  
 Asp Thr Glu Val Glu Ile Trp Asp Phe Phe Asp Ile Thr Gly Leu Trp  
 610 615 620  
 Glu Arg Gln Glu Lys Met Ala Gly Thr Gly Ile Ala Met Thr Ala Val  
 625 630 635 640  
 Thr Val Leu Gly Gly Arg Ala Phe Gly Gly Ser Trp Val Asp Ser Met  
 645 650 655  
 Leu Ser Ala Val Lys Ile Leu Gly Pro Asn Asn Leu Arg Arg Leu Leu  
 660 665 670  
 Leu Pro Gly Ile Val Ala Ala Gly Lys Phe Pro Ala Val Phe Asn Ser  
 675 680 685  
 Ala Ile Arg Asp Phe Glu Leu Thr Phe Asn Asn Ser Arg Leu Asp Tyr  
 690 695 700  
 Ser Leu His Ala Phe Val Asn Pro Ala Tyr Thr Ser Pro Ser Ser Leu  
 705 710 715 720  
 Thr Gln Ala Cys Arg Tyr Ser Val  
 725

<210> 40250

<211> 118

<212> PRT

<213> A.fumigatus

<400> 40250

Pro Ser Ile Ser Ala Lys Arg Tyr Glu Arg Leu Leu Lys Ala Tyr Ile  
 1 5 10 15  
 Glu Ser Ala Asn Thr Gly Ala Thr Ala Lys Ala Gly Pro Pro Lys Lys  
 20 25 30  
 Ser Lys Ala Lys Gly Ala Gly Glu Ser Ser Gly Ser Ser Ser Pro Ala  
 35 40 45  
 Lys Arg Lys Pro Ala Gly Glu Ser Ser Lys Gly Arg Ala Lys Lys Ala  
 50 55 60  
 Arg Met Leu Lys Glu Gly Val Leu Glu Ser Ala His Arg Met Ile Glu



## 17575

65                                70                                75                                80  
 Gln Arg Leu Ser Pro Val Lys Glu Glu Glu Gly Ser Asp Ala Glu Glu  
                               85                                90                                95  
 Glu Lys Ala Gln Gly Ala Asn Ala Asp Ala Thr Ala Val Asp Asp Glu  
                               100                                105                                110  
 Thr Leu Leu Gly Gln Phe  
                               115

&lt;210&gt; 40251

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40251

Lys Cys Pro Pro Thr Pro Arg Pro Thr Val Gly Thr Ser Val Val Pro  
 1                                5                                10                                15  
 Met Pro Ile Ser Ser Leu Asn Ala Ser Lys Ile Ser Thr Asp Leu Ser  
                               20                                25                                30  
 Arg Ser Val Asn Arg Val Pro His Val Phe Ile Leu Tyr Arg Asp Ala  
                               35                                40                                45  
 Ile Pro Leu Thr Thr His Gln Val Asp Ile Gly Lys Val Ala Thr Val  
                               50                                55                                60  
 Phe Lys Tyr Ser Asn Val Leu Ser Ala Arg Asn Arg Leu Arg Asn Leu  
 65                                70                                75                                80  
 Ser Lys Arg Tyr Gly Phe Pro Asn Leu Glu Cys Arg Phe Pro Ser Thr  
                               85                                90                                95  
 Pro Thr Lys Ala Gly Lys Ala Gly Ala Ile Val Glu Ala Ala Lys Asp  
                               100                                105                                110  
 Asp Thr Ala Gly Asp Asp Pro Ser Ser Ser Gly Glu Thr Val Gln Ser  
                               115                                120                                125  
 Thr Pro Ser Lys Pro Ala Arg Lys Pro Ala Gly Arg Lys Gly Ala Lys  
                               130                                135                                140  
 Val Asn Ser Lys Pro Ile Pro Ala Thr Gly Pro Val Ser Ala Asp Gly  
 145                                150                                155                                160  
 Ser Thr Ser Pro Ser Lys Lys Arg Gly Pro Arg Gly Lys Gly Lys Leu  
                               165                                170                                175  
 Ala Val Ala Gln Glu Ala Ala Val Met Glu Ser Val Glu Ile Pro Val  
                               180                                185                                190  
 Lys Lys Asp Asn Gly Asn Val Lys Met Glu Asp Gly Gly Ala Ile Lys  
                               195                                200                                205  
 Val Glu Ala  
                               210

&lt;210&gt; 40252

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40252

Leu Ala Ile Gly Leu Glu Trp Ala Phe Tyr Lys Phe Ser Thr Cys Tyr  
 1                                5                                10                                15  
 Gln Thr Val Ile Asn Glu Leu Ser Leu Phe Pro Asn Met Met Val Pro  
                               20                                25                                30  
 Ile Leu Lys Pro Asn Asp Glu Phe Gln Thr Asn Ser Met Leu Arg Thr  
                               35                                40                                45  
 Ser Pro Trp Gly Asp Ser Thr Ala Lys Gly Asn Ile Lys Ala Gln Ile

## 17576

50                      55                      60  
 Lys Pro Ser Phe Ser Gln Leu Ile Ala Arg Ile Leu Gln Val Pro Lys  
 65                      70                      75                      80  
 Phe

<210> 40253  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 40253  
 Asp Met Met Thr Gln His Asp Phe Val Thr Leu Arg Leu Met Ile Pro  
 1                      5                      10                      15  
 Phe Pro Val Tyr Val Phe Tyr Leu Tyr Leu Arg Ile Ile Thr Ile Asn  
                     20                      25                      30  
 His Gln Asn Pro Phe Val Lys Ser Ile Ser Leu Pro Asn Val Ser  
                     35                      40                      45  
 Val Leu Lys Thr Gly Ile Phe Arg Leu Ala Gly Ser Ala Ile Val Asp  
                     50                      55                      60  
 Met Glu Ala His Asp Tyr Val Met Ser Pro Val Cys Asn Val Cys Thr  
 65                      70                      75                      80  
 Trp

<210> 40254  
 <211> 197  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (103)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40254  
 Val His Ser Leu Thr Thr Thr Cys Met Ser Phe Leu Pro Ala Thr Arg  
 1                      5                      10                      15  
 Ser Ser Leu Phe Gly Phe Phe Thr Phe Gly Met Ala Ile Ser Ser Val  
                     20                      25                      30  
 Gln Leu Ala Ala Asn Asn Leu Thr Thr Ile Glu Asn Leu Asn Arg Arg  
                     35                      40                      45  
 Ser Ala Val Trp Thr Leu Ala Ile Arg Val Pro Arg His Ile Leu Ser  
                     50                      55                      60  
 Lys Arg Trp Ala Pro Thr Phe Arg Thr Ile Thr Tyr Pro Leu Pro Pro  
 65                      70                      75                      80  
 Val Pro Pro Ala Glu Ser Glu Val Ala Arg Glu Ser Pro Gly Gly Glu  
                     85                      90                      95  
 Gln His Val Phe Ala Ile Xaa Gln Thr Leu Pro Gly Glu Asn Pro Phe  
                     100                      105                      110  
 Asp Leu Gly Ser Pro Leu Lys Asn Ile Gln Gln Val Met Gly Phe Ser  
                     115                      120                      125  
 Leu Leu Glu Trp Leu Leu Pro Ile Lys Gln Ser Pro Cys Ala Asp His  
                     130                      135                      140  
 Ser Ser Asn Glu Ser Ala Phe Ala Leu Gly Pro Val Val Thr Arg Leu  
 145                      150                      155                      160

## 17577

Lys Lys Glu Ala Gly Leu Glu Val Ser Thr Glu Ser Glu Ser Ala Asp  
                   165                  170                  175  
 Pro Val Gly Ala Ala Glu Thr Pro Gln His Glu Gln Arg Arg Gly Lys  
                   180                  185                  190  
 His Arg Arg Arg Asn  
                   195

<210> 40255  
 <211> 185  
 <212> PRT  
 <213> A.fumigatus

<400> 40255  
 Lys Thr Val Asp Tyr Leu Ile His Pro Ala His His Tyr Asp Arg Arg  
 1                  5                  10                  15  
 Ser Arg Ser Gly Ala Gly Ala Ala Ile Leu Ala Ile Tyr Tyr Val Leu  
                   20                  25                  30  
 Leu Ile Pro Val Leu Ala Thr Tyr Leu Arg Leu Leu Tyr Asn Val Val  
                   35                  40                  45  
 Leu Ser Pro Gly Tyr Leu Pro Arg Gly Thr Ala Cys Thr Gln Asn Gln  
                   50                  55                  60  
 Thr Gly Ser Asp Gly Ser Lys His Arg His Arg Arg His Arg Arg Arg  
 65                  70                  75                  80  
 Lys Ser Gly His His Leu Ser Lys Thr Thr Glu Lys Thr Asp Arg Ser  
                   85                  90                  95  
 Asp Gly Gly Asp Val Glu Arg Gly Leu Glu Tyr Ser Ala Arg Ala Lys  
                   100                  105                  110  
 Ala Tyr Pro Leu Asp Ala Glu Gly Leu Glu Ser Phe Tyr Thr Lys Asp  
                   115                  120                  125  
 Val Phe Val Cys Gln Pro Asp Gly Arg Pro Val Tyr Cys Ser Thr Cys  
                   130                  135                  140  
 Cys Gln Phe Lys Thr Asp Arg Ala His His Cys Arg Glu Val Asp Arg  
 145                  150                  155                  160  
 Cys Val Arg Lys Met Asp His Phe Cys Pro Trp Tyr Val Gly Ile Ile  
                   165                  170                  175  
 His Gly Leu Leu Gln Trp Gln Gly Asp  
                   180                  185

<210> 40256  
 <211> 184  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (116), (179)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40256  
 Asn Arg Gln Leu Glu His Arg Ile Trp Ser Ile Ser Asn Arg Leu Met  
 1                  5                  10                  15  
 His Ser Lys Phe Ser Ser Leu Asn Ala Asp Asn Thr Gly Phe Ser His  
                   20                  25                  30  
 Gly Ala Tyr Asn Ser Asn Leu Pro Val Gln Gly Phe Ala Asp Arg Asn  
                   35                  40                  45  
 Ala Arg Arg Pro Asn Ile Pro His Ile Asn Thr Ser Asn Pro Ala Ser

## 17578

50                      55                      60  
 Thr Arg Ser Asp Gly Met Ala Asn Ser Gly Thr Ala Phe Asp Met Asn  
 65                      70                      75                      80  
 Phe Thr Pro Leu Leu Pro Ser Gln Leu Leu Leu Gly Ser Pro Ser Gln  
                     85                      90                      95  
 Pro Gly Thr Pro Ser Ala Phe Ala Ser Pro Gln Phe Ala Asn Phe Gly  
                     100                      105                      110  
 Gly Phe Ser Xaa Ala Ser Ala Ser Ala His Ala Gln Asn His Gln Thr  
                     115                      120                      125  
 Gln Leu Gly Lys Pro Thr Gln Ala Ala Pro Asn Ala Gly Leu Tyr Pro  
                     130                      135                      140  
 Gly Met Met Ala Thr Glu Arg Leu Gly Glu Leu Ser Leu Val Glu Arg  
 145                      150                      155                      160  
 Pro Thr Val Ser Asn Trp Trp Ser Gly Glu Gly Leu Val Met Gln Gln  
                     165                      170                      175  
 Leu Gly Xaa Pro Gly Ser Gly Asn  
                     180

&lt;210&gt; 40257

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40257

Arg Leu Ile Arg Cys Arg Pro Gly Ala His Leu Asn Val Pro Gly Phe  
 1                      5                      10                      15  
 Cys Leu Gly Glu Ala Thr Leu Cys Pro Cys Glu Leu Pro Cys Pro Leu  
                     20                      25                      30  
 Leu Asp Val Ile His Val Phe Leu Ile Ile Ser Phe Phe Val Phe Tyr  
                     35                      40                      45  
 Leu Asn Met Leu Gln Ser Leu Met Met Asp Thr Leu Ser Phe Phe Ile  
                     50                      55                      60  
 Ile Gln Arg Asn Lys His Ser Thr Ile  
 65                      70

&lt;210&gt; 40258

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40258

Thr Cys Leu Gln Gly Ser Gln Asn Cys His Ser Phe Ser Ser Ile Val  
 1                      5                      10                      15  
 Arg Ile Ile Arg Ser Asn Val Ser Ser Ile Pro Ile Met Pro Gly Ser  
                     20                      25                      30  
 Trp Phe Thr Glu Gly Met Asp Lys Thr Leu Asn Ile Asn Ile Asn Asp  
                     35                      40                      45  
 Ser Leu Ser Gly Cys His Asp Met Ser Ser Tyr His Ala Val Thr Val  
                     50                      55                      60  
 Ser Ser Arg Gln His Leu His Ile Ser Arg Gln Ala Ser Leu Gln Ser  
 65                      70                      75                      80  
 Pro Ser Met Leu Tyr Glu Asp Leu Pro Glu Thr Tyr Phe Ala Gly His  
                     85                      90                      95  
 Ser Gly Arg Ala Thr Asn Met Asn Lys Val Tyr Ser Gln Thr Tyr Met  
                     100                      105                      110  
 Tyr Ile Cys Cys Asn Cys Gly Asp Gly Pro Lys Val Tyr Asn Val Gln

```
<210> 40259
<211> 319
<212> PRT
<213> A.fumigatus
```

```
<220>  
<221> UNSURE  
<222> (316)  
<223> Identity of amino acid sequences at the above locations are unknown.
```

<400>	40259														
Tyr	Thr	His	Ser	Val	Asp	Pro	Ala	Ala	Arg	Leu	Val	Lys	Thr	Leu	Phe
1				5					10					15	
Leu	Thr	Ser	Val	Ile	Ile	Phe	Thr	Phe	Phe	Ala	Leu	Val	Val	Met	Ile
			20					25					30		
Ile	Val	Leu	Leu	Met	Lys	Val	Val	Cys	Ala	Val	Leu	Ala	Lys	Lys	Gly
		35				40						45			
Arg	Thr	Gly	Pro	Ala	Trp	Gly	His	Phe	Leu	Gly	Glu	Trp	Asp	Val	Val
	50					55					60				
Ala	Arg	Gly	Val	Leu	Tyr	Arg	Leu	Val	Phe	Ile	Gly	Phe	Ala	Pro	Leu
65					70					75					80
Ser	Thr	Phe	Cys	Leu	Trp	Glu	Phe	Thr	Gln	Arg	Asp	Ser	Pro	Ala	Glu
			85						90					95	
Ile	Val	Val	Ala	Ala	Ile	Ile	Leu	Ala	Ser	Ile	Ser	Gly	Ala	Leu	Val
			100					105					110		
Trp	Ala	Ala	Val	Lys	Ile	Ile	Leu	Leu	Met	Gln	Lys	Ser	Ile	Ser	Met
		115					120						125		
His	Arg	Asn	Pro	Ala	Tyr	Val	Leu	Tyr	Ser	Asp	Thr	Thr	Cys	Leu	Asn
	130					135					140				
Arg	Trp	Gly	Phe	Leu	Tyr	Val	Gln	Tyr	Arg	Ala	Thr	Ala	Ala	Ser	Phe
145					150					155					160
Ile	Leu	Val	Val	Ile	Gly	Tyr	Leu	Phe	Val	Lys	Ala	Leu	Phe	Ile	Ser
			165						170					175	
Leu	Gly	Gln	Thr	Val	Pro	Ile	Val	Gln	Thr	Val	Ala	Leu	Leu	Val	Leu
			180					185					190		
Glu	Gly	Leu	Met	Leu	Ile	Gly	Val	Ser	Val	Val	Arg	Pro	Trp	Met	Asp
	195					200						205			
Lys	Arg	Thr	Asn	Thr	Tyr	Asn	Ile	Ala	Ile	Ala	Ala	Val	Asn	Phe	Leu
	210					215					220				
Asn	Ala	Ile	Phe	Val	Leu	Phe	Phe	Ser	Gly	Val	Phe	Asp	Gln	Pro	Gly
225					230					235					240
Ile	Val	Ser	Gly	Val	Met	Gly	Val	Cys	Phe	Phe	Val	Ile	Asn	Ala	Ala
			245						250					255	
Leu	Thr	Leu	Val	Leu	Ile	Leu	Leu	Val	Ile	Tyr	Ala	Ser	Val	Met	Ala
			260					265					270		
Val	Ile	Ser	Lys	Ser	Pro	Asp	Thr	His	Tyr	Lys	Pro	Met	Gln	Asp	Asp
	275						280					285			
Arg	Gly	Ser	Phe	Ile	Gln	Ser	Gln	Ala	Arg	Leu	Gly	Pro	Glu	Leu	Asp
	290					295					300				
Asp	Leu	Ser	Ala	Val	Ala	Pro	Arg	Gly	Met	Val	Xaa	Thr	Lys	Tyr	

## 17580

305

310

315

&lt;210&gt; 40260

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40260

```

Ser Pro Trp Thr Pro Val Ser Met Pro Asn Ile Lys Ser Leu His Lys
1          5          10          15
Leu Thr Asp Lys Gln Thr Asp Ser Lys Met His Phe Lys Leu Ser Thr
          20          25          30
Ala Val Leu Ala Thr Leu Val Gly Val Ala Leu Ser Gly Pro Leu Val
          35          40          45
Ala Arg Asp Ala Ala Thr Ile Leu Ser Asp Leu Ser Thr Ile Lys Thr
          50          55          60
Asp Ile Asn Thr Leu Thr Gln His Phe Asn Glu Phe Thr Gly Asp Leu
65          70          75          80
Leu Gln Ala Leu Ala Ala Gln Ala Val Glu Gln Gln Leu Glu Ser Asp
          85          90          95
Ile Asp Gln Ala Thr Ala Asp Ala Lys Ala Thr Ser Ala Leu Ser Ala
          100          105          110
Ala Asp Ser Thr Ser Val Thr Asn Ala Leu Leu Gly Leu Lys Pro Asp
          115          120          125
Ile Val Thr Ser Leu Asp Ala Ile Val Ala Lys Val Leu Pro Ser Phe
          130          135          140
Leu Cys Arg Trp Cys Ile Asn Glu Thr Asn Cys Val Glu Thr Ala Gly
145          150          155          160
Arg Leu Arg Arg Arg Gly Gln Leu Arg Pro Leu Gly Pro Glu Cys Pro
          165          170          175
Ala Glu Gln Asp Gly Cys Pro Val Arg Arg Ala Ser Gly Tyr Cys His
          180          185          190
Cys Asp

```

&lt;210&gt; 40261

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40261

```

Lys Pro Gln Val Asp Ser Ala Gly Val Gly Ser Phe Val Leu Ser Asp
1          5          10          15
Leu Asn Ala Leu Gln Ser Lys Thr Asp Ala Leu Ser Gly Ala Leu Gln
          20          25          30
Asp Ile Ala Thr Ala Thr Asp Lys Asp Thr Ile Ala Ser Gly Thr Gln
          35          40          45
Asp Ile Asp Ala Ala Phe Ser Ser Ala Ile Ala Val Phe Ser
          50          55          60

```

&lt;210&gt; 40262

&lt;211&gt; 291

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (37), (55)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40262

```

Pro Gly Arg Leu Lys Lys Arg Ala Arg Gly Tyr Pro Pro Asp Gly Gln
1           5           10           15
Gly Lys Gln Gly Trp Cys Gly Ile Leu Leu Gln Gly Gly His Asp Pro
20           25           30
Ala Pro Ser Ser Xaa Met Ala Trp Arg Lys Glu Gly Glu Ile Val Thr
35           40           45
Ser Phe Arg Phe Ser Ser Xaa Tyr Ala Met Pro Asp Val Tyr Ala Gly
50           55           60
Asn Ala Thr Leu Thr Gln Ile Ser Ser Ala Val Asn Ala Thr His Tyr
65           70           75           80
Thr Leu Leu Phe Arg Cys Gln Gly Cys Leu Ala Trp Asn His Asn Gly
85           90           95
Val Thr Gly Ser Ala Pro Thr Ser Ala Lys Gln Leu Val Leu Gly Trp
100          105          110
Ala Gln Ala Val Ala Ala Pro Gly Asn Pro Ser Cys Pro Gly Glu Ile
115          120          125
Thr Leu Gln Gln His Asp Ala Gln Gly Ile Trp Val Ala Lys Leu Asp
130          135          140
Ala Ser Ala Ala Ser Ala Ser Tyr Glu Ala Trp Ala Ala Leu Ala Asn
145          150          155          160
Lys Thr Val Pro Gly His Cys Ser Gly Gly Gly Gly Gly Thr Gly Pro
165          170          175
Val Gly Val Pro Val Pro Pro Gly Thr Thr Phe Asp Tyr Val Val Val
180          185          190
Gly Gly Gly Ala Gly Gly Ile Val Val Ala Asp Arg Leu Ser Glu Ala
195          200          205
Gly His Ser Val Leu Leu Ile Glu Lys Gly Pro Pro Ser Thr Gly Arg
210          215          220
Trp Gly Gly Thr Met Lys Pro Asp Trp Leu Val Gly Thr Asn Leu Thr
225          230          235          240
Arg Leu Asp Val Pro Gly Leu Cys Asn Gln Ile Trp His Asp Ser Ala
245          250          255
Gly Ile Ala Cys Asp Asp Ile Asp Gln Met Ala Gly Cys Val Leu Gly
260          265          270
Gly Gly Thr Ala Val Asn Ala Ala Leu Trp Trp Lys Val Thr Ser Ser
275          280          285
Leu Pro Leu
290

```

&lt;210&gt; 40263

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40263

```

Ala Phe Ala Leu Lys His Glu Trp Arg Asn Gln Ala Asp Thr Pro Cys
1           5           10           15
Val Asp Ala Val Val Met Ser Gln Tyr Leu Gly Arg Gly Ser Thr Ser
20           25           30
Arg Gly Arg Met Thr Ile Thr Ala Asn Leu Asp Thr Val Val Ser Thr
35           40           45

```

## 17582

Leu Pro Tyr Leu Arg Asp Gln His Asp Val Asp Ala Val Ile Gln Gly  
 50 55 60  
 Leu Val Asn Leu Gln Asn Ala Leu Lys Gly Val Gly Leu Asn Trp Thr  
 65 70 75 80  
 Tyr Pro Ala Pro Asn Ile Thr Ala Glu Glu Phe Val Asn Thr Val Cys  
 85 90 95  
 Arg Val

<210> 40264  
 <211> 110  
 <212> PRT  
 <213> A.fumigatus

<400> 40264  
 Leu Pro Leu Leu Arg Lys Leu Gln Thr Asn Ser Tyr Arg Trp Lys Ser  
 1 5 10 15  
 Leu Arg Ala Pro Asp Ala Arg Ile Thr Gly Trp Val Gly Asn Arg Thr  
 20 25 30  
 Arg Phe Gly Glu Ser Ser Ala Asp His Asp Gln Pro Gly Thr Cys Lys  
 35 40 45  
 Met Gly Thr Asp Asp Gly Arg Thr Gly Gly Thr Ala Val Val Asp Thr  
 50 55 60  
 Asn Thr Lys Val Tyr Gly Thr Asp Asn Leu Phe Val Val Asp Gly Ser  
 65 70 75 80  
 Ile Phe Pro Gly Met Val Thr Ser Asn Pro Ser Ala Tyr Ile Ala Ile  
 85 90 95  
 Ala Ala Glu Arg Ala Ala Asp Arg Ile Leu Ala Leu Ala Thr  
 100 105 110

<210> 40265  
 <211> 160  
 <212> PRT  
 <213> A.fumigatus

<400> 40265  
 Arg Ser Pro Thr Ala Thr Arg Ile Ile His Pro Ser Gly Thr Asn Cys  
 1 5 10 15  
 Asn Asn Gly Ile Leu Pro Ser Ser Ser Val Cys Ser Thr Pro Ser Arg  
 20 25 30  
 Thr Phe Pro Ala Pro Phe Cys Ile Pro Cys Val Thr Thr His Gln Leu  
 35 40 45  
 Val Val Arg Arg Arg His Leu Val Gly Ser His Arg His Arg Arg Gly  
 50 55 60  
 Phe His Phe Ser Phe Glu Val Thr Thr Leu Cys Val Ser Leu Tyr Val  
 65 70 75 80  
 Leu Asp Phe Ala Ile Gly Pro Val Leu Leu Ala Pro Leu Ser Glu Tyr  
 85 90 95  
 Leu Gly Arg Gln Leu Val Tyr Val Val Ser Trp Phe Leu Phe Ile Phe  
 100 105 110  
 Ser Cys Arg Leu Pro Ser Pro Pro Thr Ser Ala Pro Ser Ser Ser Ala  
 115 120 125  
 Val Ser Trp Gln Val Val Pro Val Trp Thr Ala Arg Leu Glu Glu Arg  
 130 135 140  
 Gly Gly Gly Gly Gly Ala Leu Lys Ser Ile Leu Val Arg Trp Val Ile  
 145 150 155 160



<210> 40266  
 <211> 191  
 <212> PRT  
 <213> A.fumigatus

<400> 40266  
 Arg Ala Thr Asn Lys Lys Pro Tyr Pro Leu Asp Trp Thr Tyr Asn Phe  
 1 5 10 15  
 Pro Ala Gly Trp Gln Ala Glu Asp Met Val Ser Pro Thr Asn Arg Val  
 20 25 30  
 Phe Asn Arg Ile Pro Trp Thr Val Arg Pro Ser Ala Asp Gly Lys Ile  
 35 40 45  
 Tyr Met Gln Gln Gly Tyr Ser Val Ile Ala Gly Gly Leu Gln Ala Ala  
 50 55 60  
 Gly Trp Gln Glu Leu Thr Leu Asn Asp Asn Pro Ser Ala Lys Asn His  
 65 70 75 80  
 Thr Tyr Gly His Thr Pro Tyr Met Phe Ser His Gly Glu Arg Gly Gly  
 85 90 95  
 Pro Leu Ala Thr Tyr Leu Val Ser Ala Ser Glu Arg Asn Asn Phe Lys  
 100 105 110  
 Leu Trp Met Asn Thr Thr Val Lys Arg Val Val Arg Thr Ala Asp Gly  
 115 120 125  
 His Val Thr Gly Val Glu Val Glu Pro Phe Leu Asp Gly Gly Tyr Glu  
 130 135 140  
 Gly Val Val Asn Val Thr Ala Lys Thr Gly Arg Val Val Leu Ser Ala  
 145 150 155 160  
 Gly Thr Phe Gly Ser Ala Arg Ile Leu Met Arg Ser Thr Cys Leu Leu  
 165 170 175  
 Phe Leu Ala Phe Trp Phe Cys Leu Phe Leu Ser His Gly Leu Cys  
 180 185 190

<210> 40267  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 40267  
 Trp Ser Arg Pro Phe Gly Asp Gly Leu Gly Leu Phe Trp Val Pro Glu  
 1 5 10 15  
 Glu Val Val Ala Pro Asp Gln Ala Asp Thr Phe Trp Asp Asp Leu Phe  
 20 25 30  
 Ser Trp Ala Arg Pro Cys Lys Asp Gln Leu Gln Ala Lys Asn Glu Glu  
 35 40 45  
 Ser Ile Leu Val His Val His Pro Lys Phe Leu Ser Pro Phe Ser Gly  
 50 55 60  
 Ser Leu Ser Glu Gln Ser Tyr Phe Tyr Gly  
 65 70

<210> 40268  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 40268  
 Pro Cys Gln Glu Asp Pro Ser Asp His Gly Pro Pro Arg Leu His Trp

## 17584

```

1             5             10             15
Pro Val Thr Pro Pro Lys Val Leu Arg Val Val Asp Ala Leu Gln Thr
                20                25                30
Thr Asp Lys His Gly Val Thr Cys Pro Ile Asn Trp Leu Pro Gly Asp
                35                40                45
Asp Val Ile Ile Pro Pro Pro Val Ser Thr Glu Asp Ala Asn Lys Lys
                50                55                60
Phe Gly Glu Ile Arg Glu Val Lys Pro
65                70

```

<210> 40269  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40269
Ser Ala Asn Gly Thr Asp Ser His Lys Ala Trp Ile Lys Asp Ile Asp
1             5             10             15
Glu Val Asn Gly Ser Lys Leu Thr Phe Pro Ile Ile Ala Asp Pro Ser
                20                25                30
Arg Lys Ile Ala His Leu Tyr Asp Met Val Asp Tyr Gln Asp Thr Thr
                35                40                45
Asn Val Asp Glu Lys Gly Ile Ala Phe Thr Ile Arg Ser Val Phe Ile
                50                55                60
Ile Asp Pro Ala Lys Lys Ile Arg Leu Ile Met Ala His Pro Ala Ser
65                70                75                80
Thr Gly Arg

```

<210> 40270  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40270
Leu Phe Leu Ser His His Pro Val Asn Ile Leu Glu His Ser Ser Gln
1             5             10             15
Leu Ile Thr Ser Ser Phe Gln Glu Glu Ile Lys Met Gly Arg Lys Arg
                20                25                30
Lys Ser Glu Gly Ala Ala Asp Ser Asn Pro Pro Lys Arg Val Arg Lys
                35                40                45
Pro Asn Phe Asn Ala Asp Phe Leu Phe Ile Gly Leu Ser Ile Asp Ser
                50                55                60
Lys Leu Pro Ser Ala Ser Cys Glu Gly His Ser Cys Arg Gln Ser Ala
65                70                75                80
Asn Val Arg Phe Ser Ala Ala
                85

```

<210> 40271  
 <211> 97  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40271
Leu Thr Tyr Thr Leu Ala His His Thr Glu Ser Ala Phe Asp Pro Ala
1             5             10             15

```

## 17585

His Pro Tyr Tyr Asp Pro Lys Ser Lys Arg Asp Asn Pro Lys Trp Glu  
                   20                                  25                                  30  
 Val Val His Val Glu Phe Arg Arg Lys Phe Lys Lys Met Val Thr Leu  
                   35                                  40                                  45  
 Asn Asp Leu Lys Ala His Ala Thr Pro Gly Gly Pro Leu Glu Asp Leu  
                   50                                  55                                  60  
 Gln Val Leu Lys Gln Thr Arg Leu Ser Val Ser Ser Val Thr Pro Ala  
 65                                  70                                  75                                  80  
 Gln Trp Lys Phe Ile Leu Gly Leu Ala Gly Glu Ser Ser Glu Ser Ala  
                                   85                                  90                                  95  
 Glu

<210> 40272  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

<400> 40272  
 Leu Ile Lys Ile Ala Ser Asn Ile Lys Ile Ser Lys Ile Ser Gly Tyr  
 1                                  5                                  10                                  15  
 Gly Ala Ile Gly Gly Tyr Gly Ala Ala His Pro Gln Arg Gly Ser Gly  
                                   20                                  25                                  30  
 Glu Gly Ala Tyr Gly Thr Asp Thr Thr Tyr Phe Ser Val Val Arg Ala  
                                   35                                  40                                  45  
 Ser Lys Arg Ser Leu Val Gln Met Val Gln Ala Ile Arg His Cys Asp  
                                   50                                  55                                  60  
 Pro Met Ile Trp Met Glu Asn Ile Val Gly Ile Leu Leu Ala Ser Val  
 65                                  70                                  75                                  80  
 Tyr Leu Arg Thr Thr Glu Phe Cys Leu Val Arg Leu Ile  
                                   85                                  90

<210> 40273  
 <211> 220  
 <212> PRT  
 <213> A.fumigatus

<400> 40273  
 Arg Arg Ala Cys Arg Trp Ser Gly Gly His Gln Pro His Gly Gly Pro  
 1                                  5                                  10                                  15  
 Ser Ala Val Leu Pro Ala Ser Gly Gly Gly Val Gly His Asp Gln Thr  
                                   20                                  25                                  30  
 Asp Leu Leu Gly Arg Val Asn Asn Glu Asn Gly Thr Asp Ser Glu Ser  
                                   35                                  40                                  45  
 Asp Ala Phe Leu Val Asp Val Gly Ser Val Leu Val Val Asn His Ile  
                                   50                                  55                                  60  
 Val Gln Val Gly Asn Leu Ala Ala Gly Val Gly Asn Asp Gly Glu Gly  
 65                                  70                                  75                                  80  
 Glu Leu Gly Ala Ile Asp Leu Val Asp Val Leu Asp Pro Gly Leu Val  
                                   85                                  90                                  95  
 Gly Val Gly Ala Ile Gly Ala Leu Ala Glu Cys Gln Arg Thr Tyr Ser  
                                   100                                  105                                  110  
 Cys Leu Gly Asn Pro Trp Ile Gln Leu Thr Arg Pro Ile Ser Leu Thr  
                                   115                                  120                                  125  
 Leu Arg Ala Ala Asn Ser Gly Ser Ser Leu Ala Lys Ala Pro Ser Ser  
                                   130                                  135                                  140

## 17586

Val Val Gln Thr Gly Val Lys Ser Ser Tyr Ser Ile Arg Asp Gln Pro  
 145 150 155 160  
 Ser Phe Phe Gln Ser Ser Gly Leu Phe Leu His Ala Ala Ile Trp Glu  
 165 170 175  
 Ile Gly Gly Thr Asn Arg Val Gly Glu Glu Asp Ser Pro Ala Val Ala  
 180 185 190  
 Asn Glu Leu Val Glu Gly Asp Arg Thr Ile Gly Gly Ile Ser Phe Glu  
 195 200 205  
 Val Arg Gly Ser Arg Ala Glu Thr Glu Thr Val Gly  
 210 215 220

&lt;210&gt; 40274

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40274

Asn Ser Ser Val Arg Leu Thr Ala Pro Glu Ala Pro Asn Ser Ala Pro  
 1 5 10 15  
 Glu Thr Pro Gln Gly Pro Lys Arg Pro Val Gly Arg Pro Arg Lys Asn  
 20 25 30  
 Pro Val Gln Asn Gly Thr Glu Thr Pro Ser Arg Pro Ile Leu Ser Glu  
 35 40 45  
 Ser Glu Glu Pro Lys Ile Asp Asp Glu Glu Ser Asp Arg Ser Tyr Trp  
 50 55 60  
 Leu Met Lys Ala Glu Pro Glu Ser Arg Met Glu Lys Gly Val Asp Val  
 65 70 75 80  
 Lys Phe Ser Ile Asp Asp Leu Gln Ala Ala Glu Lys Pro Glu Pro Trp  
 85 90 95  
 Asp Gly Lys Ser Leu Asp Ser Gly Pro Leu Gln Tyr Asn Gly Met Leu  
 100 105 110  
 Asp Arg Ser  
 115

&lt;210&gt; 40275

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40275

Pro Ser Cys Ser Ser Arg Glu Ala Leu Pro Glu Ser Thr Leu Lys Ile  
 1 5 10 15  
 Arg Pro Leu Val Arg Arg Ser Val Val Thr Trp Pro Glu Arg Phe Ser  
 20 25 30  
 Ser Leu Leu Ala Ser Thr Ser Thr Val Trp Leu Pro Ser Ala Arg Arg  
 35 40 45  
 Gln Ile Ser Trp Val Ser Arg His Met Gln Ile Ala His Ser Thr Arg  
 50 55 60  
 Ile Ser Ala Asp Lys Thr Ala Gly Thr Asp Leu Leu Ala Ile Ala Arg  
 65 70 75 80  
 Thr Asp Ser Glu Ala Ala Thr Leu Ile Thr Ser Thr Ile Asp His Arg  
 85 90 95  
 Asp His Ala Phe Ile Val Gly Ser Thr Asn Pro Asn Leu Gln Pro Leu  
 100 105 110  
 Asn Asp Leu Met Leu Ala Gly Glu Gln Ala Gly Lys Thr Gly Glu Glu  
 115 120 125

## 17587

Leu Gln Ala Ile Glu Asp Gln Trp Ile Ala Gln Ala Gly Leu Lys Leu  
 130 135 140  
 Phe Asp Asp Ala Val Val Asp Thr Ile Lys Ala Gly Val His Val Asn  
 145 150 155 160  
 Lys Asp Ala Leu Ile Lys Glu Tyr Leu Thr Ala Ala Lys Gly Lys Ser  
 165 170 175  
 Asn Ser Glu Ala Arg Ala Ile Ala Lys Gly Ile Thr Gly Val Asp Ile  
 180 185 190  
 Tyr Trp Asp Trp Asp Ala Pro Arg Thr Arg Glu Gly Tyr Tyr Arg Tyr  
 195 200 205  
 Gln Gly Gly Thr Gln Cys Ala Ile Asn Arg Ala Val Ala Tyr Ala Pro  
 210 215 220  
 Phe Ala Asp Leu Ile Trp Met Glu Ser Lys Leu Pro Asp Tyr Ala Gln  
 225 230 235 240  
 Ala Lys Glu Phe Ala Asp Gly Val His Ala Val Trp Pro Glu Gln Lys  
 245 250 255  
 Leu Ala Tyr Asn Leu Ser Pro Ser Phe Asn Trp Lys Lys Ala Met Pro  
 260 265 270  
 Arg Glu Glu Gln Glu Thr Tyr Ile Lys Arg Leu Gly Ala Leu Gly Tyr  
 275 280 285  
 Ala Trp Gln Phe Ile Thr Leu Ala Gly Leu His Thr Thr Ala Leu Ile  
 290 295 300  
 Ser Asp Gln Phe Ala Arg Ala Tyr Ala Lys Gln Gly Met Arg Ala Tyr  
 305 310 315 320  
 Gly Glu Leu Val Gln Glu Pro Glu Met Glu Gln Gly Val Asp Val Val  
 325 330 335  
 Thr His Gln Lys Trp Ser Gly Ala Asn Tyr Val Asp Asn Met Leu Lys  
 340 345 350  
 Met Leu Thr Gly Gly Val Ser Ser Thr Ala Ala Met Gly Lys Gly Val  
 355 360 365  
 Thr Glu Asp Gln Phe Lys His  
 370 375

&lt;210&gt; 40276

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40276

Leu Ser Ser Cys Pro Ala His Pro Arg Pro Glu Ile Pro Leu Leu Ser  
 1 5 10 15  
 Cys Asn Leu Ser Pro Phe Asn Phe Tyr Pro Phe Ser Ile Met Val Ala  
 20 25 30  
 Ser Asp Ile Pro Pro Leu Gln Phe Thr Pro Ile Glu Asp Ile Gln Glu  
 35 40 45  
 Arg Thr Ser Arg Leu Arg Lys Ser Phe Leu Glu His Lys Thr Arg Asp  
 50 55 60  
 Val Glu Phe Arg Leu Lys Gln Leu Arg Lys Leu Tyr Trp Ala  
 65 70 75

&lt;210&gt; 40277

&lt;211&gt; 291

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40277

## 17588

```

Ser Ala Phe Asn Phe Pro Phe Gln Leu Thr Leu Gly Pro Val Ile Gly
1      5      10      15
Ala Ile Ala Ala Gly Asn Thr Val Val Ile Lys Pro Ser Glu Asn Ser
20      25      30
Pro Lys Cys Ala Ala Val Met Gln Gln Ile Val Glu Ala Ser Leu Asp
35      40      45
Pro Ser Cys Tyr Thr Leu Val Gln Gly Gly Pro Thr Glu Val Gln Ala
50      55      60
Leu Leu Ala Glu Arg Trp Asp Lys Ile Phe Phe Thr Gly Gly Ala Asn
65      70      75      80
Val Gly Arg Ile Ile Ala Lys Ala Ala Ala Pro His Leu Thr Pro Val
85      90      95
Val Leu Glu Leu Gly Gly Ile Asn Pro Ala Ile Ile Thr Lys Asn Ala
100     105     110
Asn Pro Arg Leu Val Ala Arg Arg Met Leu Trp Gly Lys Thr Leu Asn
115     120     125
Ala Gly Gln Ile Cys Thr Ser Gln Asn Tyr Leu Leu Val Asp Arg Ala
130     135     140
Ile Leu Pro Ala Val Val Glu Glu Phe Lys Lys Ala Tyr Lys Glu Phe
145     150     155     160
Tyr Pro Gln Gly Ala Lys Ala Ser Pro Asp Tyr Ser Arg Ile Ile Asn
165     170     175
Glu Gly Ala Phe Arg Lys Leu Lys Ser Met Ile Asp Asn Ser Lys Gly
180     185     190
Lys Ile Leu Met Gly Gly Thr Met Asp Glu Asn Glu Arg Phe Ile Glu
195     200     205
Pro Thr Leu Val Gln Val Asp Ser Pro Asp Asp Ser Leu Ile Val Gln
210     215     220
Glu Ser Phe Gly Pro Leu Ile Pro Ile Leu Pro Val Asp Asn Leu Glu
225     230     235     240
Glu Ala Val Asn Ile Ala Asn Ser Ile Gln Ser Thr Pro Leu Gly Val
245     250     255
Tyr Pro Phe Gly Asn Lys Ala Asp Thr Asp Lys Ser Arg Ser Thr Thr
260     265     270
Leu Ser Arg Arg Gln Asn Pro Ala Thr Ile Leu Asp Thr Gly Pro Thr
275     280     285
His Leu Thr
290

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&lt;210&gt; 40278

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40278

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Ser Thr Val Leu Ser Met Thr Arg Ser Gly Gly Ala Ala Val Asn Asp
1      5      10      15
Ala Ala Leu His Ile Pro Thr Leu Pro Phe Gly Gly Val Gly Glu Ser
20      25      30
Gly His Gly Ala Tyr Arg Gly Lys Ala Ser Phe Asp Val Phe Val His
35      40      45
Arg Arg Pro Ile Thr Thr Ser Pro Gly Trp Leu Glu Ala Ile Leu Ser
50      55      60
Ile Arg Tyr Pro Pro Tyr Ala Gly Lys Leu Ser Lys Phe Lys Val Ala
65      70      75      80
Ser Thr Leu Val Pro Asp Phe Asp Arg Asp Gly Asn Lys Leu Arg Phe

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## 17589

85 90 95  
 Gly Trp Leu Arg Thr Ile Leu Thr Leu Gly Gly Gly Thr Ala Lys Ala  
 100 105 110  
 Gly Ala Gly Arg Ala Ala Val Val Ala Ala Gly Glu  
 115 120

<210> 40279  
 <211> 101  
 <212> PRT  
 <213> A.fumigatus

<400> 40279  
 Gln Ser Asn Ile Thr Asp Leu Ser Pro Leu Gln Lys Lys Val Ala Ser  
 1 5 10 15  
 Phe Thr Tyr Gly Cys Leu Glu Pro Thr Met Leu Thr Gln Met Ala Lys  
 20 25 30  
 Tyr Leu Asp Thr Val Tyr Val Ser Gly Trp Gln Ser Ser Thr Ala  
 35 40 45  
 Ser Ser Thr Asp Glu Pro Ser Pro Asp Leu Ala Asp Tyr Pro Met Val  
 50 55 60  
 Ser Ser Tyr Leu Ala Ser Thr Leu Cys Ser Val Gly Leu Val Leu Ile  
 65 70 75 80  
 Pro Tyr Cys Ala Glu His Cys Pro Gln Gln Gly Lys Pro Ala Val His  
 85 90 95  
 Gly Thr Ala Val Pro  
 100

<210> 40280  
 <211> 126  
 <212> PRT  
 <213> A.fumigatus

<400> 40280  
 Thr Ile His Pro Leu Ile Cys Phe Trp Gly Phe Phe Leu Ile Asn His  
 1 5 10 15  
 Ala Phe Leu Phe Ser Ile Lys Asp His Glu Glu Gln Ile Val Glu Ala  
 20 25 30  
 Leu Ala Gln Asp Leu Gly Arg Pro Arg Phe Glu Ser Glu Val Ala Glu  
 35 40 45  
 Ser Leu Trp Met Glu Asn Asp Ile Val Phe Val Ser Arg Asn Leu His  
 50 55 60  
 Lys Trp Val Lys Asp Glu Lys Ala Glu Asp Ile Asp Phe Asn Tyr Lys  
 65 70 75 80  
 Phe Met Asn Pro Lys Ile Arg Lys Asp Pro Leu Gly Cys Val Leu Val  
 85 90 95  
 Ile Gly Tyr Glu Leu Ala Ile Cys Asp Leu Pro Asp Tyr Ile Leu Thr  
 100 105 110  
 Leu Gly Gly Ser Asn Lys Val His Ser Thr Ser Pro Phe Asn  
 115 120 125

<210> 40281  
 <211> 146  
 <212> PRT  
 <213> A.fumigatus

<400> 40281

## 17590

Asn Leu Phe Ile Pro Val Thr Met Gly Phe Leu Glu Asp Glu Asp Gln  
 1 5 10 15  
 Lys Tyr Trp Asp Asp Val Gln Ala Val Lys Ala Trp Trp Lys Asp Ser  
 20 25 30  
 Arg Trp Arg Tyr Thr Lys Arg Pro Tyr Thr Ala Glu Gln Ile Val Ala  
 35 40 45  
 Lys Arg Gly Asn Leu Lys Ile His Tyr Pro Ser Asn Asp Gln Ser Lys  
 50 55 60  
 Lys Leu Trp Lys Ile Leu Glu Ser Asn Phe Glu Val Arg Arg Phe Glu  
 65 70 75 80  
 Arg Ser Asp Arg Ala Thr Ser Leu Thr Phe Leu Leu Ser Arg Lys Lys  
 85 90 95  
 Leu Pro Val Ser Pro Met Ala Val Trp Asn Gln Gln Cys Ser Pro Arg  
 100 105 110  
 Trp Pro Ser Thr Ser Thr Pro Ser Thr Phe Pro Ala Gly Arg Ala Leu  
 115 120 125  
 Pro Pro Pro Arg Leu Pro Met Asn Pro Pro Pro Ile Ser Leu Ile Thr  
 130 135 140  
 Pro Trp  
 145

&lt;210&gt; 40282

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40282

Phe Arg Ile Ala Gln Asn Thr Val Pro Asn Lys Val Asn Gln Leu Phe  
 1 5 10 15  
 Met Ala Gln Leu Phe His Asp Arg Lys Gln Arg Glu Glu Arg Ile Thr  
 20 25 30  
 Thr Pro Lys Asp Gln Arg Ser Lys Leu Pro Asn Ile Asp Tyr Leu Arg  
 35 40 45  
 Pro Ile Ile Ala Asp Ala Asp Thr Gly His Gly Gly Leu Thr Ala Val  
 50 55 60  
 Met Lys Leu Thr Lys Leu Phe Ile Glu Arg Gly Ala Ala Gly Ile His  
 65 70 75 80  
 Ile Glu Asp Gln Ala Pro Gly Thr Lys Lys Cys Gly His Met Ala Gly  
 85 90 95  
 Lys Val Leu Val Pro Ile Ser Glu His Ile Asn Arg Leu Val Ala Ile  
 100 105 110  
 Arg Ala Gln Ala Asp Ile Met Gly Glu  
 115 120

&lt;210&gt; 40283

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40283

Ile Pro Gln Arg Pro Asn Cys Ala Trp Arg Pro Arg Leu Arg Arg Cys  
 1 5 10 15  
 Asp Arg Gly Arg Ser Gln Glu Cys Arg Tyr Arg Leu Pro Tyr Val Asn  
 20 25 30  
 Ile Leu Arg Tyr Gln Arg Thr Ile Asp Ser Leu Arg Ser Asp Cys Ala  
 35 40 45



## 17591

Asp Cys Asp His Val Ala Ser Ala Thr Ala Ile Ala Lys Gly Ala Thr  
 50 55 60  
 His His Thr Pro Glu Lys Pro Leu Trp Leu Ile His Thr Ser Gly Thr  
 65 70 75 80  
 Gly Ile Leu Thr Val Glu Asp Phe Arg Ala Asn Thr Trp Gly Ile Glu  
 85 90 95  
 Arg Thr Lys Glu His Asn Asp Trp Asp Gly Val Asp Glu Leu Met Asn  
 100 105 110  
 Leu Pro Asp Asp Ser Phe His Arg Asn Val Asp Lys Ile Ile Ile Gly  
 115 120 125  
 Ala Gly Gln Arg Ala Pro Asp Ser Val Lys Thr Ser Ile Val Cys Pro  
 130 135 140  
 Pro Thr Ile Tyr Gly Pro Gly Arg Gly Pro Gly Asn Gln Lys Ser Val  
 145 150 155 160  
 Gln Ala Tyr Trp Leu Ala Ser Ala Val Leu Lys Arg Lys Lys Gly Phe  
 165 170 175  
 Leu Val Gly Glu Gly Lys Asn Thr Trp His Gln Val His Val Gln Asp  
 180 185 190  
 Leu Ser Asn Val Tyr Leu Ala Leu Gly Asp Ala Ala Ala Ala Gly Cys  
 195 200 205  
 Gly Lys Ala Thr Trp Asn Glu Gln Gly Tyr Tyr Leu Ala Glu Asn Gly  
 210 215 220  
 Ser Phe Val Trp Gly Asp Ile Ser Arg Ala Val Ala Lys Val Ala Tyr  
 225 230 235 240  
 Glu Lys Lys Leu Ile Pro Ser Pro Asp Val Glu Pro Leu Ser Asp Glu  
 245 250 255  
 Gln Ile Thr Glu Leu Asn Gln Trp Gly Leu Tyr Ala Trp Gly Ser Asn  
 260 265 270  
 Ser Arg Gly His Ala Ile Arg Ala Arg Lys Leu Phe Gly Trp Ser Pro  
 275 280 285  
 Gln Gln Pro Ser Leu Met Asp Leu Ile Pro Gln Ile Val Glu Ile Glu  
 290 295 300  
 Ala Lys Ala Leu Gly Leu Met  
 305 310

&lt;210&gt; 40284

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40284

Pro Arg Ser Ser His Cys Cys Leu Glu Leu Arg Phe Ala Gly Ala Leu  
 1 5 10 15  
 Cys Gly Ser Leu Ile Asp Ser Ala Asn Asn Thr Arg Arg Gln Leu Val  
 20 25 30  
 Ser Ala Leu Phe Thr Thr Thr Gly Arg Pro Leu His Arg Ile Phe Leu  
 35 40 45  
 Phe Val Pro Tyr Ile His Ser Pro Phe Ser Cys Trp Phe Asp Phe Leu  
 50 55 60  
 Ala Cys Thr Asp Ser Phe Thr Tyr Lys Asp Arg Tyr Met Ser Cys Asp  
 65 70 75 80  
 Leu Ser Glu Ile Ser Arg Phe Ser Leu  
 85

&lt;210&gt; 40285

&lt;211&gt; 587

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (587)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40285

Gly Ala Arg Leu Asp Glu Ala Val Met Ala Pro Gly Ala Gly Gly Lys  
 1 5 10 15  
 Arg Lys Arg Gly Asp Arg Ser Trp Ser Gly Asp Ser Gly Asn Asp Gly  
 20 25 30  
 Leu Arg Pro Ser Pro His Arg Pro Gly Asn Leu Asn Met Ala Gln His  
 35 40 45  
 Asn His Gly Ser His Ser Asn His Pro Arg Asp Phe Pro Glu Thr Arg  
 50 55 60  
 Gly Arg Val Arg Arg Gln Ala Ser Arg Gly Gly Arg Asn Ser Asn Asn  
 65 70 75 80  
 Leu Ser Arg Arg Pro Ser Asn Asp Ile Pro Asn Val Asn Thr Gly Gln  
 85 90 95  
 Lys Asp Ser Pro Met Ser Pro Pro Ala Arg Asp Val Pro Asp Ser Ser  
 100 105 110  
 Gln Thr Asn Gly Phe Pro Pro Thr Val Ala Ala Ala Ser Ile Pro Pro  
 115 120 125  
 Ser Pro Ser Pro Ala Pro Thr Val Gln Gln Thr Pro Ala Gln Ala Gln  
 130 135 140  
 Ala Ser Pro Lys Pro Gln Ser Gln Ser Leu Pro Ser Pro Ala Pro Pro  
 145 150 155 160  
 Val Arg Pro Pro Pro Gly Pro Pro Pro Pro Tyr Asp Tyr Glu Tyr Val  
 165 170 175  
 Thr Glu Ser Val Val Glu Asp Trp Met Ser Thr Gly Arg Gln Lys Val  
 180 185 190  
 Ile Lys Asp Gly Val Gln Ala Arg Asp Gln Glu Asp Ala Ser Thr Leu  
 195 200 205  
 Ala Ser Ile Tyr Gln Glu Ile Ile Arg Ala Ala Phe Tyr Gly Arg Leu  
 210 215 220  
 Ser Pro Thr Asp Ala Gly Ser Val Ile Lys Glu Ile Ile Gly Glu Glu  
 225 230 235 240  
 Val Ala Ala Gln Asp Ile Asp Met Val Asp Asp Arg Gln Pro Ser Ala  
 245 250 255  
 Ala Leu Asp Thr Arg Ser Leu Phe Leu Asp Thr Leu Ser Ile Leu Thr  
 260 265 270  
 Asp Ala Asp Pro Ser Asn Pro Ala Leu Arg Pro Leu Val Phe Ser Thr  
 275 280 285  
 Gly Ile Asn Ala Ala Leu Leu Arg Leu Gln Leu Glu Thr Pro Val Leu  
 290 295 300  
 Gln Thr Leu Gly Leu Val Arg Asp Thr Phe Thr Arg Ile Gly Ile Arg  
 305 310 315 320  
 Lys Gln Thr Asn Leu Leu Tyr Arg Gln Ser Asn Tyr Asn Leu Leu Arg  
 325 330 335  
 Glu Glu Ser Glu Gly Tyr Ser Lys Leu Leu Thr Glu Leu Phe Thr Thr  
 340 345 350  
 Ser Asn Asn Glu Pro Pro Thr Ser Glu Val Val Glu Asp Thr Phe Glu  
 355 360 365  
 Arg Val Lys Ala Met Ile Gly Ala Phe Asp Met Asp Val Gly Arg Val

## 17593

370		375		380
Leu Asp Val Thr Leu Asp	Val Phe Ala Ala Val	Leu Val Lys Gln Tyr		
385	390	395	400	
Arg Phe Phe Val Lys	Leu Leu Arg Val Ser	Ser Trp Trp Pro Lys Asp		
405	410	415		
Asp Ile Ser Arg Thr	Leu Gly Gly Asn Asp	Arg Asp Ser Gly Leu Pro		
420	425	430		
Asn Trp Ala Leu Pro Gly	Ser Ala Gly Trp Val Thr	Thr Asp Glu Glu		
435	440	445		
Arg Ala Glu Ile Met Arg	Ala Asn Glu Gln Arg	Asp Arg Glu Phe Trp		
450	455	460		
Asn Arg Val Arg Glu Ile	Gly Ile Arg Ala Phe	Phe Glu Ile Gly Arg		
465	470	475		
Lys Pro Ile Ser Glu Glu	Glu Arg Lys Arg Ile	Phe Pro Glu Ser Thr		
485	490	495		
Thr Leu Ser Glu Glu Met	Glu Thr Arg Lys Trp	Ile Glu Glu Thr		
500	505	510		
Gly Thr Leu Pro Pro Lys	Gly Asn Arg Val Ala	Ala Gln Leu Leu Gly		
515	520	525		
Phe Lys Leu Arg Phe Tyr	Ser Ser Lys Ala Arg	Asp Lys Ser Asp Ile		
530	535	540		
Leu Pro Asp Asn Leu Ile	Tyr Leu Ala Ala Leu	Leu Ile Lys Val Gly		
545	550	555		
Phe Ile Ser Leu Arg Asp	Leu Tyr Pro His Leu	Trp Arg Arg Leu His		
565	570	575		
His Gly Gly Arg Arg Ile	Arg Ala Ser Val Xaa			
580	585			

&lt;210&gt; 40286

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (18), (20), (24), (44)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40286

His Leu Met Asp Tyr Ser	Ala Ile Thr Gln Asp	Pro Asp His Pro Ser
1	5	10
Gly Xaa Asp Xaa Trp	Ala Ser Xaa Arg	Ala Thr Gln Ser
20	25	30
Ala Ser Asn Asn Asp	Ile Pro Ser Pro	Xaa Pro His His
35	40	45
Gln Pro Ser Tyr Asn	Gly Asp Gln Glu	Gly Asp Phe Gly
50	55	60
Ser Ser Glu Asn Gly	Ala Pro Asp Ser	Pro Asp Leu Ser
65	70	75
Gln Ser Ala Gln Leu	Gly Asp Pro Asp	Tyr Ala Val Glu
85	90	95
Tyr Ala Thr Gln Ala	Gln Tyr Thr Asn	Glu Pro Arg Ser
100	105	110
Gly Arg Ser Gln Thr	Gly Ala Arg Gln	Asn Ala Lys Asn
115	120	125
Tyr Lys Ile Gln Ala	Lys Ile Thr Gly	Leu Glu Arg Thr
		Gly Lys Lys

## 17594

130 135 140  
 Asp Pro Ile Leu Arg Phe Asp Val His Val Ser Gly Val Leu Val Ala  
 145 150 155 160  
 Phe Gly Ser Pro Ala Val Lys Gln Thr Asp Val Gly His Gln Thr Asn  
 165 170 175  
 Val Pro Lys Phe Arg Thr Thr Gln Tyr Arg Asp Val Arg Arg Thr His  
 180 185 190  
 Ala Glu Phe Ala Lys Leu Ala Asp His Leu Ile Ser Ala Asn Pro Glu  
 195 200 205  
 Val Leu Val Pro Ala Val Pro Pro Pro Leu Thr Pro Ala Gly Ala Gly  
 210 215 220  
 Thr Glu Glu Asp Glu Ile Arg Val Lys Ala Ser Met Gln Arg Trp Leu  
 225 230 235 240  
 Asn Ile Val Met Ser Asn Glu Ile Leu Met Gln Asp Asp Glu Val Val  
 245 250 255  
 Leu Phe Val Glu Ser Asp Phe Gly Tyr Ser Pro Val Val Arg Met Lys  
 260 265 270  
 Gln Pro Ala Thr Gly Val Arg Arg Lys Val Leu Lys Gln Phe Ala Pro  
 275 280 285  
 Pro Pro Asp Asp Thr Pro Glu Leu Gln Asp Ala Arg Pro Ile Val Lys  
 290 295 300  
 Met Phe Tyr Leu Gly Thr Met Asp Ala Ser His Lys Val Asp Arg Val  
 305 310 315 320  
 Val Lys Ala Arg Arg Gly Arg Cys Leu Asp Val Ser Leu Gly Trp Lys  
 325 330 335  
 Arg Ile His

&lt;210&gt; 40287

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40287

Tyr Lys Phe Arg Ser Gly Leu Gly Leu Ala Glu Ser Asp Phe Gly Val  
 1 5 10 15  
 Lys Leu Gly Gln Met His Val Gln Glu Thr His Pro Gly Leu Ala Asn  
 20 25 30  
 Ala Tyr Lys Lys Leu Gly Lys Val Ile Gln Thr Val Gly Asp Tyr His  
 35 40 45  
 Ala Val Gln Ala Thr Ala Glu Ala Thr Thr Leu Glu Asp Pro Leu Ser  
 50 55 60  
 Tyr His Ser Ser Asp Ala Phe Ile Val Lys Glu Thr Leu Thr Asn Arg  
 65 70 75 80  
 His Ile Leu Leu Arg Glu Leu Ile Gln Ala Gln Gln Ala Thr Arg Ser  
 85 90 95  
 Lys Arg Ala Ala Asp Arg Leu Lys Val Ser Ser Ser Val Arg Pro  
 100 105 110  
 Asp Lys Val Asp Glu Ala Ile Asn Ala Leu Asp Glu Ala Gln Ser His  
 115 120 125  
 Glu Asp Tyr Leu Thr Lys Arg Thr Gln Arg Val Thr Ser Asn Leu Leu  
 130 135 140  
 Leu Glu Lys Arg Ala Trp Phe Glu Arg Thr Ser Asn Asp Met Leu Asn  
 145 150 155 160  
 Ser Leu Arg Glu Tyr Thr Leu Arg Gln Ile Glu Ala Glu Arg Arg Thr  
 165 170 175

## 17595

Leu Ala Thr Leu Glu Ser Val Arg Pro Asp Ile Arg Ser Ile Asp Ser  
                   180                  185                  190  
 Ser Gly Gly Leu Ser Arg Leu Gly Arg Glu Ala His Pro Ala Val Arg  
                   195                  200                  205  
 Arg Ala Asn Leu Ala Ser Ser Gln Gly Pro Lys Gly Asp Ala Trp Ser  
                   210                  215                  220  
 Gly Ile Pro Arg Arg Ser Asp Ser Leu Gly Arg Ser Leu Ser Gly Ser  
 225                  230                  235                  240  
 Phe Val Ala Pro Ala Val Asp Glu Asp Asp Glu Thr Asn Arg Ser Gly  
                   245                  250                  255  
 Thr Ala Lys Gly Arg Leu Arg Ser Pro Ser Gly Val Gly Ser Ile Val  
                   260                  265                  270  
 Val Asp Asp Asp Glu Asp Arg Leu Asp Ala Lys Asn Ala Ala Ser Arg  
                   275                  280                  285  
 Leu Ala Thr Ser Thr Phe  
                   290

&lt;210&gt; 40288

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40288

Ser Tyr Ser His Leu Thr Ser Phe Ser Ser Thr Gly Val Thr Gly Tyr  
 1                  5                  10                  15  
 Ile Gly Gly Asp Val Phe Tyr Ala Val Ser Gln Ala His Pro Asp Trp  
                   20                  25                  30  
 Gln Ile Ser Val Leu Val Arg Asn Arg Glu Lys Ala Ala Gln Leu Ala  
                   35                  40                  45  
 Ser Lys Tyr Pro Asn Val Arg Ile Val His Gly Asp Leu Asp Ser Ala  
                   50                  55                  60  
 Asp Val Ile Glu Glu Glu Val Lys Asn Ala Asp Ile Val Phe Arg Thr  
 65                  70                  75                  80

&lt;210&gt; 40289

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40289

Lys Gly Val Leu Xaa Trp Thr Thr Leu Pro Leu His Pro Val Leu Pro  
 1                  5                  10                  15  
 Ile Ile Asp Arg Tyr Gly Met Ile Gln Gly Cys Gln Asn Thr Leu Tyr  
                   20                  25                  30  
 Asn Thr Arg Ile Thr Pro His Asp Val Val His His Ser Asn Gln Phe  
                   35                  40                  45  
 Asp Lys Ser Asn Ile Leu Gln Val Asn Pro Ile Glu Ser Tyr Leu His  
                   50                  55                  60  
 Gly Ser Asn Val Asp Asn Pro Tyr Phe Tyr His Gln Pro Arg Val Gln  
 65                  70                  75                  80  
 His Arg Thr Thr Leu Gln Ala Ser His Glu Met Ala Ser Asp Leu Ile

[illegible]

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<210> 40290
<211> 79
<212> PRT
<213> A.fumigatus
```

```
<210> 40291
<211> 227
<212> PRT
<213> A.fumigatus
```

<400> 40291															
Gly	Asp	Pro	Ile	Ala	Ser	Gly	Ser	Ser	Leu	Ser	Met	Ser	Ser	His	Thr
1				5					10					15	
Lys	Lys	Asp	Asp	Phe	Cys	Leu	Glu	Cys	His	Trp	Glu	Ala	Phe	His	Leu
			20					25					30		
Asp	Gly	Lys	Asp	Ser	Gln	Asp	Gly	Ala	Glu	Ala	Ser	Ala	Gln	Pro	Pro
		35					40					45			
Glu	Trp	Ser	Cys	Leu	Asp	Glu	Asp	His	His	His	Thr	Ser	Leu	Ala	His
	50					55					60				
Cys	Ala	Thr	Ile	Asp	Glu	Ala	Cys	Cys	Asp	Val	Asp	Asp	Cys	Ser	Val
65					70					75					80
Asn	Cys	Pro	Ser	Val	Cys	Asp	Gly	Phe	Arg	Glu	Cys	Asp	Glu	Ala	Thr

## 17597

	85		90		95
Ala Cys Ser Leu Ser His Cys Asp Asp Lys Asp Cys Lys Ser Thr Asp					
	100		105		110
Ala Val Cys Phe Asp Glu His Cys Phe Ser Phe Ala Asp His Asn Gly					
	115		120		125
Gln Ala Ala Asp His Asn Asn Leu Asp Ser Met Leu Gly Leu Ala Gln					
	130		135		140
Pro Leu Ser Leu Glu Ala Cys Gly Leu Leu Pro Ser Ser Thr Ile Asp					
	145		150		155
Gln Asn Gln Met Gln Val Pro Ser Lys Arg Thr Glu Asn Ala Thr Ser					
	165		170		175
Gly Phe Val Asn Thr Ser Gln Cys Ala Asp Ala Pro Val Ser Phe Ser					
	180		185		190
Asn Asn Val Ser Ser Leu Ser Ser Phe Ile Ser Pro Leu Pro Val Pro					
	195		200		205
Ser Ser Ala Arg Arg Phe Thr Gln Ser Pro Trp Glu Cys Ala Ile Ser					
	210		215		220
Pro Ala Glu					
225					

&lt;210&gt; 40292

&lt;211&gt; 337

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (336)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40292

Ile Pro Pro Gly Ala Gly Lys Pro Ser Thr Thr Leu Ser Ile Tyr Met					
1	5		10		15
Met Ala Lys Pro Thr Ile Val Leu Ile Gly Thr Cys Asp Thr Lys Trp					
	20		25		30
Asp Glu Leu Cys Phe Thr Arg Ser Gln Leu Leu Ile His Asn Thr Cys					
	35		40		45
Ala Val Leu Leu Met Asp Ile Gly Arg Thr Pro Ser Pro His Arg Ser					
	50		55		60
Ile Ala Ile Lys His Pro Asp Leu Thr Ser Thr Asp Thr Asp Thr His					
	65		70		75
Asn Ala Pro Lys Leu Ser Asn Leu Pro Arg Ser Glu Tyr Ile His Arg					
	85		90		95
Met Thr Ser His Ala Ile Thr Ala Leu Thr Asn Leu His Arg Thr Gly					
	100		105		110
Ser Ile His Ala Val Leu Gly Ile Gly Gly Ser Cys Gly Thr Ala Leu					
	115		120		125
Ala Ala Ala Ala Met Arg Ala Ala Leu Pro Val Gly Phe Pro Lys Leu					
	130		135		140
Met Val Ser Thr Met Ala Ser Gly Asp Val Ser Pro Tyr Val Glu Glu					
	145		150		155
Thr Asp Leu Thr Leu Met Tyr Ser Val Val Asp Val Ala Gly Thr Asn					
	165		170		175
Arg Ile Leu Asn Arg Ile Leu Thr Asn Ala Ala Ala Ala Ala Thr Gly					
	180		185		190
Met Ala Val Ser Tyr Ala Ser His Ala Gln Ala Pro Ser Asp Thr Ser					

## 17598

195	200	205
His Ser Lys Thr Gln Ile	Ala Ile Thr Met Phe Gly Val Thr Thr Pro	
210	215	220
Ala Val Asn Thr Ile Arg Asp Arg Leu Gln Gln Thr Ile Asn Cys Glu		
225	230	235
Val Tyr Val Phe His Ala Thr Gly Ala Gly Gly Lys Ala Met Glu Arg		
245	250	255
Leu Ile Arg Glu Gly Gln Leu Asp Ala Val Val Asp Leu Thr Thr Thr		
260	265	270
Glu Ile Ala Asp Glu Ile Val Gly Gly Ala Leu Ser Ala Gly Pro Arg		
275	280	285
Arg Leu Ile Ala Ala Ala Glu Ala Gly Leu Pro Gln Ile Val Ser Val		
290	295	300
Gly Ala Cys Asp Met Val Asn Phe Gly Pro Arg Glu Thr Val Pro Ala		
305	310	315
Arg Phe Arg Gly Leu His His Gly Ala Gly Arg Thr Ser Ala Gln Xaa		
325	330	335
Gly		

&lt;210&gt; 40293

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40293

Phe Tyr Leu Phe Phe Cys Leu Ser Pro Ile Leu Ala His Lys Ser Ser	
1	5 10 15
Lys Asn Gln Leu Glu Ala Lys Arg Ser Cys Ile Lys Asn Ala Pro Ser	
20	25 30
Asn Asn Pro Ser Arg Ser Ala Gly Ser Thr Pro Pro Asp His Arg Arg	
35	40 45
Gly Leu Asn His Arg Arg Ser Arg Ser Trp Cys Val Pro Gln Pro Leu	
50	55 60
Thr Tyr Leu Gln Pro Lys Gln Leu Ile Ile Gln Tyr Ala Gly Ile Gly	
65	70 75 80
Leu Ser Ala Lys Phe Ile Glu Lys Gly Gly Ala Asp Leu Ile Leu Val	
85	90 95
Tyr Asn Ser Gly Arg Phe Arg Met Ala Gly Arg Gly Ser Leu Ala Gly	
100	105 110
Met Met Pro Tyr Ser Asp Ala Asn Gln Val Val Val Glu Met Val Arg	
115	120 125
Leu Leu Arg Thr Phe Cys Ile Leu His Leu His Gly	
130	135 140

&lt;210&gt; 40294

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40294

Ser Asp Thr Leu Asn Asn Asn Val Ala Ala Phe Gly Arg Lys Ile Arg	
1	5 10 15
Tyr Arg His Trp Trp Leu Thr Gly Tyr Val Asp Ser Leu His Ile Tyr	
20	25 30
Thr Ser Pro Ser Gln Ala Gln Leu Asp Glu Thr Gly Ile Gly Glu Ala	



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      35              40              45
Ile Ala Arg Asn Leu Ala Ala Lys Gly Cys Ser Leu Leu Leu Asn Phe
      50              55              60
Thr Ser Glu Ser Ser Arg Ala Arg Thr Glu Glu Leu Cys Ala Ser Leu
65              70              75              80
Ala Ser Thr His Ser Ile Arg Cys Val Ala Val Gln Ala Asp Leu Leu
      85              90              95
His Ala Glu Glu Ala Val Pro Gln Ile Leu Ala Ala Ala Lys Gln His
      100             105             110
Phe Thr Ser Pro Glu Gly Lys Phe Gln Ile Asp Val Leu Ile Asn Asn
      115             120             125
Ala Gly Val Ser Ala Asp Arg Phe Leu Asn Asp Pro Val Lys Gly Pro
      130             135             140
Ile Asp Arg Glu Tyr Phe Asn Trp His Tyr Ser Ile Asn Val Leu Ala
145             150             155             160
Pro Leu Leu Leu Thr Gln Ala Cys Ala Pro Phe Leu Pro Thr Asp Arg
      165             170             175
Ser Gly Arg Ile Val Asn Ile Ser Ser Val Ser Ser Ser Ile Gly Phe
      180             185             190
Thr Gly Gln Ser Val Tyr Gly Gly Thr Lys Ala Ala Ile Glu Ala Met
      195             200             205
Thr Arg Thr Trp Ala Arg Glu Leu Ala Asp Arg Ala Thr Val Asn Thr
      210             215             220
Val Asn Pro Gly Pro Val Ile Gly Asp Met Tyr Phe Ala Thr Gly Glu
225             230             235             240
Glu Phe Trp Lys Gln Met Gln Gly Phe Gln Asp Ala Thr Pro Leu Ser
      245             250             255
Lys Met Asp Glu Asp Asp Pro Gln Leu Lys Glu Leu Ser Glu Glu Gln
      260             265             270
Ile Cys Leu Ile Lys Glu Lys Met Gly Gly Arg Arg Pro Ala Phe Thr
      275             280             285
Ser Glu Ile Ala Gly Val Val Gly Met Leu Cys Thr Ala Asp Gly Leu
      290             295             300
Trp Cys Thr Gly Ser Val Val Cys Ala Asn Gly Gly Met Lys Met Gly
305             310             315             320
Phe

```

&lt;210&gt; 40295

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40295

```

Cys Arg Thr Arg Met Pro Thr Arg Ser Leu Leu Arg Trp Phe Val Ser
1              5              10              15
Tyr Val Arg Ser Ala Tyr Cys Thr Tyr Met Ala Asn Asn Thr Cys Gln
      20              25              30
Ala Asn Glu Val Leu Pro Val Val Glu His Thr Pro Val Leu Ala Gly
      35              40              45
Val Cys Gly Thr Asp Pro Phe Arg Glu Met Arg Ser Phe Leu Ala Gln
      50              55              60
Leu Arg Gly Leu Gly Phe Ile Gly Val Gln Asn Phe Pro Thr Val Gly
65              70              75              80
Leu Ile Asp Gly Lys Phe Arg Gln Asn Leu Glu Glu Thr Gly Met Gly
      85              90              95

```

## 17600

Tyr Asp Arg Glu Val Glu Met Ile Arg Leu Ala His Glu Met Asp Leu  
 100 105 110  
 Val Thr Thr Pro Tyr Val Phe Thr Val Asp Glu Gly Glu Arg Met Ala  
 115 120 125  
 Arg Ala Gly Ala Asp Val Ile Val Val His Val Gly Leu Thr Thr Ser  
 130 135 140  
 Gly Thr Ile Gly Ala Gln Thr Ala Leu Ser Leu Asp Glu Cys Val Gly  
 145 150 155 160  
 Val Val Gln Ala Ile Arg Asp Ala Val Val Arg Val Asn Pro Glu Val  
 165 170 175  
 Ile Val Leu Cys His Gly Gly Pro Leu Ala Gly Pro Glu Asp Ala Glu  
 180 185 190  
 Tyr Val Leu Ser Arg Thr Arg Gly Val His Gly Phe Phe Gly Ala Ser  
 195 200 205  
 Ser Met Glu Arg Leu Pro Val Glu Leu Ala Ile Gln Glu Asn Ala Gln  
 210 215 220  
 Ala Phe Lys Arg Leu Lys Ile Arg Gln  
 225 230

&lt;210&gt; 40296

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40296

Ser Ile Asp Thr Lys Asp Asn Asp Leu Pro Pro Thr Gln Ser Val Asn  
 1 5 10 15  
 Pro Pro Leu Asn Pro Pro Thr His Gln Thr Ser Thr Leu Pro Tyr Pro  
 20 25 30  
 Pro Arg Leu His His Ile Ile Ser Arg Pro Gln Ala Ser Ile Arg Ser  
 35 40 45  
 Ser Pro Glu Ala Ile Thr Thr Arg Thr Cys Thr Phe Val Gln Glu Asn  
 50 55 60  
 Ser Ser Ile Ser Lys Pro Leu Leu Asn Arg Lys Ile Pro Ser  
 65 70 75

&lt;210&gt; 40297

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40297

Arg Asn Ser Tyr Glu Thr Ala Lys Asp Glu Phe Glu Ile Ala Thr Asp  
 1 5 10 15  
 Ser Thr Ala Ser Ser Thr Ile Tyr Ala Ala Ser Asp Arg Glu Ser Ala  
 20 25 30  
 Arg Asp Ala Leu Asn Gln Leu Leu Ala Val Tyr Ser Leu Tyr Thr Thr  
 35 40 45  
 Asp Ile Ala Ala Thr Ala Glu Ser His Ala Pro Gln Glu Leu Gln Gln  
 50 55 60  
 Gly Asp Asp Ala Ala Asp Glu Arg Gly Gln Leu Val Asn Thr Asp Phe  
 65 70 75 80  
 Asp Pro Ser Glu Ile Pro Ala Pro Val Arg Asp Glu Val Arg Arg Arg  
 85 90 95  
 Val Gly Gln Arg Val Arg Glu Leu Ser Asn Ala Val Glu Ala Leu Glu  
 100 105 110

## 17601

Glu Arg Ala His Val Glu  
115

<210> 40298

<211> 71

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (70)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40298

Leu	Thr	Pro	Ala	Gly	Leu	Ile	Tyr	Asn	Pro	Leu	Gly	Ala	Trp	Leu	His
1			5					10						15	
Asp	Lys	Val	Asn	Ser	Arg	Arg	Gly	Met	Tyr	Ile	Thr	Gly	Phe	Val	Gly
		20					25					30			
Ile	Ile	Ile	Thr	Thr	Ser	Cys	Leu	Ala	Ala	Met	Thr	Ala	Glu	Tyr	Ala
		35				40						45			
Gly	Thr	Thr	Asn	Lys	Ala	Gly	Asn	Ala	Phe	Gly	Ile	Leu	Phe	Ile	Tyr
	50					55					60				
Leu	Tyr	Leu	Ala	Phe	Xaa	Gly									
65					70										

<210> 40299

<211> 174

<212> PRT

<213> A.fumigatus

<400> 40299

Lys	Arg	Tyr	Ala	Cys	Tyr	Tyr	Ala	Lys	Asp	Ile	Gly	Ser	Phe	Gly	Trp
1			5					10						15	
Arg	Phe	Pro	Leu	Ala	Leu	Gln	Cys	Leu	Pro	Pro	Leu	Val	Leu	Leu	Val
		20					25					30			
Gly	Ser	Pro	Trp	Leu	Pro	Arg	Ser	Pro	Arg	Trp	Leu	Ile	Ser	Lys	Gly
		35				40						45			
Lys	His	Glu	Glu	Ala	Lys	Val	Val	Leu	Glu	Arg	Leu	Arg	Gln	Ser	Pro
	50				55						60				
Asp	Asp	Pro	Asp	Asn	Leu	Val	Ala	Lys	Glu	Glu	Tyr	Tyr	Gln	Thr	Ala
65				70					75					80	
Glu	Gln	Ile	Arg	Leu	Glu	Ser	Glu	Arg	Leu	Ser	Glu	Tyr	Gly	Asn	Val
			85					90						95	
Trp	Lys	Ala	Val	Val	Lys	Lys	Lys	Ser	Tyr	Arg	Lys	Arg	Met	Val	Ile
		100					105						110		
Gly	Phe	Leu	Thr	Gln	Trp	Gly	Ala	Glu	Phe	Gly	Gly	Pro	Leu	Ile	Ile
		115				120						125			
Val	Ser	Ile	Leu	Leu	Val	Lys	Val	Glu	Ser	Ser	Thr	Tyr	Asn	Leu	Thr
	130				135						140				
Glu	Gln	Leu	Arg	Gly	Phe	Ala	Ile	Leu	Lys	Ser	Arg	His	Glu	Gly	Arg
145				150					155						160
Tyr	Ala	Phe	Ala	Ser	Glu	Arg	Ser	Val	Ala	Asp	Asn	Ser	Trp		
				165					170						

<210> 40300

<211> 98

17602

<212> PRT  
<213> A.fumigatus

<400> 40300

```

Asp Leu Pro Asn Gly Asp Gln Thr His Arg His Gly Ile Leu Pro Phe
1           5           10           15
Trp Ala Val Cys Arg Tyr Val His Pro Gly Cys Met Val Arg Thr Ala
          20           25           30
Thr Asn Met Asp Ala Ala Thr Leu Ile Leu Leu Glu Thr Ala Pro Met
          35           40           45
Gly Phe Asn Asn Ile Gly Trp Lys Tyr Tyr Leu Val Ile Ile Cys Trp
          50           55           60
Ser Ala Phe Phe Ile Pro Gly Lys Thr Asp Thr Gln Val Leu Asp Glu
65           70           75           80
Thr Ser Thr Asn Ala Ser Lys Leu Phe Thr Ser Ser Ser Arg Arg Leu
          85           90           95
His Ala

```

<210> 40301  
<211> 127  
<212> PRT  
<213> A.fumigatus

<400> 40301

```

His Arg Gln Ser Asp Lys Leu Ser Lys Met Lys Leu Asn Thr Val Leu
1           5           10           15
Ser Leu Ala Pro Leu Leu Gly Ala Ala Thr Ala Gln Gly Gln His Glu
          20           25           30
Gln Glu Pro Phe Thr Leu Asn Val Arg Trp Ser Asn Ser Met Gly Thr
          35           40           45
Leu Glu Gly Leu Leu Asn Ala Asn Ser Gly Ala Phe Trp Ser Gly Lys
          50           55           60
Pro Thr Val Ser Ser Cys Pro Glu Asn Val Gln Asp Cys Pro Ala Val
65           70           75           80
Asn Thr Thr Ser Phe Val Ser Gln Gly Ser Lys Leu Phe Leu Asn Val
          85           90           95
Ala Val Pro Gly Gly Gln Gln Gly Ile Ala Arg Leu Phe Phe Ser Phe
          100           105           110
Pro Phe Leu Pro Pro Ser Ser Ile Phe Phe Phe Gly Arg Gln Arg
          115           120           125

```

<210> 40302  
<211> 102  
<212> PRT  
<213> A.fumigatus

<400> 40302

```

Tyr Leu Phe Cys Gly Thr Val Tyr Ile Ser Pro Glu Gly Gln Leu Thr
1           5           10           15
Tyr Thr Val Pro His Ser Gly Tyr Ile Pro Asp Gly Ser Leu Ala Asp
          20           25           30
Leu Pro Ile Met Lys Asp Gly Phe Leu Asn Pro Phe Leu Thr Leu Trp
          35           40           45
Leu Cys Ser Val Asp Lys Asp Ala Lys Gln Trp Lys Val Trp Ala Glu
          50           55           60

```

## 17603

Tyr Thr Asn Gly Thr Thr Gly Ala Ile Thr Asn Asn Gly Ser Asn Gly  
 65 70 75 80  
 Gln Ser Ala Cys Thr Arg Phe Ala Leu Glu Ala Gln Pro Tyr Lys Gly  
 85 90 95  
 Asp Lys Ala Trp Glu Phe  
 100

<210> 40303  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 40303  
 Ser Pro Leu Ile Ser Ala Ile Leu Asp Ala Arg Ser Phe Asn Ala Arg  
 1 5 10 15  
 Leu Arg Val Gly Val Met Ser Gly Leu Leu Thr Ser Gly Gln Ser Pro  
 20 25 30  
 Val Ile Tyr Arg Ile Ala Leu Leu Lys Ala Ser Lys Ala Leu Phe Met  
 35 40 45  
 Thr Met Gly Asn Ala Pro Gln Ser Ser Phe Leu Ser Ala Leu Ile Ala  
 50 55 60  
 Trp Asn  
 65

<210> 40304  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 40304  
 Pro Gln Gly Ser Ala Phe His Lys Leu Phe Arg Phe Thr Arg Leu Thr  
 1 5 10 15  
 Ala Val Phe Arg Gln Glu Pro Lys Leu Trp Tyr Gly Ile Gly Ile Leu  
 20 25 30  
 Tyr Asp Arg Tyr Gly Ser Leu Asp His Ala Glu Glu Ala Phe Ser Gln  
 35 40 45  
 Val Met Arg Met Ala Pro Asp Phe Glu Lys Ala Asn Glu Ile Tyr Phe  
 50 55 60  
 Arg Leu Gly Ile Ile Tyr Lys Gln Gln Gln Lys Phe Asn Gln Ser Leu  
 65 70 75 80  
 Glu Val Arg Ser Ser Val Ser Tyr Leu  
 85

<210> 40305  
 <211> 128  
 <212> PRT  
 <213> A.fumigatus

<400> 40305  
 Ala Thr Glu Gly Arg Lys Leu Tyr Arg Ile Leu Ile Arg Leu Leu Ile  
 1 5 10 15  
 Tyr Arg Leu Thr Thr Leu Gln Phe Asp Ser Ala Gln Ala Ala Tyr Arg  
 20 25 30  
 Arg Val Leu Asp Arg Asp Pro Asn His Ala Lys Val Leu Gln Gln Leu  
 35 40 45  
 Gly Trp Leu Tyr His Gln Gln Ser Asn Ser Tyr Ala Ser Gln Glu Lys

## 17604

50		55		60											
Ala	Ile	Glu	Tyr	Leu	Glu	Lys	Ser	Val	Ser	Ala	Gly	Lys	Thr	Ser	Ala
65		70		75		80									
His	Val	Leu	Asp	Pro	Glu	Gln	Ala	Leu	Ile	Leu	Pro	Phe	Phe	Arg	Gln
		85		90		95									
His	Arg	Cys	Thr	Lys	Leu	Val	Pro	Ser	Trp	Ser	Leu	Leu	His	Val	Ala
	100			105		110									
Ser	Gln	Val	Ser	Gln	Gly	Val	Arg	Ser	Ile	Ser	Thr	Gly	Cys	Leu	Pro
	115			120		125									

&lt;210&gt; 40306

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (63), (111), (120)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40306

Tyr	Glu	Ser	Cys	Asn	Asn	Gln	Ile	Ala	Asp	Ala	Leu	Asp	Ala	Tyr	Gly
1			5						10					15	
Arg	Ala	Ala	Asp	Leu	Asp	Pro	Thr	Asn	Val	His	Ile	Lys	Ala	Arg	Leu
			20					25					30		
Gln	Leu	Leu	Gln	Ser	Gln	Leu	Ser	Gly	Ser	Asn	Gln	Asn	Ser	Ala	Pro
	35					40						45			
Ala	Pro	Ala	Pro	Gln	Pro	Gln	Asp	Val	His	Pro	Gln	Ala	Tyr	Xaa	Ala
	50				55						60				
Pro	Gly	Val	Gly	Ala	Pro	Pro	Ala	Pro	Gln	Trp	Gly	Ala	Pro	Ala	Pro
65					70				75					80	
Asn	Gly	Gly	Pro	His	Pro	Pro	Ala	Ser	Gly	Ser	Ser	Lys	Ala	Asp	Arg
			85					90						95	
Arg	Leu	Glu	Ser	Arg	His	Gln	Arg	Ser	Thr	Ile	Ser	Glu	Ser	Xaa	Ala
		100					105					110			
Ala	Pro	Ala	Ser	Gln	Arg	Phe	Xaa	Ser	Pro						
	115				120										

&lt;210&gt; 40307

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40307

Leu	Ala	Val	Phe	Ala	Ile	Ile	Gly	Ser	Leu	Thr	Glu	Leu	Met	Gly	Asp
1			5						10					15	
Leu	Asp	Gly	Ala	Met	Asn	Ala	Tyr	Glu	Gln	Ala	Leu	Arg	His	Asn	Gln
		20						25					30		
Trp	Ser	Ile	Pro	Ala	Met	Asn	Ala	Ile	Ser	Cys	Ile	Leu	Arg	Thr	Lys
	35					40						45			
Glu	Gln	Phe	Pro	Lys	Ala	Ile	Glu	Tyr	Leu	Gln	Asn	Ile	Leu	Lys	Leu
	50				55				60						
Asp	Pro	Thr	Ser	Gly	Glu	Thr	Trp	Gly	Ser	Leu	Gly	Ile	Trp	Asn	Pro
65				70				75						80	
Phe	Lys	Ile	Leu	Ile	Cys	Leu	Leu	Ser	His	His	Gly	Asp			
			85				90								

&lt;210&gt; 40308

&lt;211&gt; 600

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (175), (223), (231), (317)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40308

```

Ser Cys Leu Phe Leu Asp Asn Thr Asp Ala Gln Ser Trp Tyr Leu Leu
1          5          10          15
Gly Arg Cys Tyr Met Ser Gln Ala Lys Tyr Pro Lys Ala Tyr Glu Ala
20          25          30
Tyr Gln Gln Ala Val Tyr Arg Asp Gly Arg Asn Pro Thr Phe Trp Cys
35          40          45
Ser Ile Gly Val Leu Tyr Tyr Gln Ile Asn Gln Tyr Arg Asp Ala Leu
50          55          60
Asp Ala Tyr Ser Arg Ala Ile Arg Leu Asn Pro Tyr Ile Ser Glu Val
65          70          75          80
Trp Tyr Asp Leu Gly Thr Leu Val Ser Gln Val Ala Arg Ser Leu Phe
85          90          95
Gly Asp Asn Thr Arg Glu Thr Glu Val Ala Asp His Arg Ser Cys Ser
100          105          110
Met Asn Pro Ala Thr Thr Arg Leu Arg Met Leu Leu Thr Leu Met Ala
115          120          125
Ala Pro Leu Ile Leu Ile Leu Gln Met Phe Thr Ser Arg Leu Val Cys
130          135          140
Asn Cys Cys Lys Ala Ser Ser Gln Ala Pro Ile Arg Thr Ala Leu Leu
145          150          155          160
Arg Pro Leu Leu Asn Leu Arg Thr Phe Ile His Arg Leu Thr Xaa Leu
165          170          175
Leu Val Trp Ala Leu Leu Gln Leu His Ser Gly Glu Arg Gln Leu Gln
180          185          190
Met Glu Ala Arg Ile Pro Gln His Pro Asp Leu Pro Arg Gln Ile Ala
195          200          205
Asp Trp Asn Arg Gly Ile Asn Glu Val Gln Phe Gln Asn Gln Xaa Gln
210          215          220
Pro Gln Pro Ala Asn Gly Xaa Asp His Arg Asp Gln Val Arg Gly Pro
225          230          235          240
Val Val Phe Gln Gln Pro Ser Pro Arg Gln Glu Pro Gly Arg Ala Phe
245          250          255
Pro Asp Gly Val Arg Ala Pro Ala Ala Arg Ser Pro Lys Thr Thr Val
260          265          270
Thr Gly Ser Gly Ala Phe Ala Pro Ala His Ala Leu Pro Gln Leu Pro
275          280          285
Asn Pro Pro Pro Pro Pro His Asp Arg Ala Pro Thr Gly Ser Thr Pro
290          295          300
Phe Gly Cys Asp Thr Arg Gly Pro Leu Pro Pro Ala Xaa Asn Phe Ala
305          310          315          320
Ala Pro Pro Thr Gly Pro Thr Gly Pro Asn Gly Ala Pro Ala Ser Ala
325          330          335
Gly Pro Leu Pro Pro Tyr Pro Arg Pro Phe Thr Pro Pro Thr Glu Ile
340          345          350

```

## 17606

Arg Pro Ile Arg Glu Glu Arg Pro Ser Ser Pro Gly Ser Thr Tyr Pro  
 355 360 365  
 His Gln Gln Tyr His His Gly Pro Ser Val Pro Ile Gln Gly Ala Ser  
 370 375 380  
 Ser Thr Gly Ile Ala Gly Gly Ala Pro Ala Pro Ala Ser Ala Ile Thr  
 385 390 395 400  
 Ala Ala Glu Ala Ala Ala Arg Glu Arg Glu Asp Arg Pro Thr Ser Ala  
 405 410 415  
 Met Lys Arg Gly Arg Glu Trp Glu Gly Glu Ser Gly Pro Ser Lys Lys  
 420 425 430  
 Val Ala Asn Glu Glu Thr Arg Val Arg Leu Asp Asp Gln Val Ala Arg  
 435 440 445  
 Arg Val Thr Pro Pro Asn Arg Met Pro Ser Pro Gly Glu Met Gln Arg  
 450 455 460  
 Arg Gly Ser Ser Glu Ala Arg Arg Glu Asp Gln Arg Arg Val Asn Glu  
 465 470 475 480  
 Ser Tyr His Pro Ser Glu Ala Ala His His Pro Pro Thr Leu Pro Ser  
 485 490 495  
 Ile Gln His Met Pro Gln His Ala Thr Gly Ser Ser Leu Pro Pro Met  
 500 505 510  
 Asn Asp Gly Pro Ala Pro Ala Ser Asn Gly Pro Gln Ala Gly Ala Pro  
 515 520 525  
 Ser Ala Gln Val Lys Glu Glu Pro Ala Arg Asn Glu Gln Val Pro Ala  
 530 535 540  
 His Glu Pro Ala Ala Arg Lys Met Asp Val Asp Glu Asn Tyr Asp Asp  
 545 550 555 560  
 Asp Gly Asp Asp Glu Lys Arg Thr Ser Thr Ala Ala Lys Gly Ser Pro  
 565 570 575  
 Ala Ala Gly Ser Asn Ser Asn Gly Val Leu Ser Asn Gly Ala Gln Thr  
 580 585 590  
 Ser Gln Ser Lys Gln Glu Ser Ala  
 595 600

&lt;210&gt; 40309

&lt;211&gt; 1429

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (339)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40309

Phe Asn Met Ala Pro Tyr Ile Gly Thr Gln Glu Gly Ser Pro Ser Ser  
 1 5 10 15  
 Leu Gly Thr Phe Ser His Val Gln Leu Ser Lys Asp Thr Asn Val Ala  
 20 25 30  
 Ser Gln Tyr Trp Glu Glu Leu Phe His Ser Val Gly Ser Gln Pro Arg  
 35 40 45  
 Leu Ala Cys Val Pro Leu Asp His Gln Trp Pro Arg Ala Glu Thr Thr  
 50 55 60  
 Val Leu Ala Ser Asp Gly Leu Leu Glu Ala Ala Thr Thr Phe Ser Arg  
 65 70 75 80  
 Thr His Asn Ile Ser Leu Ala Asp Leu Ile Tyr Ala Val Trp Ala Ile  
 85 90 95



Val Ser Ala Arg Gln Thr Val Ser Gly Gln Ser Thr Ala Leu Phe Thr  
 100 105 110  
 Val Thr Gly Arg Ser Tyr Pro Ser Ala Lys Gln Asp Thr Pro Glu Asn  
 115 120 125  
 Gly Arg Ala Glu Gln Asp Tyr Pro Leu Leu Leu Ser Val Pro Glu Asp  
 130 135 140  
 Val Asp Val Leu Ser Trp Val Arg Ser Val Ser Thr Ala Ala Ala Thr  
 145 150 155 160  
 Ala Ser Ala Leu Ser Tyr Ile Gly Tyr Asp Arg Ile Met Glu Arg Thr  
 165 170 175  
 Ser Gly Met Arg Pro Gln Val Lys Val Ser Val Thr Phe Glu Val Asp  
 180 185 190  
 Ser His Asp Thr Met Ala Pro Asp Asp Asp Phe Pro Leu Val Phe Asn  
 195 200 205  
 Ile Ile Ala Ser Ala Arg Leu Gln Leu Ser Met Arg His Asn Ala Thr  
 210 215 220  
 Val Pro Arg Gly Asp Val Arg Ala Leu Leu Asp Arg Phe Ala Ala Thr  
 225 230 235 240  
 Leu Gln Arg Val Thr Ala Asn His Asp Ala Thr Val Ser Ser Val Asp  
 245 250 255  
 Ile Met Pro Pro Ala Glu Arg Gln Leu Leu Leu Asp Tyr Gly Lys Ala  
 260 265 270  
 Pro Leu Lys Pro Lys Ser Gly Met Ala His Ser Leu Ile Glu Glu Gln  
 275 280 285  
 Ala Lys Ala Arg Pro Asp Ala Ala Ala Val Gln Tyr Glu Thr Glu Pro  
 290 295 300  
 Pro Leu Thr Phe Ser Ala Leu Asn Thr Arg Ala Asn Gln Leu Ala Arg  
 305 310 315 320  
 Gln Ile Arg Pro Tyr Gly Thr Lys Tyr Ile Ala Val His Leu Arg Met  
 325 330 335  
 Ser Thr Xaa Phe Ile Val Ala Leu Leu Ala Ile Leu Lys Ser Gly Ala  
 340 345 350  
 Ala Tyr Val Ile Leu Asn Pro Asp Ala Leu Ala Ala Gly Asn Pro Ser  
 355 360 365  
 Ser Ser Lys Asn Ser Ser Leu Gly Trp Val Leu Val Asp Ile Ser Thr  
 370 375 380  
 Ala Gly Glu Leu Ala Asn Glu Val Gln Leu Gly Ser Leu Leu Ser Gln  
 385 390 395 400  
 Ala Ser Ser His Asp Thr Gly Asp Leu Leu His Val Gln Asp Pro Ser  
 405 410 415  
 Ser Val Ala Tyr Val Ile Tyr Thr Ser Gly Ser Thr Gly Lys Pro Lys  
 420 425 430  
 Pro Thr Leu Leu Glu His Gln Ala Val Phe Asn Gly Leu Leu Ala Phe  
 435 440 445  
 Pro Pro Ile Glu Gly Leu Arg Gln Leu Leu Phe Phe Asn Pro Ala Phe  
 450 455 460  
 Ser Ala Ala Gln Arg Ser Ile Trp Ala Thr Leu Ala Val Gly Gly Cys  
 465 470 475 480  
 Leu Cys Leu Ala Ser Lys Glu Asn Leu Thr Val His Thr Ala Lys Met  
 485 490 495  
 Ile Asn Thr Met Asp Ile Asn Ser Val Asp Met Thr Ser Ser Ala Ala  
 500 505 510  
 Ala Leu Ile Ser Pro Asp Asp Val Pro Ser Leu Arg Arg Met Val Leu  
 515 520 525  
 Gly Gly Glu Met Val Asn Pro Ala Val Ile Gln Arg Trp Glu His Arg  
 530 535 540

## 17608

Val Glu Leu Leu Ser Ser Tyr Gly Leu Ser Glu Cys Thr Gln Leu Asn  
 545 550 555 560  
 Trp Arg His Arg Leu Gln Ser Asn Val Ser Ser Arg Leu Ile Gly Gln  
 565 570 575  
 Pro Tyr Asp Thr Thr Thr Ser Tyr Ile Leu Leu Pro Gly Thr Thr Glu  
 580 585 590  
 Leu Ala Pro Leu Leu Val Pro Gly Glu Leu Cys Leu Gly Gly Ala Gln  
 595 600 605  
 Leu Ala Arg Gly Tyr Leu His Arg Pro Asp Glu Thr Ala Lys Arg Phe  
 610 615 620  
 Ile Pro Asn Pro Phe Gly Lys Gly Lys Leu Tyr Arg Thr Gly Asp Met  
 625 630 635 640  
 Ala Val Arg His Ala Asp Gly Ser Val Glu Leu Ile Gly Arg Ile Asp  
 645 650 655  
 Phe Gln Val Lys Ile Asn Gly His Arg Val Asp Pro Gly Glu Pro Asn  
 660 665 670  
 Ser Ile Ile Gln Ala Ile Glu Glu Val Glu Asp Ser Ala Val Val Pro  
 675 680 685  
 Ala Ser Val Asn Asn Arg Thr Val Leu Val Ala Ala Val Val Ser Arg  
 690 695 700  
 Pro Asp Thr Glu Trp Glu Ala Leu Val Arg Lys Leu Arg Pro Phe Leu  
 705 710 715 720  
 Ala Ala Arg Leu Pro Leu Tyr Met Val Pro Gln Phe Trp Val Ser Met  
 725 730 735  
 Pro Ala Leu Pro Val Asn Ala Asn Gly Lys Ile Asp Leu Val Ala Ile  
 740 745 750  
 Arg Arg Thr Val Glu Ala Leu Gly Glu Ser Gly Gln Leu Leu Pro Glu  
 755 760 765  
 Arg Ser Ser Ile Gly Ser Arg Glu Glu Arg Asp Leu Thr Asp Ser Glu  
 770 775 780  
 Lys Val Val Arg Ser Leu Trp Ala Lys Val Leu Ser Leu Ser Glu Ser  
 785 790 795 800  
 Glu Ile Ser Leu Glu Asp Ser Phe Ile Ser Leu Gly Gly Thr Ser Leu  
 805 810 815  
 Glu Ala Ile Gln Val Val Ser Gln Leu Gln Val Leu His Gln Leu Ser  
 820 825 830  
 Leu Arg Val Glu Asp Ile Leu Leu Gly Glu Thr Leu Phe Gln Val Ala  
 835 840 845  
 Ala Ala Val Gln Pro Gln Pro Val Glu Gly Lys Pro Asp Asn Asp Thr  
 850 855 860  
 Ile Ser Ala Ala Leu Phe Glu Val Ala Pro Ser Ile Glu Ser Val Gly  
 865 870 875 880  
 Ile Ser Ile Ser Ser Ile Glu Asp Ala Phe Pro Val Thr Pro Phe Gln  
 885 890 895  
 Glu Ala Ala Ile Ala Asn Thr Met Met Gly Gly Thr Ser Tyr Ile Tyr  
 900 905 910  
 Arg Arg Ser Tyr Ser Phe Glu Gly Tyr Ser Pro Asp Asp Val Lys Ala  
 915 920 925  
 Ala Phe Glu Thr Leu Met Lys Ser Asp Gly Trp Leu Arg Thr Thr Tyr  
 930 935 940  
 Val Pro His Gly Thr Ser Phe Leu Gln Val Val Lys Lys Thr Ala Asp  
 945 950 955 960  
 Leu Pro Trp Glu Thr Ser Asp Met Asp Val Thr Glu Tyr Leu Gln Lys  
 965 970 975  
 Gln Thr Ser Lys Gly Met Tyr Pro Gly Glu Leu Trp Trp Thr Ala Ala  
 980 985 990

## 17609

Ala Leu Pro Asn Asn Val Leu Val Ile Thr Ala His His Ala Leu Phe  
 995 1000 1005  
 Asp Phe Trp Ser Asn Glu Phe Leu Ile Gln Asp Leu Thr Ser Val Leu  
 1010 1015 1020  
 Gln Gly Thr Pro Arg Ile Gln Arg Arg Gly Phe Arg Pro Tyr Val Glu  
 1025 1030 1035 1040  
 Tyr Leu Gln Gln His Asp Pro Val Ala Met Gln Glu Phe Trp Gln Gly  
 1045 1050 1055  
 Tyr Leu Glu Gly Ala Val Pro Ser His Leu Gly Ser Gln Ile Ala Pro  
 1060 1065 1070  
 Glu Asn Thr Val Ala Ala Glu Val His Cys Asp Leu Lys Arg Thr Ala  
 1075 1080 1085  
 Ser Gln Arg Arg Val Thr Pro Gly Val Leu Leu Tyr Ala Ala Trp Ala  
 1090 1095 1100  
 Ile Val Leu Gly Leu Ala Asn Ser Thr Glu Asp Val Val Met Gly Val  
 1105 1110 1115 1120  
 Thr Phe Ser Gly Arg Asp Ala Pro Leu Ala Gly Val Leu Gln Met Ser  
 1125 1130 1135  
 Gly Pro Thr Leu Met Val Ala Pro Leu Arg Val Lys Val Asn Lys Val  
 1140 1145 1150  
 Thr Pro Leu Asp Lys His Leu Glu Asp Val Gln Ser Asn Leu Trp Ala  
 1155 1160 1165  
 Val Ala Arg Asn Ala Pro Tyr Gly Leu Arg Lys Ile Leu Lys Ala Ser  
 1170 1175 1180  
 Gly Gln Ala Lys Asp Leu Phe Asp Thr Met Val Asn Phe Leu Ile Lys  
 1185 1190 1195 1200  
 Ile Pro Thr Ser Thr Pro Ala Gly Gly Leu Arg Gln Leu Pro Glu Ser  
 1205 1210 1215  
 Asn Leu Gly Thr Val Glu Tyr Thr Arg Ile Glu Leu Arg Asn Glu Ser  
 1220 1225 1230  
 Leu Asn Arg Val Thr Leu Thr Ser Thr Leu Glu Pro Arg Tyr Ala Gln  
 1235 1240 1245  
 Ala Leu Ala Asp Thr Leu Ala Ala Ile Leu Gly Ala Ala Ser Asp Gln  
 1250 1255 1260  
 Pro Leu Thr Lys Leu Gly Glu Phe Arg Leu Val Gln Pro Val Pro Arg  
 1265 1270 1275 1280  
 Leu Met Glu Arg Leu Asp Asp Pro Val Gly Ser Val Pro Val Ser Ala  
 1285 1290 1295  
 Val His Thr Ile Gln Ala Glu Asp Arg Val Glu Ser Pro Gly Gly Glu  
 1300 1305 1310  
 Leu Ala His Ser Ala Leu Gln Thr Met Ala Val Ser His Pro Ser Arg  
 1315 1320 1325  
 Thr Ala Val Glu Asp Ile Ser Gly Ala Arg Ile Thr Tyr Ala Gly Leu  
 1330 1335 1340  
 Ala Ile Lys Met Asn Gln Leu Ala Gly Leu Leu Arg Glu Arg Gly Leu  
 1345 1350 1355 1360  
 Glu Leu Glu Gln Ile Val Pro Ile Met Leu Glu Lys Ser Ile Asn Thr  
 1365 1370 1375  
 Ile Val Ala Met Phe Gly Ile Leu Val Ala Gly Gly Ala Phe Leu Pro  
 1380 1385 1390  
 Leu Gly Pro Lys Asn Pro Pro Gly Lys Lys Leu Gly Asn Pro Arg Arg  
 1395 1400 1405  
 Leu Arg Cys Gln Thr Gly His Cys Gly Ser Ala Glu Cys Arg Leu Phe  
 1410 1415 1420  
 Pro Arg His Leu Pro  
 1425

<210> 40310  
 <211> 355  
 <212> PRT  
 <213> A.fumigatus

<400> 40310

Gly	Gly	Tyr	Gly	Ser	Ala	Arg	Ala	Phe	Tyr	Ile	Asn	Leu	Cys	Val	Gly
1				5				10						15	
Ala	Val	Cys	Ala	Pro	Val	Tyr	Leu	Phe	Leu	Leu	Pro	Asn	Lys	Asp	Pro
			20					25					30		
Arg	Pro	Gly	Val	Ser	Leu	Gln	Glu	Arg	Ala	Asn	Thr	Met	Asp	His	Ile
			35				40					45			
Gly	Gly	Ile	Leu	Thr	Ile	Gly	Ala	Met	Val	Thr	Gly	Val	Met	Ala	Val
	50					55					60				
Ser	Phe	Gly	Gly	Val	Met	Tyr	Pro	Trp	Asn	Ser	Gly	Arg	Ile	Ile	Gly
65				70					75					80	
Leu	Phe	Cys	Cys	Ser	Gly	Ala	Leu	Phe	Ile	Leu	Leu	Gly	Ile	Gln	Gln
			85					90						95	
Val	Phe	Thr	Ile	Tyr	Thr	Ser	Val	Ala	His	Arg	Val	Val	Pro	Val	Glu
			100					105					110		
Phe	Phe	Lys	Ser	Arg	Thr	Val	Leu	Ile	Leu	Phe	Ala	Ala	Thr	Ala	Ala
		115					120					125			
Gly	Gly	Thr	Ala	Ile	Phe	Val	Pro	Val	Tyr	Met	Ala	Pro	Leu	Tyr	Phe
	130					135					140				
Gln	Phe	Thr	Arg	Gly	Asp	Ser	Thr	Leu	Glu	Ser	Gly	Val	Arg	Leu	Leu
145				150					155					160	
Pro	Phe	Ile	Ile	Leu	Met	Ile	Val	Ala	Val	Met	Thr	Asn	Gly	Ala	Leu
				165				170						175	
Leu	Ser	Lys	Phe	Gly	Leu	Tyr	Met	Pro	Trp	Tyr	Leu	Val	Gly	Gly	Val
			180					185					190		
Leu	Val	Val	Ile	Gly	Ala	Ala	Leu	Met	Tyr	Thr	Val	Gly	Leu	Thr	Thr
	195						200					205			
Ser	Val	Ala	His	Val	Tyr	Gly	Tyr	Thr	Ile	Leu	Ile	Gly	Val	Gly	Val
	210					215					220				
Gly	Phe	Phe	Ala	Gln	Ala	Ser	Phe	Ser	Val	Ala	Gln	Ala	Thr	Val	Ala
225				230					235					240	
Pro	Glu	Leu	Val	Pro	Ser	Ala	Val	Gly	Phe	Ile	Ser	Leu	Ala	Gln	Ile
				245				250					255		
Thr	Gly	Ile	Thr	Leu	Ala	Leu	Ala	Ile	Ala	Asn	Ala	Val	Phe	Phe	Asn
		260					265						270		
Glu	Ser	Val	Arg	Ser	Leu	Lys	Thr	Ile	Leu	Pro	Gly	Val	Asp	Pro	Gly
	275					280						285			
Gln	Ile	Lys	Asp	Thr	Ile	Ser	Gly	Thr	Arg	Ser	Glu	Phe	Phe	Gln	Ser
	290					295					300				
Leu	Glu	Pro	Gly	Val	Arg	Glu	Gln	Val	Leu	Glu	Ala	Leu	Val	Asp	Ala
305				310					315					320	
Leu	Ser	Lys	Ser	Tyr	Ile	Leu	Val	Met	Thr	Ala	Gly	Ala	Leu	Val	Ala
			325					330					335		
Val	Leu	Ser	Leu	Leu	Met	Lys	Arg	Glu	Lys	Leu	Phe	Leu	Ala	Pro	Pro
			340				345						350		
Gly	Gly	Ser													
		355													

<210> 40311  
 <211> 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40311

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Val Arg Val Lys Leu Asn Asn Val Pro Phe Gln Lys Gln Leu Leu Met
1          5          10          15
Ile Leu Leu Ala Thr Gly Asn Lys Tyr His Lys Val Leu Ser Gly Asp
20          25          30
Asn Cys Trp Ala Ile Ala Asn Gln Tyr Gly Ile Ser Leu Asp Gln Phe
35          40          45
Tyr Ser Trp Asn Pro Ala Val Lys Pro Thr Ser Cys Gln Ser Leu Leu
50          55          60
Pro Asp Tyr Tyr Val Cys Val Gly Val Ala Gly Met Leu Leu Ser Arg
65          70          75          80
Ser His Tyr Ser Pro His Leu Ala Met Tyr Leu Leu Ser Asp
85          90

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&lt;210&gt; 40312

&lt;211&gt; 516

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40312

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Arg Cys Cys Gly Gln Ser Ile Leu Ile Gly His Ile Glu Arg Asn His
1          5          10          15
Val Leu Leu Tyr Ala Phe Val Met Phe Val Ala Ser Ser Ser Ser Pro
20          25          30
Ser Thr Ala Pro Gly His Asn Leu Gly Leu Ile Leu Lys Ser Asp Gly
35          40          45
Cys Arg Met Asp Arg Phe Ile Ser Arg Lys Arg Pro Arg Pro Ser Pro
50          55          60
Ser Ala Gly Gln Gln Thr Pro Ala Pro Asp Glu Asp Ser Thr Asp Met
65          70          75          80
Lys Leu Ala Met Leu Leu Ser Leu Phe Pro Asp Ile Glu Gln Asp Ala
85          90          95
Leu Leu Asp Ile Leu Ile Ser Ser Gly Gly Ser Val Glu Asp Ala Ser
100          105          110
Ala Val Ile Thr Ala Gln Arg Ala Tyr Lys Pro Val Lys Lys Arg Ala
115          120          125
Gly Gly Val Pro Ala Ile Gln Thr Ser Met Thr Ser His Ile Thr Thr
130          135          140
Glu Ala Gly Leu Pro Pro Lys Arg Gln Leu Thr Arg Lys Gly Lys Thr
145          150          155          160
Leu His Leu Phe Ser Pro Glu Asp Val Ala Ala His Thr Pro Cys Ser
165          170          175
Ile Ile His Asn Phe Leu Pro Pro Asp Glu Ala Asp Ala Leu Leu Leu
180          185          190
Glu Leu Leu Asp Glu Ser Lys His Phe Ser Arg Tyr Arg Phe Gln Leu
195          200          205
Phe Asp Arg Thr Val Glu Ser Pro His Thr Ser Ser Leu Tyr Val Ala
210          215          220
Thr Pro Glu Glu Ile Arg Gln Gln Thr Ser Glu Tyr Thr Tyr Gly Gly
225          230          235          240
Arg Tyr Arg Ser Asn Val Arg Gln Leu Thr Pro Tyr Leu Arg Ala Val
245          250          255
Ser Ala Lys Val Gln Arg Ala Val Asn Asp Glu Val Gln Lys Arg Ile

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	260		265		270										
Arg	Ala	Cys	Tyr	Pro	Gly	Gly	Lys	Lys	Leu	Lys	Tyr	Gln	Ser	Pro	Lys
	275						280					285			
Glu	Trp	Val	Pro	Asn	Ala	Ala	Phe	Val	Asn	Cys	Tyr	Asp	Gly	Pro	Ala
	290					295					300				
Glu	Ser	Val	Gly	Tyr	His	Ser	Asp	Glu	Leu	Thr	Tyr	Leu	Gly	Pro	Arg
305					310					315					320
Ala	Ile	Ile	Gly	Ser	Leu	Ser	Leu	Gly	Val	Glu	Arg	Glu	Phe	Arg	Val
				325					330					335	
Arg	Arg	Ile	Val	Ala	Ser	Asp	Asp	Asp	Ala	Glu	Asn	Asn	Ser	Glu	Val
			340				345						350		
Ser	Phe	Met	Val	Ser	Thr	Ala	Asp	Ser	Pro	Ser	Arg	Arg	Lys	Thr	Thr
	355						360					365			
Ser	Lys	Gly	Ile	Asp	Gly	Arg	Gly	Asp	Ala	Gln	Gly	Gln	Ile	Ser	Ile
	370				375					380					
His	Leu	Pro	His	Asn	Ser	Leu	Leu	Val	Met	His	Ala	Glu	Met	Gln	Glu
385				390					395						400
Glu	Trp	Lys	His	Ala	Ile	Val	Pro	Ala	Gln	Thr	Val	Ser	Pro	His	Pro
			405					410						415	
Leu	Ser	Gly	Asn	Arg	Arg	Ile	Asn	Ile	Thr	Tyr	Arg	Trp	Tyr	Arg	Asp
			420				425					430			
Ser	Leu	His	Pro	Arg	Asn	Ile	Pro	Arg	Cys	Arg	Cys	Gly	Thr	His	Ala
	435					440			445						
Ile	Leu	Arg	Cys	Val	Gln	Arg	Lys	Arg	Glu	Asn	Lys	Gly	Arg	Tyr	Met
	450				455				460						
Trp	Met	Cys	Tyr	Ala	Gly	His	Glu	Pro	Gly	Lys	Lys	Gly	Cys	Thr	Phe
465					470				475						480
Phe	Gln	Trp	Ala	Glu	Phe	Asp	Asp	Asp	Gly	Glu	Pro	Leu	Trp	Glu	Ile
			485					490					495		
Lys	Pro	Thr	Glu	Gly	Gly	Ala	Pro	Thr	Leu	Arg	Asn	Phe	Ile	Glu	Glu
			500				505					510			
Asp	Asp	Lys	Gln												
	515														

&lt;210&gt; 40313

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40313

Pro	Arg	Gly	Val	Leu	Arg	His	Phe	Lys	Gly	Arg	Ala	Gly	Glu	Leu	Gly
1				5					10					15	
Lys	Cys	Trp	Thr	Thr	His	Val	Pro	Val	His	Asn	Ser	Asp	Gly	Lys	Phe
			20					25					30		
Lys	Asn	Pro	Ser	Leu	Lys	Glu	Asn	Cys	Arg	Leu	Gln	Asn	Gly	His	Ser
	35					40					45				
Tyr	Cys	Val	Ala	Ala	Ser	Asp	Leu	Thr	Thr	Arg	Ser	Thr	Asp	Ser	Ala
	50					55				60					
Glu	Glu	Ala	Ser	Arg	Met	Asp	Met	Ala	Thr	Gly	Val	Glu	Ala	Ala	Asp
65				70					75						80
Leu	Pro	Ser	Pro	Thr	Gln	Gly	Gly	Leu	Ala	Ala	Asn	Cys	Asn	Ala	Phe
				85				90						95	
Tyr	Lys	Val	Lys	Thr	Gly	Asp	Ser	Cys	Trp	Ser	Ile	Ile	Asn	Asp	Phe
			100				105						110		
Gly	Asn	Phe	Ser	Ile	Tyr	Asp	Phe	Tyr	Arg	Trp	Asn	Pro			
	115						120					125			

17613

<210> 40314  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus

<400> 40314  
 Tyr Gln Phe Glu Tyr Leu Leu Pro Val Thr Ser Asn Ser Lys Glu Ser  
 1 5 10 15  
 Thr Thr His Cys Met Met Ser Leu Leu His Ser Glu Trp Thr Ala Phe  
 20 25 30  
 Leu Ala Gln Asn Pro Thr Val Ser His Asp Asp Glu Ser Arg Asn Arg  
 35 40 45  
 Arg Phe Leu Ser Ser Pro Glu Gly Arg Val Leu Ala Glu Gln Val Ser  
 50 55 60  
 Ser Val Asp Thr Thr Val Pro Ala Arg Asp Asn His Leu Ile Pro Ile  
 65 70 75 80  
 Arg Ile Tyr Thr Pro Lys Asp His Ser Ser Asp Ala Val Val Ile Phe  
 85 90 95  
 Tyr His Ser Gly Gly Phe Val Gln Gly Ser Leu Asp Thr Glu Asp Ser  
 100 105 110  
 Met

<210> 40315  
 <211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 40315  
 Pro Thr Leu Thr His Arg Val Asn Lys Leu Thr Glu Ile Lys Val Ser  
 1 5 10 15  
 Cys Arg His Met Ala Leu Gly Gly Pro Ser Thr Val Ile Ser Val Asp  
 20 25 30  
 Tyr Arg Leu Ser Pro Ala His Gln Tyr Pro Ile Pro Leu Asn Asp Gly  
 35 40 45  
 Trp Asp Ser Phe Glu Tyr Ile Ile Thr Asn Leu Pro Thr Leu Leu Pro  
 50 55 60  
 Lys His Gly Ala Ser Ala Arg Val Val Ile Ser Gly Thr Ser Ser Gly  
 65 70 75 80  
 Gly Gln Ile Ala Ala Ile Val Ser  
 85

<210> 40316  
 <211> 192  
 <212> PRT  
 <213> A.fumigatus

<400> 40316  
 Ala Asp Ala Glu Trp His Arg Thr Cys Gln Met Val Cys Leu Ile Val  
 1 5 10 15  
 Asp Tyr Ser Gln Pro Glu Leu Asn Ile Asp Lys Val Ile Arg Phe Thr  
 20 25 30  
 Thr Gln Asp Ser Leu Tyr Asp Leu Ala Trp Ser Glu Ile His Glu Asn  
 35 40 45  
 Gln Ile Leu Thr Ala Ser Gly Asp Gly Ser Ile Lys Leu Phe Asp Cys

## 17614

50		55		60
Asn Leu Glu Asp Phe Pro Val Gln Asn Trp Lys Glu His Asn Arg Glu				
65		70		75
Val Phe Ser Val His Trp Asn Leu Val Ala Lys Asp Thr Phe Cys Ser				80
	85		90	95
Ser Ser Trp Asp Gly Thr Val Arg Val Trp Ser Pro His Arg Pro His				
	100		105	110
Ser Leu Leu Thr Leu Pro Thr His Ser Cys Thr Tyr Ser Ala Ala Phe				
	115		120	125
Ser Pro His Ser Pro Asp Ile Leu Ser Cys Val Thr Ser Asp Ser Tyr				
	130		135	140
Val Arg Ile Phe Asp Leu Arg Thr Pro Ala Ser Ala Ser Asn His Leu				
	145		150	155
Thr Leu Gln Ile Pro Ile His Ala Ala Pro Ala Ser Pro Ile Pro Gly				
	165		170	175
Lys Ala Ser Ser Pro Pro Gly Ala Gly Ser Lys Arg Ala Thr Ala Lys				
	180		185	190

&lt;210&gt; 40317

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40317

Pro Val Leu Ser Ser Val Tyr Phe Asn Cys Ser Phe Gln Thr Leu Tyr				
1	5		10	15
Pro Val Phe Cys Thr Met Leu His Phe Arg Thr Glu Gly Tyr Asn Gly				
	20		25	30
Cys Ala Val Lys Tyr Ser Pro Phe Phe Asp Asn Arg Leu Ala Val Ala				
	35		40	45
Ala Ser Ala Asn Phe Gly Leu Val Gly Asn Gly Arg Leu Phe Ile Leu				
	50		55	60
Glu Leu Thr Pro Asn Gly Ile Val Pro Ala Lys Trp Tyr Val Ser Leu				
	65		70	75
Ser Thr Ile His Ser Arg Asn Ser Thr Leu Thr Arg				
	85		90	

&lt;210&gt; 40318

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40318

Arg Ser Glu Lys Val His Ser Arg Thr Tyr Cys Ile Ser Ala Ser Gly				
1	5		10	15
Tyr Phe Leu Gly Leu Arg Ser Leu Phe Phe Ala Cys Ala Ser Gln Pro				
	20		25	30
Trp Ile Arg Asp Ser Phe Ser Tyr Phe Leu Thr Phe Leu Ala Glu Asn				
	35		40	45
Asn Ala Cys Asp Ile Ala Phe Leu Phe Ile Leu Asp Ser Ala Ile Ile				
	50		55	60
Ile Ile Tyr Ile Gln Leu His Ser Ser Tyr Pro Pro Ile Arg Arg Asn				
	65		70	75
Gln Glu Leu Gly Val Ile Pro Glu Glu Pro Lys Leu Pro Ala Val Trp				
	85		90	95
Phe Ser Ala Pro Ile Pro Pro Pro Thr Pro Pro Pro Ser Ser His Pro				



## 17615

100 105 110  
 Ser  
  
 <210> 40319  
 <211> 184  
 <212> PRT  
 <213> A.fumigatus  
  
 <400> 40319  
 Ala Leu Val Thr Asn Thr Leu Cys Ser Ala His Glu Met Glu Lys Gln  
 1 5 10 15  
 Tyr Ser Cys Gln Phe Cys Asn Asn Arg Phe Lys Asn Lys Asn Glu Ala  
 20 25 30  
 Glu Arg His Gln Asn Ser Leu His Leu Arg Arg His Ser Trp Ser Cys  
 35 40 45  
 Ala Ala Leu Pro Gly Tyr Gln Ala Ala Phe His Pro Ser Thr Ser Pro  
 50 55 60  
 Thr Ala Gln Thr Asn Ser Gly Pro Ser His Asp Ala Cys Gly Tyr Cys  
 65 70 75 80  
 Gly Glu Glu Phe Pro Asn Phe Pro Gln Pro Asp Trp Asp Arg Arg Phe  
 85 90 95  
 Glu His Leu Thr Ser Val His Lys Phe Gly Glu Cys Asn Asn Gly Lys  
 100 105 110  
 Lys Phe Tyr Arg Ala Asp His Phe Arg Gln His Leu Lys His Ser His  
 115 120 125  
 Ala Gly Thr Ser Gly Lys Trp Thr Asn Val Leu Glu Asn Ala Cys Met  
 130 135 140  
 Lys Glu Glu Ala Pro Pro Glu Leu Lys Asp Thr Thr Arg Ser Ser Gly  
 145 150 155 160  
 Ala Gly Ser Ala Ala Pro Glu Thr Thr Gly Ser Leu Thr Ser Asn Lys  
 165 170 175  
 Ile Ser Glu Val Leu Ser Pro Cys  
 180  
  
 <210> 40320  
 <211> 551  
 <212> PRT  
 <213> A.fumigatus  
  
 <400> 40320  
 Leu Arg Trp Thr Met Asp Phe Pro Arg Leu Ser Pro Pro Leu Ile Asn  
 1 5 10 15  
 Val His Glu Ile Asn Ser Gly Gly Tyr Asp Gln Ser His Ser Thr Asp  
 20 25 30  
 Gly Ser Pro Lys Asn Met Ser Gly Gln Ser Tyr Ser Pro Leu Arg Pro  
 35 40 45  
 Met Pro Ile Pro Val Lys Ser Ile Thr Asn Phe Ala Pro Pro Pro Leu  
 50 55 60  
 Pro Pro Pro Thr His Ile Thr Asp Leu Glu Asp Gly His Asp Ala Gly  
 65 70 75 80  
 Trp Leu Phe Ala Asn Ala Arg Asn His Pro Gly Ser Ala Lys Leu Ala  
 85 90 95  
 Pro Ile Asn Pro Gly Ser Ser Leu Phe Gly Gly His Arg Arg Leu Glu  
 100 105 110  
 Ser Val Cys Lys Thr Asp Arg Met Ala Leu Asp Glu Leu Asp Gly Arg

## 17616

115	120	125
Gln Ser Gly Leu Pro Val	Ser Thr Ser Pro Lys	Ala His Ile Lys Ile
130	135	140
Glu Pro Pro Pro Ala Met	Glu Glu Gly Phe Arg	Asn Ser Ile Thr Ile
145	150	155
Asn Ala Pro Gly Ser Ile	Leu Lys Gly Glu Arg	Asp Phe Ser Arg Arg
165	170	175
Ser Val Lys Asp Ser Ser	Asp Ala Tyr Asp	Gln His Leu Leu Ser Lys
180	185	190
Ile Gly Lys Pro Leu Ser	Pro Arg Gln Ser Ile	Ser Leu Gly Asn Glu
195	200	205
Thr Lys Ala Ser Leu Ser	Thr Leu Pro Ile Pro	Pro Arg Asn Phe Gly
210	215	220
Gly Leu Pro Ser Pro Gly	Val Ser Asp Gly Pro	Thr Leu Asp Val Arg
225	230	235
Trp Pro Ser Asn Ser Gln	Ser Gly Ala Ile Ser	Pro Gly Thr Lys Val
245	250	255
Gly Trp Arg Asp Tyr Leu	Gly His Arg Ser Pro	Ser Val Glu Ser Ser
260	265	270
Ala Pro Ser Ser Ala Val	Glu Tyr Asp His Ser	Ala Phe Leu Arg Asp
275	280	285
Val Tyr Arg Arg Arg Gly	Gly Gly Thr Thr Pro	Gln Ser Glu Glu Thr
290	295	300
Leu Ser Leu Pro Ser Arg	Ser Asn Arg Gly Ser	Tyr Asp Gln Gly Val
305	310	315
Phe Ser Asp Ile Glu Gly	Asp Phe Ser Thr Asp	Glu Ser Leu Pro Ser
325	330	335
Arg Tyr Phe Asn Leu Arg	Glu Ala Thr Pro Pro	Tyr Leu Asp Ala Ser
340	345	350
Lys Ser Gly Thr Lys Arg	Arg Ala Ser Ser Pro	Pro Arg Glu Pro Val
355	360	365
Gln Asp Asp Arg His Ala	Pro His Val Thr Thr	Cys Asn Gly Asp Leu
370	375	380
Ser Gln Arg Arg Thr Ser	Gly His Pro Tyr Ala	Asn Thr Leu Ser Val
385	390	395
Asn Gly Gly Tyr Ile Gln	Ser His Gly Thr Leu	Ser Ala Ala Ser Ser
405	410	415
Leu Ser Leu Arg Thr Ser	Gly Thr Tyr Ser Ser	Ala Ala Met Ser Ile
420	425	430
Gly Gly Ser Ser Met Thr	Ser Met Ser Thr Phe	Asp Arg Pro Ser Pro
435	440	445
Gly Gly Leu Ser Pro Ser	Ser Asp Phe Asp Ala	Leu Asn Asp Arg Pro
450	455	460
Pro Ile Ser Ser Thr Ser	Pro Gly Gly Leu Pro	Ser His Gln Ser Val
465	470	475
Arg Asn Ala Gln Val Pro	Asp Ala Ser Glu Leu	Arg Asn Ala Asp Ser
485	490	495
Thr Thr Lys Leu Ser Leu	Gln Thr Thr Leu	Asn Val Pro Lys Ser Ala
500	505	510
Ala Pro Lys Met Ala Gly	Leu Tyr Ile Cys Asp	Cys Cys Pro Lys Lys
515	520	525
Pro Lys Lys Phe Asp Ser	Pro Ala Glu Leu Arg	Tyr Asp Leu Thr Ile
530	535	540
Leu Ser Ala Val Thr Glu	His	
545	550	

17617

<210> 40321  
<211> 61  
<212> PRT  
<213> A.fumigatus

<400> 40321  
Tyr Leu Leu Leu Tyr Arg Tyr Val Leu Gly His Glu Ala Met Lys Arg  
1 5 10 15  
Met Ser Ser Ser Asn Val Leu Val Val Gly Met Lys Gly Leu Gly Val  
20 25 30  
Glu Ile Gly Lys His Asn Ile Trp Phe Ala Lys Tyr Gly Gln Arg Leu  
35 40 45  
Thr Ser Ser Phe Ser Gln Glu Arg Cys Pro Cys Trp Gly  
50 55 60

<210> 40322  
<211> 82  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (66), (76)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40322  
Arg Ala Leu Ser Ala Lys Asn Val Ala Leu Ala Gly Val Lys Ser Leu  
1 5 10 15  
Thr Leu Tyr Asp Pro Ala Pro Val Val Ile Ser Asp Leu Ser Ser Gln  
20 25 30  
Phe Phe Leu Gln Pro Gln Asp Val Gly Lys Pro Arg Ala Glu Val Thr  
35 40 45  
Ala Pro Arg Val Ala Glu Leu Asn Ser Tyr Val Pro Gly Thr Val Gly  
50 55 60  
Pro Xaa Leu His Asp Gly Pro Glu Thr Arg Tyr Xaa Leu Trp Val Pro  
65 70 75 80  
Lys Gly

<210> 40323  
<211> 61  
<212> PRT  
<213> A.fumigatus

<400> 40323  
Arg Ile Lys Leu Gly Pro Cys Val Cys Gln Ser Met Tyr Asn Ile Pro  
1 5 10 15  
Ile Phe Asp Asp Lys Pro Phe Lys Leu Arg Leu Arg Ser Asp Pro Ala  
20 25 30  
Ser Glu Glu Leu Arg Tyr Ser Met Ser Leu Thr Gln Ser Gly Ile Ser  
35 40 45  
Met Arg His Lys Arg Ser Ser Glu Phe Ser Ala Pro Gln  
50 55 60

<210> 40324  
<211> 803

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40324

Trp	Thr	Pro	Gly	Arg	Met	Leu	His	Glu	Ile	Leu	Leu	Ser	Leu	Ser	Gly
1				5					10					15	
Gln	Pro	Ser	Pro	Leu	Phe	Ala	Phe	Asn	Thr	Glu	Glu	Asp	Ile	Val	Pro
			20					25					30		
Glu	Asp	Ala	Phe	Pro	Leu	Ser	Pro	Pro	Glu	Lys	Ala	Leu	Leu	Thr	Ser
		35					40					45			
Leu	Ala	Arg	Leu	Ser	Arg	Leu	His	Ala	Lys	Leu	Arg	Glu	Gln	Thr	Ser
		50				55					60				
Leu	Ile	Ser	Ser	Ser	His	Pro	Ser	Ile	Ile	Cys	Arg	Ala	Val	Ser	Ser
65					70					75				80	
Ala	Ile	Asn	Ala	His	His	Leu	Gly	Gly	Phe	Gln	Arg	Lys	Ile	Leu	Glu
				85					90					95	
Val	Glu	Lys	Ala	Ile	Leu	Ala	Glu	Asp	Ser	Ala	Tyr	Val	Gly	Gly	Tyr
			100					105					110		
Gly	Ile	Val	Pro	Leu	Ser	Thr	Ile	Val	Gly	Glu	Phe	Ser	Pro	Trp	Thr
		115				120						125			
Arg	Arg	Leu	Glu	Trp	Leu	Trp	Asp	Val	Thr	Arg	Phe	Val	Leu	Pro	Glu
		130				135					140				
Asn	Arg	Thr	Ser	Ser	Ala	His	Gly	Cys	Thr	Gly	Ser	Ala	Leu	Ile	Asp
145					150					155				160	
Tyr	Leu	Arg	Thr	Glu	Ser	Gln	Thr	Gly	Tyr	Leu	Asp	Leu	Glu	Glu	Ile
				165					170					175	
Ala	Leu	His	Leu	Ile	Thr	Val	Ala	Glu	Ser	Ala	Trp	Ile	Arg	Gln	Leu
			180					185					190		
Ser	Thr	Trp	Leu	Leu	Tyr	Gly	Asn	Leu	Pro	Ile	Phe	Gly	Lys	Asp	Asp
		195				200						205			
Phe	Phe	Ile	Gln	Lys	Asp	Asn	Ser	Ser	Gln	Met	Asp	Asp	Ser	Ser	Ser
	210				215						220				
Ile	Thr	Asn	Phe	Val	Met	Gln	Thr	Ser	Leu	Leu	Pro	Lys	Phe	Val	Ser
225					230					235					240
Leu	His	Thr	Ala	Ser	Ser	Ile	Leu	Phe	Ile	Gly	Lys	Thr	Leu	Ser	His
			245						250					255	
Ile	Thr	Ala	Lys	Arg	Lys	Gly	Ala	Thr	Met	Gly	Phe	Asp	Ser	Gly	Ala
		260						265					270		
Pro	Pro	Val	Thr	Leu	Gln	Gly	Glu	His	Ile	Ala	His	Leu	Ala	Ser	Leu
		275					280					285			
Gly	Ser	Pro	Ile	Ser	Ala	Ser	Lys	Leu	Ser	Asn	Ala	Val	Asp	Ser	Ile
	290					295					300				
Arg	Leu	Ser	Leu	Ser	Gln	Ser	Val	Leu	Ser	Lys	Leu	Leu	Pro	Leu	Pro
305					310					315					320
Lys	Ile	Leu	Glu	Ile	Leu	Ser	Val	Leu	His	Asp	Phe	Leu	Leu	Leu	Gly
			325						330					335	
Arg	Gly	Glu	Phe	Ala	Thr	Ala	Leu	Val	Ser	His	Ala	Asp	Ala	Arg	Leu
		340					345					350			
Ser	Glu	Arg	His	Arg	Ile	Pro	Glu	Leu	Leu	Ala	Gly	Arg	Val	Arg	Ala
	355					360					365				
Gln	Thr	Glu	Leu	Glu	Gly	Leu	Val	Val	Lys	Asp	Gly	Asp	Val	Val	His
	370					375					380				
Ala	Leu	Ala	His	Thr	Trp	Ala	Glu	Leu	Tyr	Ser	Leu	Gln	Asn	Glu	Glu
385					390				395						400
Asp	Pro	Val	Asp	Glu	Ser	Leu	Asp	Leu	Ala	Arg	Asp	Leu	Val	Arg	Leu
			405					410						415	

## 17619

Ser Ile Thr Asp Ser Lys Asn Arg His Thr Val Ala Thr His Ser Asp  
 420 425 430  
 Glu Ile Gly Ser Asp Leu Val Ala Glu Leu Ser Asp Val Ser Phe Glu  
 435 440 445  
 Asp Leu Leu Phe Pro Thr Arg Thr Ser Ile Ser Val Glu Val Arg Ala  
 450 455 460  
 Pro Leu Asp Leu Phe Leu Ser Thr Ser Asp Ile Ala Val Tyr Ser Arg  
 465 470 475 480  
 Ile His Ser Tyr Leu Leu Gly Ile Arg Arg Ala Gln Ile Arg Ile Asn  
 485 490 495  
 Asp Leu Trp Lys His Ser Phe Leu Arg Lys Ser Tyr Pro Ser Pro Trp  
 500 505 510  
 Gly Pro Pro Arg Ser Asn Thr Pro Phe Gly Gln Ser Lys Leu Lys Leu  
 515 520 525  
 Gly Arg Gln Arg Asp Asn Ile Arg Leu Ser Gln Met Arg Pro Val Trp  
 530 535 540  
 Ala Thr Ser Ser Ala Ala Leu Phe Val Leu Ser Glu Ile Gly Ser Phe  
 545 550 555 560  
 Phe Gln Gly Glu Val Asn Gly Cys Trp Gln His Phe Arg Glu Trp  
 565 570 575  
 Ile Gln Gly Gly Leu Ala Thr Ala Thr Ser Ser Thr Ser Ser Arg Pro  
 580 585 590  
 Glu Thr Ser Ala Ser Leu Lys Ser Arg Tyr Ser Asp Ser Pro Ile Glu  
 595 600 605  
 Gly Arg Val Gly Ile Asp Gln Ser Ser His Ser Ala Pro Gln Arg Leu  
 610 615 620  
 Asp Pro Glu Thr Leu Thr Val Ala His His Arg Tyr Leu Phe Ser Leu  
 625 630 635 640  
 Val Gln Ser Leu Phe Leu Thr Asp Lys Pro Phe Thr Glu Ala Leu Arg  
 645 650 655  
 Ser Leu Leu Ser Leu Ile Asp His Phe Ile Ala Leu Ile Ile Arg Leu  
 660 665 670  
 Glu Ser Val Gln Lys Asn Met Asp Leu Glu Thr Asp Glu Gly Val Val  
 675 680 685  
 Asp Ala Leu Ala Asp Tyr Pro Arg Glu Glu Thr Glu Leu Leu Glu Ala  
 690 695 700  
 Leu Arg Thr Ala Arg Met Glu Val Glu Lys Gly Ile Arg Asp Val Val  
 705 710 715 720  
 Ala Arg Leu Arg Asp Ile Asp Asp Ser Arg Ser Gly Glu Gly Arg Lys  
 725 730 735  
 Met Leu Asp Leu Leu Lys His Ala Arg Ala Thr Pro Leu Ala Asp Arg  
 740 745 750  
 Lys Asn Gly Ser Gly Val Asn Ala Gln Ile Cys Gln Tyr Leu Pro Arg  
 755 760 765  
 Lys Thr Ala Gly Val Asp Gln Leu Leu Met Lys Leu Asp Phe Gly His  
 770 775 780  
 Ala Asn Gly Ser Leu Gly Thr Thr Ala Pro Val Leu Gly Asp Ser Phe  
 785 790 795 800  
 Asp Leu Glu

&lt;210&gt; 40325

&lt;211&gt; 336

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40325

Ser Ala Ile Trp Ile Glu Ala Ser Leu Pro Ser Ile Pro Gln Cys Asn  
 1 5 10 15  
 Pro Val Glu Met Asn Gln Ser Pro Leu Tyr Ala Trp Ala Ala Val Ser  
 20 25 30  
 Gln Val Lys Pro Ala Pro Pro Pro Asn Ser Gly Thr Ser Ser Thr Thr  
 35 40 45  
 Arg Ala Met Ser Pro Val Thr Ser Pro Phe Asn Leu Asp Arg Phe Tyr  
 50 55 60  
 His Pro Thr Gly Ser His His Gly Thr Thr Asn Ile Arg Gln Ala Tyr  
 65 70 75 80  
 Leu Leu Ser Glu Asp Val Arg Ala Phe Asp Ala Lys Phe Phe Ser Val  
 85 90 95  
 Pro Pro Gly Asp Ala Glu Ala Ile Asp Pro Gln Gln Arg Leu Leu Leu  
 100 105 110  
 Glu Val Thr Tyr Glu Ala Leu Glu Ser Ser Gly His Thr Leu Ala Asp  
 115 120 125  
 Leu Ser Asn Ser Asn Thr Gly Ala Phe Val Gly Leu Met Ser Gln Asp  
 130 135 140  
 Tyr Phe Ala Leu Asn Gly Gln Asp Val Asp Ser Val Pro Thr Tyr Ala  
 145 150 155 160  
 Ala Ser Gly Thr Ala Ala Ser Asn Ala Ser Ser Arg Leu Ser Tyr Phe  
 165 170 175  
 Phe Asn Trp His Gly Pro Ser Met Ala Ile Asp Thr Ala Cys Ser Ser  
 180 185 190  
 Asn Leu Val Ala Val Asn Glu Ala Val Gln Ala Leu Arg Asn Gly Thr  
 195 200 205  
 Ser Arg Val Ala Val Ala Cys Gly Thr Asn Leu Cys Leu Ser Ala Phe  
 210 215 220  
 Thr Phe Ile Thr Leu Ser Lys Leu Ser Met Leu Ser Pro Thr Ser Arg  
 225 230 235 240  
 Cys His Met Trp Asp Ala Asp Ala Asp Gly Tyr Ala Arg Gly Glu Gly  
 245 250 255  
 Val Ala Cys Val Val Leu Lys Thr Leu Ser Asp Ala Ile Ser Asp Arg  
 260 265 270  
 Asp Pro Ile Glu Ala Val Thr Arg Glu Val Gly Val Asn His Asp Gly  
 275 280 285  
 Arg Thr Lys Gly Leu Thr Met Pro Ser Ala Lys Ala Gln Ala Ala Leu  
 290 295 300  
 Ile Arg Asn Thr Tyr Ala Arg Ala Gly Leu Asp Pro Thr Lys Glu Ala  
 305 310 315 320  
 Asp Arg Cys Gln Tyr Phe Glu Ala His Gly Thr Gly Thr Lys Ala Gly  
 325 330 335

&lt;210&gt; 40326

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40326

Val Ala Pro Phe Trp Asp Pro Gln Glu Ala Glu Ala Leu Met Arg Ala  
 1 5 10 15  
 Phe Phe Pro Gln Ser Asp Ser Glu Gly Glu Leu Phe Val Gly Ser Ile  
 20 25 30  
 Lys Ala Val Ile Gly His Thr Glu Gly Thr Ala Gly Leu Ala Gly Leu  
 35 40 45

## 17621

Met Lys Ala Cys Leu Ala Leu Arg Asn Ala Thr Phe Pro Pro Asn Leu  
 50 55 60  
 Leu Phe Asn Lys Leu Asn Pro Asp Leu Glu Leu Phe Thr Ser His Leu  
 65 70 75 80  
 Arg Val Pro Thr Ala Asn Gln Pro Trp Pro Glu Leu Ser Asp Gly Thr  
 85 90 95  
 Thr Arg Arg Leu Gly  
 100

&lt;210&gt; 40327

&lt;211&gt; 318

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40327

Gly Phe His Leu Ser Val Ser Pro Glu Gln Arg Glu Ala Leu Pro Trp  
 1 5 10 15  
 Tyr Arg Gln Ala Leu Leu Lys Asn Ala Glu Leu Leu Leu His Leu Val  
 20 25 30  
 Asn Asp Gly Lys His Pro Phe Ala Pro Gln Asn Trp Val Ser Asp Thr  
 35 40 45  
 Arg Glu Asp Ile Phe Lys Met Met Asp Ser Tyr Pro Thr Thr Asp Ala  
 50 55 60  
 Asp Phe Asn Leu Thr Lys Ala Val Gly Glu His Leu Leu Leu Pro Ser  
 65 70 75 80  
 Val Leu Asn Gly Asp Thr Ser Ile Leu Gln Tyr Met Thr Lys Asp Asn  
 85 90 95  
 Tyr Leu Glu Arg Tyr Tyr Val Asp Ala Ile Gly Phe Gln Leu Leu Asn  
 100 105 110  
 Phe Leu Ile Ala Gly Val Met Glu Pro Leu Cys Leu Lys Ser Pro Arg  
 115 120 125  
 Met Asn Phe Leu Glu Val Gly Ala Gly Thr Gly Gly Ala Thr Lys Ala  
 130 135 140  
 Ile Leu Glu Lys Ile Gly Tyr Ser Tyr Ala Ser Tyr Thr Tyr Thr Asp  
 145 150 155 160  
 Ile Ser Ser Ala Phe Phe Asp His Asp Ala Gly His Phe Gln Ser His  
 165 170 175  
 Ala Ser Lys Met Ile Phe Lys Ala Leu Asp Ile Thr Lys Asp Pro Ala  
 180 185 190  
 Gly Gln Gly Phe Ile Pro Gln Ser Tyr Asp Val Ile Val Ala Ser Asn  
 195 200 205  
 Val Leu His Ala Thr Glu Ser Leu Arg Ser Ala Leu Glu His Thr Arg  
 210 215 220  
 Arg Leu Leu Arg Pro Gly Gly Tyr Leu Val Met Val Glu Ile Ile Arg  
 225 230 235 240  
 Asn Asp Val Met Arg His Gly Leu Val Met Gly Gly Leu Pro Gly Trp  
 245 250 255  
 Trp Val Gly Glu Asn Asp Gly Arg Tyr Gly Gly Pro Ser Ile Thr Leu  
 260 265 270  
 Asp Gln Trp His Lys Met Leu Arg Glu Thr Gly Phe Ser Gly Ile Glu  
 275 280 285  
 Thr Asn Ser Pro Met Arg Asp Pro Val Gly Val Pro Gly Ser Ile Ile  
 290 295 300  
 Val Ser Arg Ala Asn Gly Leu Lys Leu Ile Ser Ser Pro Ser  
 305 310 315

<210> 40328  
 <211> 131  
 <212> PRT  
 <213> A.fumigatus

<400> 40328  
 His Pro His Ser Thr Ser Thr Ala Ser Thr Thr Gln Pro Ala Ala Ile  
 1 5 10 15  
 Thr Val Pro Pro Thr Ser Ala Arg Pro Thr Ser Phe Pro Lys Thr Cys  
 20 25 30  
 Ala Arg Ser Met Gln Asn Ser Ser Pro Ser Pro Gln Val Thr Gln Arg  
 35 40 45  
 Pro Ser Thr Arg Ser Ser Ala Cys Ser Ser Lys Ser Leu Thr Arg Pro  
 50 55 60  
 Ser Asn Pro Gln Ala Ile Arg Trp Pro Thr Cys Pro Thr Arg Ile Arg  
 65 70 75 80  
 Glu Pro Ser Ser Ala Ser Cys Pro Arg Thr Thr Ser Arg Leu Met Ala  
 85 90 95  
 Arg Met Trp Thr Pro Ser Pro Leu Thr Leu Arg Leu Val Arg Arg Arg  
 100 105 110  
 Val Met Leu Pro Ala Asp Ser Leu Thr Phe Ser Thr Gly Met Ala Arg  
 115 120 125  
 Pro Trp Gln  
 130

<210> 40329  
 <211> 185  
 <212> PRT  
 <213> A.fumigatus

<400> 40329  
 Leu Cys Asp Asn Ser Val Asn Ser Phe Gly Leu Gly Gly Thr Asn Ala  
 1 5 10 15  
 His Cys Ile Leu Glu Thr Tyr Asn Pro Thr Ala Ser Asp Pro Val  
 20 25 30  
 Ile Glu Ile Asp Met Ala Ala Ser Gly Thr Cys Cys Ile Pro Ser Val  
 35 40 45  
 Phe Ser Ala Ala Ser Asp Arg Ser Leu Ala Thr Leu Leu Gln Ser Thr  
 50 55 60  
 Leu Lys Phe Met Asp Glu Asn Thr Asp Val Asn Met Ser Gly Leu Ala  
 65 70 75 80  
 Tyr Asn Leu Ser Thr Lys Arg Ser Ala Leu Gln Arg Arg Val Ala Val  
 85 90 95  
 Ser Ala Thr Ser Ile Asp Glu Leu Arg Asp Lys Ile Lys Ser Thr Ile  
 100 105 110  
 Glu Ala Ala Ser Glu Asn Asp Ala Thr Leu His Ser Thr Ser Ala Leu  
 115 120 125  
 Pro Glu Pro Ala Ser Leu Leu Gly Ile Phe Thr Gly Gln Gly Ala Gln  
 130 135 140  
 Trp Gln Gly Met Gly Ser Gln Leu Ile Ser Ser Ile Pro Leu Ala Arg  
 145 150 155 160  
 Arg Thr Val Glu Glu Leu Asp Ser Ser Leu Ala Ser Leu Pro Ser Tyr  
 165 170 175  
 His Arg Leu Ser Trp Thr Leu Glu Asp  
 180 185



<210> 40330  
 <211> 183  
 <212> PRT  
 <213> A.fumigatus

<400> 40330  
 Asp Pro Pro Phe Met Asn Pro Arg Arg Pro Ser Ser Pro Val Val Lys  
 1 5 10 15  
 Thr Leu Val Val Thr Ala Pro Ser Arg Pro Trp Pro Cys Ser Gly Asn  
 20 25 30  
 Ile Cys Ser Arg Thr Ala Tyr Leu Pro Leu Val Ile Leu Tyr Leu Ser  
 35 40 45  
 Ile Thr Ser Arg Phe Asp Ser Ile Ala Val Leu Cys Cys Ile Tyr Asn  
 50 55 60  
 Val Arg Ile Val Glu Lys Trp Phe Asp Ser Gln Asp Thr Gly Phe His  
 65 70 75 80  
 Ser Ile Leu Leu Ile Ser Tyr Leu Asp Arg Ser Ile Ser Pro Leu His  
 85 90 95  
 Pro Thr Met Gln Pro Ser Arg Asn Glu Pro Ile Ala Ile Ile Arg Met  
 100 105 110  
 Gly Cys Arg Phe Pro Gly Glu Ala Ser Ser Pro Ser Lys Leu Trp Asp  
 115 120 125  
 Leu Leu His Asn Pro Arg Asp Val Ala Arg Asp Ile Pro Ile Gln Pro  
 130 135 140  
 Arg Pro Leu Leu Pro Pro Asn Arg Gln Pro Ser Arg Tyr His Gln His  
 145 150 155 160  
 Pro Pro Gly Leu Pro Pro Phe Arg Arg Arg Ala Arg Val Arg Cys Lys  
 165 170 175  
 Ile Leu Leu Arg Pro Pro Arg  
 180

<210> 40331  
 <211> 374  
 <212> PRT  
 <213> A.fumigatus

<400> 40331  
 Lys Ile Asp Ser Thr Thr Pro Val Gly Lys Ala Ser Leu Ser Gln Pro  
 1 5 10 15  
 Leu Cys Thr Ala Val Gln Val Ile Leu Val Asp Met Leu Arg Ala Ala  
 20 25 30  
 Gly Val Lys Phe Gln Ala Val Val Gly His Ser Ser Gly Glu Ile Ala  
 35 40 45  
 Ala Ala Tyr Ala Ala Gly Phe Ile Ser Ala Trp Asp Ala Ile Arg Ile  
 50 55 60  
 Ala Asp Tyr Arg Gly Phe Tyr Ala Glu Met Ala Ala Ala Pro Gly Gly  
 65 70 75 80  
 Glu Lys Gly Ala Met Leu Ala Ala Gly Thr Ser Phe Glu Asp Ala Ser  
 85 90 95  
 Asp Leu Cys Gln Leu Asp Asp Phe Ala Gly Arg Ile Cys Val Ala Ala  
 100 105 110  
 His Asn Ser Pro Ser Ser Val Thr Leu Ser Gly Asp Ile Asp Ala Ile  
 115 120 125  
 Ala Leu Ala Arg Arg Val Leu Glu Glu Glu Glu Lys Phe Ala Arg Arg  
 130 135 140  
 Leu Lys Val Asp Thr Ala Tyr His Ser Thr His Met His Lys Cys Ser

## 17624

145                      150                      155                      160  
 Val Pro Tyr Leu Thr Ala Leu Arg Asn Cys Asn Ile Gln Val Gln Gln  
                          165                      170                      175  
 Pro Gly Pro Asp Ala Pro Gln Trp Phe Ser Ser Val Arg Asn Gly Gln  
                          180                      185                      190  
 Val Ile Ser Ser Met Glu Ser Leu Asp Ser Gln Tyr Trp Val Asp Asn  
                          195                      200                      205  
 Met Val Gln Pro Glu Leu Phe Cys Pro Ala Val Gln Thr Cys Leu Lys  
                          210                      215                      220  
 Tyr Val Asp Lys Ala Ile Asn Cys Val Val Glu Val Gly Pro His Pro  
 225                      230                      235                      240  
 Ala Leu Gln Gly Pro Ala Lys Asp Ser Ile Leu Ala Ala Val Asp Gln  
                          245                      250                      255  
 Glu Ile Pro Tyr Ser Ser Thr Leu Asn Arg Gly Lys Ser Ser Thr Val  
                          260                      265                      270  
 Ala Phe Ser Asp Thr Leu Arg Phe Leu Trp Cys Leu Phe Gly Ser Ala  
                          275                      280                      285  
 Asp Glu Thr Leu Arg Ala Phe Gln Gln Thr Asn Tyr Pro His Thr Pro  
 290                      295                      300  
 Thr Thr Met Thr Arg Gly Leu Pro Thr Tyr Pro Trp Ser His Asp Arg  
 305                      310                      315                      320  
 Gly Tyr Phe Ala Glu Ser Arg Leu Ile Lys Thr Phe His Asn His Pro  
                          325                      330                      335  
 Leu Pro Phe His Asp Leu Leu Gly Ile Gln Thr Ala Asp Gly Ala Arg  
                          340                      345                      350  
 Glu Glu Trp Gly Trp Arg Asn Ile Leu Lys Met Asn Glu Leu Lys Trp  
                          355                      360                      365  
 Leu Ser Glu His Ser Val  
 370

&lt;210&gt; 40332

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (39)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40332

Gly Gln Val Val Phe Pro Ala Thr Ala Tyr Ile Cys Leu Ala Met Glu  
 1                      5                      10                      15  
 Ala Ala Leu Gln Leu Ala Gln Gly Arg Pro Val Lys Ser Ile Asp Leu  
                          20                      25                      30  
 Phe Asp Leu Glu Ile His Xaa Ala Ile Ala Ser His Asp Ser Thr Gly  
                          35                      40                      45  
 Thr Glu Leu Leu Thr Ser Met Thr Lys Val Ser Ala Leu Asp Thr Glu  
                          50                      55                      60  
 Trp Glu Glu Ile Thr Ala Asp Phe Ser Ala Tyr Ser Thr Ile Ser Lys  
 65                      70                      75                      80  
 Asp Ala Ala Asn Leu Gly Leu Asn Cys Cys Gly Arg Val Arg Val Leu  
                          85                      90                      95  
 Leu Gly Glu Gly Glu Asp Ser Pro Ser His Phe Ser Pro Arg Leu Pro  
                          100                      105                      110  
 Pro Leu Gly Lys Leu Thr Ala Val Asp Val Asp Ser Phe Tyr Lys Ile

## 17625

```

      115              120              125
Leu Arg Asp Asp Phe Gly Phe Gly Tyr Glu Gly Pro Phe Arg Ala Leu
  130              135              140
Thr Asn Met Ser Arg Lys Thr Gly Phe Ala Thr Gly Thr Val Arg Cys
 145              150              155              160
Glu Arg Phe Asp Asp Ser Glu Thr Ser Leu Leu Phe His Pro Gly Met
      165              170              175
Leu Asp Ser Ala Leu Gln Gly Leu Asn Ala Ala His Ser Ala Pro Gly
      180              185              190
Asp Asp Arg Leu Trp Thr Ile Val Ala Pro Thr Phe Cys Arg
      195              200              205

```

<210> 40333  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40333
Arg Glu Asp Gln Tyr Val Pro Val Ser Val Glu Pro Val Thr Gln Arg
 1              5              10              15
Gly Asp Leu Phe Arg Pro Asp Arg Thr Tyr Trp Leu Ala Gly Leu Thr
      20              25              30
Gly Asp Thr Gly Arg Ser Leu Ala Asp Phe Met Ile Ala His Asn Ala
      35              40              45
Arg Asn Ile Val Leu Ser Ser Arg Thr Pro Thr Val Tyr Glu Asp Trp
      50              55              60
Val Glu Trp His Lys Ser Arg Gly Val Ser Val Arg Tyr Phe Gly Gly
      65              70              75              80

```

<210> 40334  
 <211> 158  
 <212> PRT  
 <213> A.fumigatus  
  
 <220>  
 <221> UNSURE  
 <222> (112)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 40334
Ala Lys Val Leu Val Arg Leu Lys Leu Ile Ile Ala Tyr Gln Pro Phe
 1              5              10              15
Leu Leu Arg Asp Ile Thr Ser Phe Gln Ser Val Lys Gln Ile His Asp
      20              25              30
Ala Ile Lys Glu Ser Met Pro Pro Ile Gly Gly Val Ala Asn Gly Ala
      35              40              45
Met Val Leu Arg Asp Ser Ser Phe Met Lys Val Ser Phe Asp Asp Phe
      50              55              60
Gln Ala Val Leu Gly Pro Lys Val Lys Gly Thr Ile Asn Ile Asp Arg
      65              70              75              80
Leu Phe Ser Asp Pro Asn Gln Leu Leu Asp Trp Phe Ile Gly Phe Ser
      85              90              95
Ser Val Ala Gly Thr Val Gly Asn Pro Gly Gln Ser Gly Tyr Thr Xaa
      100              105              110
Gly Ser Cys Phe Ile Lys Ala Leu Val Asp Arg Arg Arg Lys Gln Arg
      115              120              125

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## 17626

Leu Ala Gly Ser Val Ile Asp Ile Thr Pro Leu Val Gly Leu Gly Phe  
 130 135 140  
 Ile Glu Arg Glu Ser His Gly Arg Leu Asn Lys Gly Pro Leu  
 145 150 155

<210> 40335  
 <211> 322  
 <212> PRT  
 <213> A.fumigatus

<400> 40335  
 Tyr Leu Thr Val Asn Tyr Arg Ser Met Val Glu Leu Arg Ser Leu Cys  
 1 5 10 15  
 Val Tyr Cys Val Cys Thr Val Cys Val Leu Cys Val Gly Arg Tyr Ile  
 20 25 30  
 Gly Lys Leu Phe Cys Leu Ser Ile Gln Ile Pro Arg Leu Phe Pro Ile  
 35 40 45  
 Pro Ile Asp Pro Pro Pro Ala Ser Pro Asp Leu Leu Pro Arg Pro Ala  
 50 55 60  
 Gly Arg Leu His Trp Ile His Ser His Cys Gln Ala Leu Arg Arg Arg  
 65 70 75 80  
 Thr Pro Ile Arg Cys Val Arg Pro Pro Thr Ala Ala Pro Arg Ser Cys  
 85 90 95  
 Thr Ala Arg Pro Pro Arg Gly Arg Pro Arg Gly Gly Pro Pro Gln Thr  
 100 105 110  
 His Arg Pro Arg Val Cys Trp Arg Ser Pro Asp Arg Arg Cys Ser Cys  
 115 120 125  
 Ser Thr Trp Pro Arg Ser Arg Arg Asp Ala Arg Lys Thr Leu Ala Arg  
 130 135 140  
 Thr Ser Ala Ala Ser Ser His Pro Arg Ala Pro Ala Gly Ser Ser Ala  
 145 150 155 160  
 Ala Ala Arg Pro Ala Gly Arg Gly Arg Cys Arg Cys Gly Arg Arg  
 165 170 175  
 Pro Pro Ala Ala Ser Gly Thr Pro Gly Arg Pro Ala Pro Ser Gly Ser  
 180 185 190  
 Ala Pro Arg Ser Arg Pro Arg Arg Ser Thr Arg Gly Pro Cys Gly  
 195 200 205  
 Arg Ala Pro Cys Ser Glu Ser Ser Leu Pro Thr Ala Ala Arg Leu Ser  
 210 215 220  
 Ala Ser Ala Val Arg Thr Ala Pro Ala Pro Thr Ala Pro Ser Arg Ser  
 225 230 235 240  
 Ala Pro Ser Ala Pro Thr Ala Ala Pro Gln Ser Pro Trp Arg Thr Ala  
 245 250 255  
 Ser Pro Arg Ser Ile Ala Val Gly Ser Gly Pro Gly Ser Ser Ala Pro  
 260 265 270  
 Arg Gly Pro Ser Arg Gly Thr Ala Cys Ala Arg Cys Ala Arg Ser Ala  
 275 280 285  
 Ala Thr Ala Gly Pro Arg Arg Ser Ser Arg Ala Pro Gly Asn Arg Thr  
 290 295 300  
 Pro Ala Arg Ser Ser Ala Ala Ala Ala Ser Gly Ser Arg Leu His  
 305 310 315 320  
 Pro Arg

<210> 40336  
 <211> 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40336

```

His His Pro Arg Gly Gly Pro Gly Ala Ala Cys Ala Cys Pro Cys Cys
1      5      10      15
Asp Ala Gly His Leu Phe Asp Arg Trp Ser Glu Gly Asp Gly Gly Arg
      20      25      30
Ser Arg Ala Glu Ala Asp Gly Arg Gly His Gly Arg Gly Cys Gln Gly
      35      40      45
Ser Ala Gly Ser Pro Ala Gln His Arg Ala Asp Pro Ala Gly Gly Gly
      50      55      60
Glu Glu Gly Val Gly Gly Pro Leu Cys Gly Gly Glu Gln Pro Ser Gly
65      70      75      80
Arg Val Asp Gln Val Gly Cys Cys Val Arg Glu His Gln Asp Gly Ala
      85      90      95
Gly Ala Gly Pro Glu Pro Ala Val Cys Ile Ala Arg Gly Ser Val Ala
      100      105      110
Ala Ala Gly Gln Pro Arg Ser Gly Gln Trp Arg Ala Gly Ala Val Gln
      115      120      125
Val Thr Asp Ala Gly Asp Gly Gly Lys Thr Gly Ala Gly Arg Glu Gly
      130      135      140
Pro Glu
145

```

&lt;210&gt; 40337

&lt;211&gt; 826

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (11), (89)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40337

```

Phe Leu Gly Gly Gly Gly Glu Lys Lys Gly Xaa Lys Lys Lys Lys Lys
1      5      10      15
Lys Ile Phe Phe Phe Leu Gly Gly Lys Lys Lys Pro Pro Pro Lys Lys
      20      25      30
Gly Gly Gly Ser Arg Gly Pro Pro Pro Pro Lys Lys Lys Lys Arg Gly
      35      40      45
Gly Lys Lys Thr Pro Pro Lys Gly Gly Gly Lys Lys Arg Gly Gly Val
      50      55      60
Phe Phe Phe Pro Arg Gly Phe Phe Gly Pro Arg Gly Gly Gly Pro Phe
65      70      75      80
Trp Glu Lys Lys Gly Gly Lys Gly Xaa Asn Arg Gly Gly Gly Pro Pro
      85      90      95
Pro Lys Lys Gly Pro Pro Lys Lys Phe Ser Pro Pro Lys Phe Phe Leu
      100      105      110
Phe Pro Pro Arg Gly Gly Pro Lys Asn Phe Leu Gly Gly Gly Glu Lys
      115      120      125
Lys Lys Gly Lys Lys Gly Lys Lys Arg Gly Val Ser Arg Pro Asp Leu
      130      135      140
Ala Ala Lys Leu Ala Gln Ala Glu Ser Ala Arg Ser Gln Ser Ser Glu
145      150      155      160

```

Glu Thr Ser Leu Arg Leu Ala Glu Lys Asp Lys Glu Val Ala Glu Leu  
 165 170 175  
 Lys Gln Ala Val Ala Lys Ser Gln Glu Glu Leu Gln Ala Ala Arg Glu  
 180 185 190  
 Ala Ala Ala Lys Glu Leu Ser Glu Lys Ile Ala Glu Leu Glu Ala Ala  
 195 200 205  
 His Glu Ala Ala Val Ala Lys Leu Lys Ala Glu His Glu Gly Ala Leu  
 210 215 220  
 Ala Ser Ala Ala Ala Ala His Ala Gln Glu Leu Ser Val Ala Lys Gln  
 225 230 235 240  
 Ala Ala Glu Ser Ala Gly Ser Met His Ser Glu Glu Leu Gln Lys Leu  
 245 250 255  
 Arg Glu Glu Leu Asp Ala Ala Glu Ala Ala Glu Lys Gly Arg Glu  
 260 265 270  
 Glu Ala Ile Ser Glu Leu Asn Ala Ala His Gln Ala Glu Leu Lys Ala  
 275 280 285  
 Leu Gln Asp Lys Leu Asn Ala Ser Glu Gln Ala Leu Gly Glu Ala Arg  
 290 295 300  
 Gln Ala Leu Glu Ala Ser Val Ser Ser Ala Gln Ala Val Ala Val Gln  
 305 310 315 320  
 Glu Ile Glu Ser Leu Lys Glu Lys Val Gly Ala Leu Glu Ala Gln Leu  
 325 330 335  
 Ser Thr Gly Gln Gly Glu Ile Gln Ser Leu Val Glu Glu Val Gln Ser  
 340 345 350  
 Lys Gln Ala Glu Ala Glu Ala Leu His Gln Asn Leu Thr Asp Phe Glu  
 355 360 365  
 Thr Gln Leu Lys Ala Lys Asp Ala Glu Lys Asp Glu Gln Leu Arg Asp  
 370 375 380  
 Leu Lys Glu Lys Ala Ala Ala Ser Glu Lys Ala Leu Glu Glu Gln Leu  
 385 390 395 400  
 Gln Glu Ala Val Ala Val Ala Glu Arg His Ala Gln Ala Leu Glu Ala  
 405 410 415  
 Leu Lys Ala Glu His Ala Ala Ala Leu Glu Lys Ala Lys Ser Glu Ala  
 420 425 430  
 Ala Gly Ser His Glu Ser Ala Leu Ser Ala Leu Gln Ala Lys His Asp  
 435 440 445  
 Glu Leu Leu Ala Ala Asn Arg Asp Leu Glu Thr Ala His Ala Gln Lys  
 450 455 460  
 Val Ala Lys Leu Glu Ala Glu Leu Gln Ser Thr Leu Glu Arg His Ala  
 465 470 475 480  
 Gly Glu Ile Ser Ser Gln Thr Glu Leu Arg Glu Lys Glu Ile Ala Asp  
 485 490 495  
 Leu Arg Lys Asp Phe Glu Glu Thr Lys Ala Lys Leu Leu Ala Glu Leu  
 500 505 510  
 Glu Ala Ser Gln Ala Ser Lys Ala Ala Glu Ala Asp Ala Glu His Ser  
 515 520 525  
 Lys Ala Ile Glu Gln Leu Leu Thr Leu Gln Glu Glu Lys Leu Ser Ser  
 530 535 540  
 Leu Arg Ser Glu Leu Glu Ser Ser His Lys Ala Lys Leu Asp Glu Leu  
 545 550 555 560  
 Gln Lys Leu His Asp Thr Thr Leu Ala Glu Val Gln Glu Gln Leu Ala  
 565 570 575  
 His Ala Arg Ala Ala Met Gln Asp Thr Ser Leu Ile Asp Gly Leu Arg  
 580 585 590  
 Ala Thr Val Ala Asp Leu Glu Gln Lys Leu Met Asp Ala Asp Met Ala  
 595 600 605

17629

```

Val Ala Ala Lys Glu Ala Leu Ala His Gln His Ser Thr Ala Leu Thr
  610                      615                      620
Gln Leu Glu Ala Glu Lys Lys Glu Leu Glu Ala Arg Tyr Ala Ala Val
  625                      630                      635                      640
Ser Ser Gln Val Asp Glu Leu Thr Lys Ser Ala Ala Ala Ser Glu Ser
                      645                      650                      655
Ile Lys Thr Glu Leu Glu Arg Val Leu Asn Gln Leu Ser Ala Ser Arg
                      660                      665                      670
Glu Glu Val Ser Gln Leu Gln Ala Ser His Glu Ala Val Asn Gly Glu
                      675                      680                      685
Leu Glu Gln Phe Lys Ser Gln Thr Arg Ala Met Glu Glu Lys Leu Ala
  690                      695                      700
Gln Gly Glu Lys Asp Leu Asn Asp Gln Ile Glu Arg Asn Leu Ser Leu
  705                      710                      715                      720
Leu Asn Gln Leu Gly Asp Val Asp Ser Thr Ile Ser Ala Asn Arg Lys
                      725                      730                      735
Arg Val Arg Glu Leu Glu Ala Glu Leu Ala Ala Leu Lys Ala Asp Lys
                      740                      745                      750
Asp Ser Gly Lys Gly Ser Val Gly Leu Glu Gly Ser Arg Trp Ala Gly
  755                      760                      765
Glu Asp Gly Ala Asn Pro Asn Asn Lys Ser Glu Glu Ser Gly Pro Thr
  770                      775                      780
Ala Ala Ala Glu Gly Glu Asp Leu Gly Ser Ser Ile Glu Gly Thr Val
  785                      790                      795                      800
Gly Asp Pro Leu Phe Thr Arg Gly Ile His Pro Gly Cys Pro Phe Pro
                      805                      810                      815
Val Phe Asp Val Ile Leu Met Arg Trp Thr
                      820                      825

```

<210> 40338  
 <211> 122  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40338
Ile Asp Pro Trp Ala Val Arg Ser Arg Ser Met Leu Arg Ile Ile Pro
  1                      5                      10                      15
Ser Asp Ser Gly Ser Ser Val Arg Gln Cys Arg Ala Tyr Ser Ala Ser
                      20                      25                      30
Thr Asp Gly Ala Val Ala Lys Cys Ser Ile Ser Thr Asp Gly Ser Ser
                      35                      40                      45
Ala Lys Ser Val Ala His Arg Val Pro Glu Ile Asp Cys Ser Arg Val
  50                      55                      60
Trp Pro Arg Ile Glu Cys Thr Ala Trp Pro Ile Ser Trp Asn Ser Val
  65                      70                      75                      80
Arg Thr Leu Cys Ser Leu Ser Ser Asp Gly Arg Pro Pro Pro Phe Val
                      85                      90                      95
Pro Gly Ser Gly Lys Ser His Thr Ser Ala Ile Val Gly Ser Cys Arg
                      100                      105                      110
Ser Val Trp Val Thr Ser Ser Pro Thr Gly
                      115                      120

```

<210> 40339  
 <211> 151  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40339

Trp Arg Trp Ser Thr Arg Arg Thr Thr Arg Gly Arg Arg Thr Ala Ala  
 1 5 10 15  
 Ala Ser Thr Ala Pro Pro Ser Thr Ser Arg Ser Arg Ser Ser Thr Arg  
 20 25 30  
 Ala Cys Arg Ser Pro Arg Met Arg Arg Arg Arg Arg Arg Pro Gly Lys  
 35 40 45  
 Gly Phe Ser Gly Ile Ser Thr Ala Thr Gly Pro Arg Thr Thr Ala Thr  
 50 55 60  
 Ser Ser Ile Gly Arg Ser Pro Thr Asn Ser Gly Ser Met Cys Leu Gly  
 65 70 75 80  
 Arg Ala Ala Thr Arg Ser Thr Ala Arg Arg Ala Ser Gly Thr Arg Thr  
 85 90 95  
 Arg Cys Cys Gly Gly Gly Ala Asp Ala Asp Gly Ser Ala Ser Pro  
 100 105 110  
 Glu Arg Leu Ala Val Arg Met Asn Pro Met Gln Thr Ala Gly Trp Ser  
 115 120 125  
 Arg Glu Glu Ile Arg Arg Cys Gly Arg Trp Val Asp Gly Asp Trp Glu  
 130 135 140  
 Glu Thr Gly Tyr Leu Asp Arg  
 145 150

&lt;210&gt; 40340

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40340

Leu Arg Ala Ala His His Ala Trp Pro Gly Ala Arg Ser Ala His Ser  
 1 5 10 15  
 His Glu Thr Gln Pro Pro Arg Ser Trp Pro Phe Arg Ala Pro Gln His  
 20 25 30  
 Ala Pro Pro Ser Ala Pro Pro Arg Leu Val Arg Val Ser Arg Pro Arg  
 35 40 45  
 Gln Pro Pro Pro Gly Val Ala Pro Gln Glu Pro Phe Pro Lys Gln Pro  
 50 55 60  
 Pro Ser Leu Ser Asp Pro Ser Ala Ala His Pro Ser Arg Arg Pro  
 65 70 75

&lt;210&gt; 40341

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40341

Arg Arg Asp Pro Asp Ala Ala Ala Ala Asp Asp Arg Ala Gly Val  
 1 5 10 15  
 Arg Phe Pro Gly Ala Arg Asp Glu Arg Arg Gly Pro Ala Val Ala Ala  
 20 25 30  
 Glu Arg Ala Gln Arg Ala His Ala Val Pro Arg Asp Gly Pro Arg Gly  
 35 40 45  
 Ala Leu Asp Pro Gly Pro Asp Pro Thr Ala Ile Asp Leu Gly Asp Ala  
 50 55 60  
 Val Arg His Gly Leu Cys Gly Ala Ala Val Gly Ala Asp Gly Ala Leu  
 65 70 75 80



17631

```

Arg Asp Gly Ala Val Gly Ala Gly Ala Val Arg Thr Ala Leu Ala Asp
      85                      90                      95
Arg Arg Ala Ala Val Gly Arg Asp Asp Ser Glu His Gly Ala Arg Pro
      100                      105                      110
His Gly Pro Arg Val Asp Leu Arg Arg Gly Arg Glu Arg Gly Ala Asp
      115                      120                      125
Pro Asp Gly Ala Gly Arg Pro Gly Val Pro Leu Ala Ala Gly Gly Arg
      130                      135                      140
Arg Pro His Arg Gln His Arg Pro Leu Pro Ala Gly Leu Ala Ala Ala
      145                      150                      155                      160
Leu Glu Pro Ala Gly Ala Arg Gly Cys Asp Asp Ala Ala Asp Val Leu
      165                      170                      175
Ala Arg Val Phe Arg Ala Ser Leu Arg Leu Arg Gly His Val Leu Gln
      180                      185                      190
Leu His Leu Arg Ser Gly Asp Arg Gln Gln Thr Leu Gly Arg Cys Val
      195                      200                      205
Trp Gly Gly Pro Pro Arg Gly Arg Pro Arg Gly Gly Arg Ala Val Gln
      210                      215                      220
Glu Arg Gly Ala Ala Val Gly Gly Arg Thr Gln Arg Met Gly Val Arg
      225                      230                      235                      240
Arg Arg Ser Ala Trp Gln Cys Glu
      245

```

<210> 40342  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40342
Phe Gln Thr Arg Asp Phe Ser Ser Ser Gly Arg Ile Lys Tyr Glu Gln
1      5      10
Gly Ile Leu Ser Ile Val Leu His Thr Tyr Asn Gln Pro Ile Ser Thr
      20      25      30
Lys Glu Asn Ser Pro Phe Arg Lys Leu Val Arg Pro Arg Ala His Ser
      35      40      45
Gly Arg Ser Leu Pro Thr Ala Ala Leu Lys Ala Ala Gln Ser Phe Gln
      50      55      60
Leu Arg Arg Arg Arg
65

```

<210> 40343  
 <211> 143  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (55),(133)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 40343
Ile Gly Pro Gly Asn Pro Pro Phe Phe Pro Leu Phe Pro Leu Phe Phe
1      5      10      15
Phe Pro Pro Pro Gln Lys Val Phe Gly Ala Pro Pro Gly Gly Lys Lys
      20      25      30
Lys Lys Phe Gly Gly Gly Lys Phe Phe Gly Gly Pro Leu Phe Trp Gly

```

## 17632

```

      35              40              45
Gly Ala Pro Pro Ala Val Xaa Pro Phe Ser Pro Phe Phe Leu Pro Lys
  50              55              60
Arg Ala Pro Pro Pro Gly Pro Lys Lys Thr Pro Gly Lys Lys Lys Asn
  65              70              75              80
Pro Pro Pro Phe Phe Pro Pro Pro Phe Gly Gly Gly Phe Phe Ser Pro
      85              90              95
Pro Phe Phe Phe Phe Trp Gly Gly Gly Pro Pro Gly Ala Pro Pro Phe
      100             105             110
Phe Gly Gly Trp Phe Phe Phe Pro Pro Gln Lys Lys Lys Asn Phe Phe
      115             120             125
Phe Phe Phe Phe Xaa Pro Leu Phe Phe Ser Pro Pro Pro Gln Lys
      130             135             140

```

<210> 40344  
 <211> 283  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40344
Pro Val Gly Glu Asp Val Thr Gln Thr Leu Arg Gln Leu Pro Thr Ile
  1              5              10              15
Ala Leu Val Cys Asp Phe Pro Glu Pro Gly Thr Asn Gly Gly Gly Arg
      20              25              30
Pro Ser Leu Leu Ser Glu His Ser Val Arg Thr Leu Phe His Glu Met
      35              40              45
Gly His Ala Val His Ser Ile Leu Gly Gln Thr Arg Leu Gln Ser Ile
      50              55              60
Ser Gly Thr Arg Cys Ala Thr Asp Phe Ala Glu Leu Pro Ser Val Leu
      65              70              75              80
Met Glu His Phe Ala Thr Ala Pro Ser Val Leu Ala Leu Tyr Ala Arg
      85              90              95
His Trp Arg Thr Asp Glu Pro Leu Ser Glu Gly Met Ile Arg Ser Met
      100             105             110
Glu Arg Asp Arg Thr Ala His Gly Ser Ile Tyr Gly Ala Val Glu Asn
      115             120             125
Glu Ala Gln Ile Leu Met Ala Leu Val Asp Gln Ala Tyr His Ser Arg
      130             135             140
Pro Ala Asp Gly Gly Arg Ile Asp Ser Thr Ala Leu Tyr Gln Gln Val
      145             150             155             160
Ser Gln Gln His Ser Ser Leu Pro Glu Pro Ala Asp Ala Thr Thr Pro
      165             170             175
Pro Thr Ser Trp Gln Gly Phe Phe Gly His Leu Tyr Gly Tyr Gly Ala
      180             185             190
Thr Tyr Tyr Ser Tyr Ile Phe Asp Arg Ala Ile Ala Asn Lys Leu Trp
      195             200             205
Val Asp Val Phe Gly Ala Gly Arg His Ala Val Asp Arg Ala Ala Gly
      210             215             220
Glu Arg Tyr Lys Asn Glu Val Leu Arg Trp Gly Gly Gly Arg Ser Gly
      225             230             235             240
Trp Glu Cys Val Ala Gly Ala Leu Gly Ser Ala Asn Glu Ser Asn Ala
      245             250             255
Asp Gly Arg Leu Val Glu Gly Gly Asp Gln Ala Met Arg Glu Val Gly
      260             265             270
Arg Trp Gly Leu Gly Arg Asp Gly Val Ser Gly
      275             280

```

17633

<210> 40345  
 <211> 265  
 <212> PRT  
 <213> A.fumigatus

<400> 40345  
 Phe His Ser Ser Ile Leu Arg Thr Leu His Phe Thr Arg Tyr Arg His  
 1 5 10 15  
 Ala Leu Thr Arg Ser Arg Lys Gly Glu Arg Lys Gly Lys Lys Met Pro  
 20 25 30  
 Glu Ile Leu Leu Pro Asp Thr Ser Ser Ile Thr Ser Ser Thr Ala Ser  
 35 40 45  
 Ser Leu Leu Leu Tyr Thr Asp His Gln His Gln Thr Ala Leu Ala Arg  
 50 55 60  
 Arg Lys Ser Leu Pro Leu Arg Arg Leu Ser Val Trp Leu Ser Arg Arg  
 65 70 75 80  
 Thr Ser Lys Gln Gly Leu Asn Ala Thr Asp Asp Asn Gly Tyr Ser His  
 85 90 95  
 His His His His His Pro His Thr Leu Thr Gln Gly Glu Asn Tyr Pro  
 100 105 110  
 Asp Tyr Asp Ala Gln Arg Ile Thr Ser Asp Phe Asn Leu His Arg Gln  
 115 120 125  
 Arg Glu His Glu His Glu Gln Gly Arg Arg Asn Arg Lys Phe Thr Asp  
 130 135 140  
 Ser Glu Ala Glu Arg His Leu Ala Glu Ser Tyr Ala Ala Tyr Cys Arg  
 145 150 155 160  
 Ala Phe Thr Ser Ala Gly Glu His Leu Tyr His Gln Lys Arg Arg Thr  
 165 170 175  
 Trp Met Met His Gly Glu Val Asp Leu Pro Val Met Thr Glu Asp Ser  
 180 185 190  
 Ala His Val His Ala His Pro Glu Asp Asp Ala Asp Gly Lys Arg  
 195 200 205  
 Glu Gly Leu Asn Pro Pro Asp Thr Glu Pro Ser Pro Pro Pro His Ile  
 210 215 220  
 Leu Thr Pro Ser Leu Tyr Ala Glu Met Arg Arg Val Ala Ser Asp Gln  
 225 230 235 240  
 Lys Arg Ala Arg Lys Arg Leu Arg Glu Arg Arg Leu Trp Ser Trp Phe  
 245 250 255  
 Ala Trp Ile Arg Pro Arg Glu Ser His  
 260 265

<210> 40346  
 <211> 189  
 <212> PRT  
 <213> A.fumigatus

<400> 40346  
 Val His Arg Ile Ser Ile Thr Ser Asn Thr Gly Asn Gly His Pro Gly  
 1 5 10 15  
 Trp Met Pro Arg Val Asn Asn Gly Ser Pro Thr Val Pro Ser Met Asp  
 20 25 30  
 Asp Pro Arg Ser Ser Pro Ser Ala Ala Val Gly Pro Leu Ser Ser  
 35 40 45  
 Leu Leu Leu Phe Gly Phe Ala Pro Ser Ser Pro Ala His Arg Leu Pro  
 50 55 60

## 17634

Ser Arg Pro Thr Leu Pro Leu Pro Leu Ser Leu Ser Ala Leu Ser Ala  
65 70 75 80  
Ala Ser Ser Ala Ser Ser Ser Arg Thr Arg Leu Arg Leu Ala Glu Met  
85 90 95  
Val Glu Ser Thr Ser Pro Ser Trp Phe Ser Ser Asp Lys Leu Arg Ser  
100 105 110  
Ile Trp Ser Phe Arg Ser Phe Ser Pro Cys Ala Ser Phe Ser Ser Ile  
115 120 125  
Ala Arg Val Cys Asp Leu Asn Cys Ser Ser Ser Pro Leu Thr Ala Ser  
130 135 140  
Trp Leu Ala Cys Ser Cys Asp Thr Ser Ser Arg Asp Ala Asp Ser Trp  
145 150 155 160  
Phe Arg Thr Arg Ser Ser Ser Val Leu Met Leu Ser Asp Ala Ala Ala  
165 170 175  
Asp Leu Val Asn Ser Ser Thr Trp Leu Leu Thr Ala Ala  
180 185

&lt;210&gt; 40347

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40347

Ala Ser Ala Ser Leu Ala Ala Thr Ala Met Ser Ala Ser Ile Ser Phe  
1 5 10 15  
Cys Ser Arg Ser Ala Thr Val Ala Leu Arg Pro Ser Ile Lys Glu Val  
20 25 30  
Ser Cys Ile Ala Ala Arg Ala Cys Ala Ser Cys Ser Trp Thr Ser Ala  
35 40 45  
Arg Val Val Ser Cys Asn Phe Cys Ser Ser Ser Asn Leu Ala Leu Trp  
50 55 60  
Glu Asp Ser Ser Ser Asp Arg Arg Leu Asp Ser Phe Ser Ser Trp Arg  
65 70 75 80  
Val Ser Ser Cys Ser Ile Ala Leu Leu Cys Ser Ala Ser Ala Ser Ala  
85 90 95  
Ala Leu Asp Ala Cys Asp Ala Ser Ser Ser Ala Arg Ser Leu Ala Leu  
100 105 110  
Val Ser Ser Lys Ser Phe Arg Arg Ser Ala Ile Ser Phe Ser Arg Ser  
115 120 125  
Ser Val Cys Glu Leu Ile Ser Pro Ala Trp Arg Ser Asn Val Leu Cys  
130 135 140  
Ser Ser Ala Ser Ser Phe Ala Thr Phe  
145 150

&lt;210&gt; 40348

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40348

Asp Pro Ala Ala Ser Leu Leu Ala Phe Ser Ser Ala Ala Ala Cys Ser  
1 5 10 15  
Ala Phe Ser Ala Ser Lys Ala Cys Ala Cys Leu Ser Ala Thr Ala Thr  
20 25 30  
Ala Ser Trp Ser Cys Ser Ser Arg Ala Phe Ser Glu Ala Ala Ala Phe  
35 40 45

## 17635

Ser Phe Arg Ser Leu Ser Cys Ser Ser Phe Ser Ala Ser Leu Ala Leu  
 50 55 60  
 Ser Trp Val Ser Lys Ser Val Arg Phe Trp Cys Lys Ala Ser Ala Ser  
 65 70 75 80  
 Ala Cys Leu Leu Trp Thr Ser Ser Thr Arg Asp Trp Ile Ser Pro Cys  
 85 90 95  
 Pro Val Asp Ser Cys Ala Ser Lys Ala Pro Thr Phe Ser Leu Ser Asp  
 100 105 110  
 Ser Ile Ser Trp Thr Ala Thr Ala Trp Ala Glu Leu Thr Leu Ala Ser  
 115 120 125  
 Ser Ala Cys Arg Ala Ser Pro Ser Ala Cys Ser Asp Ala Phe Ser Leu  
 130 135 140  
 Ser  
 145

&lt;210&gt; 40349

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (98), (176)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40349

Ser Ser Ser Cys Asp Phe Ala Thr Ala Cys Leu Ser Ser Ala Thr Ser  
 1 5 10 15  
 Leu Ser Phe Ser Ala Ser Arg Arg Leu Val Ser Ser Leu Leu Trp Leu  
 20 25 30  
 Leu Ala Asp Ser Ala Trp Ala Ser Leu Ala Ala Arg Ser Gly Arg Glu  
 35 40 45  
 Thr Pro Leu Phe Phe Pro Phe Phe Pro Phe Phe Ser Pro Pro Pro  
 50 55 60  
 Lys Lys Phe Leu Gly Pro Pro Arg Gly Gly Lys Arg Lys Asn Leu Gly  
 65 70 75 80  
 Gly Glu Asn Phe Leu Gly Gly Pro Phe Phe Gly Gly Gly Pro Pro Pro  
 85 90 95  
 Arg Xaa Pro Pro Phe Pro Pro Phe Phe Ser Gln Lys Gly Pro Pro Pro  
 100 105 110  
 Arg Gly Pro Lys Lys Pro Arg Gly Lys Lys Lys Thr Pro Pro Leu Phe  
 115 120 125  
 Phe Pro Pro Pro Leu Gly Gly Val Phe Phe Pro Pro Leu Phe Phe Phe  
 130 135 140  
 Phe Gly Gly Gly Gly Pro Arg Glu Pro Pro Phe Leu Gly Gly Gly  
 145 150 155 160  
 Phe Phe Phe Pro Pro Lys Lys Lys Lys Ile Phe Phe Phe Phe Xaa  
 165 170 175  
 Ser Pro Phe Phe Ser Pro Pro Pro Pro Lys Lys  
 180 185

&lt;210&gt; 40350

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40350

```

Ser Arg His Phe Tyr Thr Ser Tyr Thr Met Asn Asp Pro Val Thr Glu
1          5          10          15
Ser Ile His Gln Lys Gly Ala Met Pro Glu Asp Lys Pro Phe Ser Glu
          20          25          30
Thr Pro Arg Arg Val Asp Gly Val Ser Gln Leu Cys Met Ser Cys Ser
          35          40          45
Met Phe Leu Leu Lys Gly Asp Ile Gly Ala Asp Val Ser Ile Gln Thr
          50          55          60
Arg Ala Met Phe Leu Met Arg His Gln Thr Thr Val Gly Arg Ser Ala
65          70          75          80
Ser Ser Val Arg Leu Phe
          85

```

&lt;210&gt; 40351

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40351

```

Phe Ser Pro Lys Asp Glu Val Cys Ser Ser Ser Leu Pro Leu Val Leu
1          5          10          15
Tyr Gln Glu Leu Thr Ser Ser Ala Val Val Gln Glu Leu Gly Arg Glu
          20          25          30
Gly Val Leu Pro Phe Ser Arg Leu Trp Ala Ser Asn Lys Pro Phe His
          35          40          45
Ser Pro Ala Ala Gly Leu Phe Glu His Trp Val Val Ser Ile Ile Ile
          50          55          60
Met Leu Ala Pro Pro Pro Gly Asp Ala Tyr Asn Phe Leu Leu Lys
65          70          75

```

&lt;210&gt; 40352

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40352

```

Leu Ser Ser Ser Cys Ser Ala Arg Phe Ser Pro Phe Leu Pro Leu Ser
1          5          10          15
Ser Leu Phe Leu Pro Pro Ala Gly Phe Met Arg Arg Phe Ser Ser Ala
          20          25          30
Arg Leu Pro Leu Val Leu Asn Ser Ala Arg Pro Pro Leu Ser Ser Pro
          35          40          45
Ser Thr Lys Pro Leu Leu Leu Leu Ser Arg Ser Ala Ser Leu Phe Ser
          50          55          60
Ser Ser Pro Ser Thr Ser Val Asn Arg Ile Ala Pro Arg Arg Phe Pro
65          70          75          80
Leu Ser Gln Val Ala Lys Arg Tyr Cys Ser Tyr Arg Arg Met Cys Met
          85          90          95
Ser Arg Arg Thr Asp Val Pro Ser Gly Ser Thr Asn Val Thr His Gly
          100          105          110
Arg Glu Val Leu Pro Thr Asn Val Lys Pro Val His Tyr Asp Leu Thr
          115          120          125
Leu Glu Pro Asn Phe Glu Lys Phe Thr Tyr Asp Gly Asn Val Ile Ile
130          135          140
Glu

```

145

&lt;210&gt; 40353

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40353

```

Ser Arg Asn Ser Arg Ser Asn Ser Glu Thr Arg Phe Pro Ile Gly Ser
1          5          10          15
His Cys Ala Arg Arg Tyr Arg Ala Arg Lys Arg Gly Ser Val Phe Ala
          20          25          30
Lys Glu Gly Tyr Trp Ser Tyr Ala Ala Ala Pro Phe Ser Lys Pro Glu
          35          40          45
Ile Trp His Thr Pro Asp Tyr Asn Thr Tyr Ala Pro Asn Arg Lys Arg
          50          55          60
Gly Gln Ala Ser Ile Tyr Ser Gln Arg Val Asn Ala Ala Asp Asp Leu
65          70          75          80
Pro Ser Lys Thr

```

&lt;210&gt; 40354

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40354

```

Ser Pro Cys Val Tyr Val Asp Ser Thr Ile Leu Ile Met Thr Thr Arg
1          5          10          15
Asn Gly Gly Glu Lys Asn Tyr Leu Glu Tyr Val Tyr Arg Lys Pro Lys
          20          25          30
Phe Leu Ala Thr Ala Met Phe Ala Ala Tyr Ala Val Leu Leu Gly Trp
          35          40          45
Ala Ala Ser Asn Ser Val Val Phe Gly Glu Tyr Ile Leu Asn Ala Ala
          50          55          60
Asp Val Glu Val Asn Arg Trp Asn Gln Arg Gly Ile Gly Leu Ala Cys
65          70          75          80
Val Thr Ala Ala Phe Leu Ile His Ala Leu Ala Val Lys Trp Gly Leu
          85          90          95
Arg Leu Gln Asn Leu Leu Gly Val Val Lys Leu Val Ile Ile Leu Phe
          100          105          110
Val Ile Val Ala Gly Trp Val Ala Leu Ala Gly His Thr Glu Ala Glu
          115          120          125
Thr Pro His Asn Phe Lys Asn Ala Phe Glu Gly Thr Thr Gly Ser Gly
          130          135          140
Tyr Gly Ile Val Met Ala Leu Tyr Asn Val Ile Trp Ser Phe Ile Gly
145          150          155          160
Tyr Ser Asn Ala Asn Tyr Val Ser His Ser Gln Ser
          165          170

```

&lt;210&gt; 40355

&lt;211&gt; 768

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40355

Ser Met Arg Gly Pro Ala Leu Arg Gly Glu Asp Pro Arg Leu Lys Ile  
 1 5 10 15  
 Ala Asp Phe Gly Phe Ala Arg Ser Leu Pro Ala Thr Ser Leu Ala Glu  
 20 25 30  
 Thr Leu Cys Gly Ser Pro Leu Tyr Met Ala Pro Glu Ile Leu Arg Tyr  
 35 40 45  
 Glu Lys Tyr Asp Ala Lys Ala Asp Leu Trp Ser Val Gly Thr Val Leu  
 50 55 60  
 Tyr Glu Met Val Val Gly Lys Pro Pro Phe Arg Ala Thr Asn His Val  
 65 70 75 80  
 Glu Leu Leu Arg Lys Ile Glu Lys Gly Glu Asp Arg Ile Lys Phe Pro  
 85 90 95  
 Glu Glu Asn Pro Ala Ser Asp Glu Ile Lys Ala Leu Ile Arg Ala Leu  
 100 105 110  
 Leu Lys Arg Asn Pro Val Glu Arg Leu Asn Phe Pro Asp Phe Phe Gln  
 115 120 125  
 Asn Gly Val Ile Thr Ser Pro Ile Pro Gly Leu Val Ala Asp Asp Gln  
 130 135 140  
 Pro Ser Ile Pro Gln Gly Pro Pro Ala Asp Pro Glu Thr Ala Glu Ala  
 145 150 155 160  
 Thr Pro Arg Pro Asp Ser Arg Ser Gly Ala Thr Val Pro Gly Gly Thr  
 165 170 175  
 Glu Arg Glu Arg Glu Gly Pro Ser Leu Pro Lys Arg Asp Thr Gly Leu  
 180 185 190  
 Thr Gln Arg Pro Pro Ser Gln Asn Gln Arg Phe Gly Thr Pro Gln Thr  
 195 200 205  
 Thr Thr Pro Met Arg Arg Ile Gly Ser Gly Asp Arg Pro Pro Ser Thr  
 210 215 220  
 Pro Lys Glu Ser Thr Pro Pro Met Thr Tyr Pro Gln Arg Pro Ser Ala  
 225 230 235 240  
 Val Ser His Ala Thr Ala Pro Gly Arg Gln Glu Leu Val Asp Arg Asn  
 245 250 255  
 Ala Thr Phe Thr Ala Met Glu Arg Gln Lys Gly Arg Asn Thr Phe Ser  
 260 265 270  
 Glu Gly Ser Pro Gln Ile Asp Arg Gln Ala Asp Lys Leu Arg Glu Glu  
 275 280 285  
 Arg Glu Arg Ala Ala Gln Asp Val Ala Phe Glu Arg Asp Tyr Val Val  
 290 295 300  
 Val Glu Lys Arg Ala Val Glu Val Asn Ala Phe Ala Asp Glu Leu Ala  
 305 310 315 320  
 His Ser Pro Arg Ile Gln Gly Asn Ile Ser Arg Gly Ala Gln Thr Gly  
 325 330 335  
 Ala Leu Ser Arg Arg Ser Thr Val His Gly Pro Thr Pro Ser Asn Pro  
 340 345 350  
 Ser Pro Pro Gln Ala Thr Val Gly Lys Ala Met Gln Val Leu Ser Gly  
 355 360 365  
 Arg Ser Arg Ala Asp Ser Met His Asn Arg Gln Gly Ser Tyr Glu Arg  
 370 375 380  
 Arg Tyr Gly Gln Ser Pro Thr Ser Ala Thr Ser Ala Ile Ser Lys Ala  
 385 390 395 400  
 Leu Asn Met Ala Ser Gly Arg Leu Phe Gly Met Gly Phe Ser Pro Pro  
 405 410 415  
 Leu Ala Ile Thr Lys Gly Gly Arg Ser Pro Pro Leu Ala Tyr Asn Pro  
 420 425 430  
 Phe Pro Ala Tyr Pro Ala His Gly Ser Leu Met Ile Gly Asp Gly Ala  
 435 440 445



## 17639

Lys Ser Asn Leu Ala Leu Asp Glu Asp Thr Lys Thr Val Gln Ile Leu  
 450 455 460  
 Glu Glu Cys Ala Thr Arg Ser Asp Val Val Tyr Gly Phe Ala Glu Val  
 465 470 475 480  
 Lys Tyr Lys Gln Leu Val Pro Leu Ala Pro Ser Val Gln Thr Asp Pro  
 485 490 495  
 Ser Ser Lys Leu Asn Leu Ala Gly Glu Arg Glu Asn Pro Asp Ser Ala  
 500 505 510  
 Asp Gly Gly Leu Thr Val Asp Ala Ile Val Thr Leu Ser Glu Glu Ala  
 515 520 525  
 Leu Val Leu Tyr Val Lys Ala Leu Ser Leu Leu Ala Lys Ser Met Asp  
 530 535 540  
 Ile Ala Gly Ala Trp Trp Ala Arg Lys Asn Arg Gly Asp Gly Phe Gly  
 545 550 555 560  
 Asp Ser Ala Met Ser Arg Ala Ser Gly Ala Ser Thr Leu Ala Gly Thr  
 565 570 575  
 Arg Ile Asn Asn Val Val Gln Trp Val Arg Asn Arg Phe Asn Glu Val  
 580 585 590  
 Leu Glu Lys Gly Glu Phe Val Arg Leu Lys Leu Ile Glu Ala Gln Lys  
 595 600 605  
 Arg Leu Pro Pro Asp His Pro Ser His Pro Asp Asn His Ser Val Gly  
 610 615 620  
 Ser Ser Leu Gly Ser Gly Ala Ser Val Asp Val Val Val Ser Pro Gly  
 625 630 635 640  
 Val Ser Ala Glu Lys Leu Met Tyr Asp Arg Ala Leu Glu Met Ser Arg  
 645 650 655  
 Thr Ala Ala Ile Asn Glu Leu Thr Gly Glu Asp Leu Ser Gly Cys Glu  
 660 665 670  
 Ile Ala Tyr Val Thr Ala Ile Arg Met Leu Glu Ala Val Leu Glu Asn  
 675 680 685  
 Gly Glu Val Pro Arg Phe Gly Gln Asp Lys Asp Asp Thr Ser Lys Asp  
 690 695 700  
 Ser Asp Lys Ile Val Leu Asp Ala Val Gln Ala Asp Glu Arg Gln Val  
 705 710 715 720  
 Val Ile Lys Arg Glu Ser Leu Pro Pro Ser Arg Lys Pro Thr Ser Ala  
 725 730 735  
 Asp Asp Pro Gly Ser Cys Arg Gln His Pro Glu Ser Ala Ser Ser Ser  
 740 745 750  
 Ser Gln Glu Ala Gly Asp Ser Cys Glu Thr Ser Thr Asp Thr Phe Cys  
 755 760 765

&lt;210&gt; 40356

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40356

Cys Phe Tyr Pro Asp Glu Gly Asn Val Phe Asp Ala Thr Pro Asp Asp  
 1 5 10 15  
 Arg Arg Gln Ile Gly Val Val Ser Ala Ser Phe Leu Ile Phe Asn Arg  
 20 25 30  
 Val Ile Gly Thr Gly Ile Phe Ala Thr Pro Ala Thr Ile Leu Gly Leu  
 35 40 45  
 Cys Gly Ser Val Gly Leu Ser Leu Phe Met Trp Val Ala Gly Thr Ala  
 50 55 60  
 Ile Ala Met Ala Gly Thr Ala Val Tyr Leu Glu Trp Gly Thr Ala Ile

## 17640

65		70		75		80									
Pro	Lys	Tyr	Asp	Pro	Pro	Ala	Cys	Met	Trp	Ile	Pro	Pro	Tyr	Ser	Ser
				85					90					95	

<210> 40357  
 <211> 131  
 <212> PRT  
 <213> A.fumigatus

<400> 40357  
 Val Ile Arg Ser Arg Asp Leu Ser Ser Leu Thr Gly Ile Leu Thr Ala  
 1 5 10 15  
 Arg Gln Ala Leu Ser Glu Thr Arg Asn Pro Val Arg Thr Leu Lys Ile  
 20 25 30  
 Ala Ala Pro Ile Ala Ile Gly Ser Val Gly Ile Leu Tyr Met Leu Cys  
 35 40 45  
 Asn Ile Ala Tyr Phe Ala Ala Val Ser Lys Glu Asp Met Leu Ser Ser  
 50 55 60  
 Gly Gln Thr Val Ala Ala Lys Phe Phe Gly Asn Met Phe Gly Ala Arg  
 65 70 75 80  
 Ala Glu Lys Val Met Ser Val Phe Val Ala Leu Ser Ala Phe Gly Asn  
 85 90 95  
 Val Leu Ser Val Ile Phe Ser Gln Gly Arg Ser Met Phe Lys Leu Val  
 100 105 110  
 Ala Pro Gly Val Val Ser Arg Thr Asn Lys Phe Gly Ser Cys Pro Arg  
 115 120 125  
 Thr Trp Pro  
 130

<210> 40358  
 <211> 139  
 <212> PRT  
 <213> A.fumigatus

<400> 40358  
 Gly Ala Ala Asn Pro Ser Ser Leu Ile Ser Tyr Pro Leu Ser Ile Val  
 1 5 10 15  
 Asn Val Phe Val Ser Gly Gly Leu Ile Tyr Ile Tyr Leu Thr Arg Ser  
 20 25 30  
 Thr Arg Phe Pro Asp Trp Ala Pro Gly Ile Arg Ala Thr Leu Pro Val  
 35 40 45  
 Thr Ile Phe Phe Phe Leu Ser Asn Ile Tyr Leu Val Ile Ala Pro Tyr  
 50 55 60  
 Ile Pro Pro Ser Glu Gly Gln Ser Val Tyr Glu Glu Leu Pro Tyr Tyr  
 65 70 75 80  
 Leu His Cys Val Val Ala Leu Gly Ile Phe Ala Leu Gly Ala Ile Tyr  
 85 90 95  
 Tyr Val Val Trp Ala Ile Val Met Pro Arg Phe Gly Arg Tyr Met Leu  
 100 105 110  
 Val Lys Glu Thr Val Val Asp Ala Asp Gly Trp Ser Arg Ser Val Phe  
 115 120 125  
 Thr Arg Leu Pro Leu Ala Glu Ala Glu Arg Val  
 130 135

<210> 40359  
 <211> 151

17641

<212> PRT  
<213> A.fumigatus

<400> 40359

Gln	Lys	Val	Ser	Val	Leu	Val	Ser	Gln	Glu	Ser	Pro	Ala	Ser	Cys	Glu
1			5						10					15	
Glu	Leu	Leu	Ala	Asp	Ser	Gly	Cys	Trp	Arg	Gln	Leu	Pro	Gly	Ser	Ser
			20				25					30			
Ala	Leu	Val	Gly	Phe	Leu	Leu	Gly	Gly	Ser	Asp	Ser	Arg	Phe	Ile	Thr
		35					40					45			
Thr	Cys	Arg	Ser	Ser	Ala	Cys	Thr	Ala	Ser	Ser	Thr	Ile	Leu	Ser	Leu
	50					55					60				
Ser	Leu	Asp	Val	Ser	Ser	Leu	Ser	Cys	Pro	Asn	Arg	Gly	Thr	Ser	Pro
65				70						75				80	
Phe	Ser	Ser	Thr	Ala	Ser	Ser	Ile	Arg	Met	Ala	Val	Thr	Tyr	Ala	Ile
			85					90						95	
Ser	His	Pro	Asp	Arg	Ser	Ser	Pro	Val	Ser	Ser	Leu	Met	Ala	Ala	Val
			100					105					110		
Arg	Leu	Ile	Ser	Ser	Ala	Arg	Ser	Tyr	Ile	Ser	Phe	Ser	Ala	Glu	Thr
		115					120					125			
Pro	Gly	Leu	Thr	Thr	Thr	Ser	Thr	Asp	Ala	Pro	Asp	Pro	Ser	Glu	Glu
	130					135					140				
Pro	Thr	Glu	Trp	Leu	Ser	Gly									
145					150										

<210> 40360  
<211> 61  
<212> PRT  
<213> A.fumigatus

<400> 40360

His	Pro	Thr	Arg	Met	Ala	Val	Glu	Leu	Tyr	Trp	Pro	Asp	Leu	Lys	Val
1				5					10					15	
Arg	Asp	Ser	Leu	Phe	Leu	Arg	Glu	Gly	Cys	Asn	Ser	Val	Ser	Gln	
		20					25					30			
Arg	Asn	Thr	Tyr	Asp	Lys	Met	Cys	Leu	Ile	Ile	Met	Gln	Ile	Phe	Val
		35				40						45			
Asp	Ala	Pro	Arg	Trp	Val	Cys	Ser	Ser	Phe	Ile	Met	Gln			
	50					55					60				

<210> 40361  
<211> 62  
<212> PRT  
<213> A.fumigatus

<400> 40361

His	Phe	Pro	Lys	Ser	Phe	Phe	Ser	His	His	Leu	Ile	Pro	Pro	Arg	Arg
1				5					10					15	
Ser	Gly	Thr	Val	Ala	Arg	Thr	Tyr	Ser	Asn	Lys	Ser	His	Ser	Arg	Arg
		20					25					30			
His	Leu	Ser	Cys	Met	Ile	Ala	Thr	Tyr	Ser	Gln	Leu	Lys	Cys	Ala	Met
		35				40						45			
Tyr	Val	Thr	Thr	Glu	His	Tyr	Val	Pro	Arg	Ile	Thr	Pro	Arg		
	50					55					60				

<210> 40362

<211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 40362  
 Pro Thr Tyr Ala Ser Ile Ser Val Phe Leu Gly Phe Ile Phe Arg Gly  
 1 5 10 15  
 Cys Phe Lys Cys Ser Val Trp Asn Pro Tyr Gly Ser Thr Tyr Pro Val  
 20 25 30  
 Thr Ile Tyr Leu Gly His Cys Phe Cys Leu Gln Gly Asn Tyr Thr Ser  
 35 40 45  
 Leu Gly Lys Val Pro Thr Ala Phe Leu Leu Phe Tyr Thr Ala Ile Lys  
 50 55 60  
 Tyr Ile Asp Ile Ser Met Val Gln Leu Ser Asp Ile Val Pro Leu Cys  
 65 70 75 80  
 Thr Glu Tyr

<210> 40363  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 40363  
 Asp Cys Thr Gly Ser Glu Val Cys Arg Ile Arg Gly Glu His Gly Arg  
 1 5 10 15  
 His Thr Lys Ala Gly Val Gly Ile Leu Tyr Leu Leu Ile Tyr Thr Cys  
 20 25 30  
 Gln Asp Phe Ala Met Val Phe Asp Leu Ser Phe Leu Leu Ala Ser  
 35 40 45  
 Leu Ala Ser Pro Val Ala Ser Ala Ile Thr Tyr Cys Ser Ser Val Asn  
 50 55 60  
 Thr Gly Ser Ser Tyr Ser Ala Ser Arg  
 65 70

<210> 40364  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 40364  
 Ser Asp Lys Ser Lys Thr Glu Thr Thr Asp Ser Lys Thr Thr Thr Thr  
 1 5 10 15  
 Ala Pro Thr Thr Thr His Asn Thr Val Ser Ile Gln Thr Val Ala Gly  
 20 25 30  
 Ile Val Lys Thr Ile Thr Val Pro Gly Thr Glu Pro Ser Ala Thr Pro  
 35 40 45  
 Thr Ser Ala Leu Leu Gln Ala Arg Arg Asp Gly Ile Arg Gly Trp  
 50 55 60

<210> 40365  
 <211> 135  
 <212> PRT  
 <213> A.fumigatus

<400> 40365

## 17643

Val Ala Leu Thr Thr Ser Leu Cys His Gln Val Ile Ser Asn Leu Phe  
 1 5 10 15  
 Leu Leu Thr Asp Ile Ser Ile Tyr Gln Ser Asn Gly Leu Cys Thr Asp  
 20 25 30  
 Thr Cys Asn Ala Asp Tyr Ala Phe Ala Ile Leu Gln Gly Lys Gln Cys  
 35 40 45  
 Trp Cys Ser Asn Ile Ala Pro Asn Lys Ala Thr Asn Thr Asp Ile Ser  
 50 55 60  
 Asp Cys Ala Val Gly Cys Pro Gly Tyr Pro Thr Asp Ser Cys Gly Asp  
 65 70 75 80  
 Ala Ser Lys Gly Leu Tyr Ala Tyr Ile Gln Met Ser Leu His Asn Pro  
 85 90 95  
 Ser Gly Thr Ala Ala Ala Pro Ser Ser Thr Asp Ser Thr Lys Ser Thr  
 100 105 110  
 Val Ser Ser Leu Cys Leu Glu Leu Arg Pro His Ala Thr His Leu Leu  
 115 120 125  
 Pro Thr Gly Pro Ile Ser His  
 130 135

&lt;210&gt; 40366

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40366

His Cys Leu Ser Ala Ala Lys Val Ser Ser His Val Ile Ile Pro His  
 1 5 10 15  
 Ala Leu Asp Pro Pro Lys Ser Gly Glu Ser Ser Asp Asp Phe Gly Leu  
 20 25 30  
 Ala Gly Lys Tyr Ile Cys Met Pro Ser Ala Lys Phe Gly Leu Trp Thr  
 35 40 45  
 Leu Thr Asn Cys Thr Phe Ser Val Ser Glu Arg Ser Lys Val Thr Val  
 50 55 60  
 Lys Thr Arg Arg Tyr Val Val Ala Ser Leu Leu Trp Ala  
 65 70 75

&lt;210&gt; 40367

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40367

Phe Leu Thr Phe Asn Lys His Leu Ser Leu Glu Tyr Lys Phe Thr Ser  
 1 5 10 15  
 Leu Ile His Gln Leu Leu Ser Thr Ile Glu Tyr Met Tyr Leu Ile Gly  
 20 25 30  
 Leu Ala Ser Ile Ser Thr Val Ile Val Leu Val Leu Pro Val Val Val  
 35 40 45  
 Phe Asn Pro Gln Leu Asp His His Ile Ile Ala Ser Leu Arg Leu Ser  
 50 55 60  
 Ala  
 65

&lt;210&gt; 40368

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40368

Leu Gly Asp Leu His Cys Val Gly Ser Val Ile Leu Asn Leu Ser Gly  
 1 5 10 15  
 Ile Leu Leu Ser Phe Tyr Lys Leu His Phe Ile Cys Asn Lys Cys Thr  
 20 25 30  
 Thr Leu Ser Ile His Thr Lys Lys Phe Gln Val Ile Cys Asn Phe Ser  
 35 40 45  
 Phe Asn Tyr Ser Leu Leu Ile Thr Thr Ile Ala Asn Met Thr Glu Leu  
 50 55 60  
 Ala Pro Leu Ser Leu Cys Phe Phe Ala Glu  
 65 70

&lt;210&gt; 40369

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40369

Ser Val Cys Trp Arg Val Cys Thr Asp Cys Lys Phe Ala Gly Ser Arg  
 1 5 10 15  
 Asp His Leu Pro Thr Ile Ser Phe Phe Thr Lys Asp Gly Ser Gly Tyr  
 20 25 30  
 Thr Ser Arg Asn Ser Thr Val Ser Ser Pro Thr Pro Leu Val Ser Pro  
 35 40 45  
 Thr Thr Met Tyr Pro Ser Gln Pro Ser Pro Tyr Ser Tyr Gln Pro Ser  
 50 55 60  
 Ala Ala Ser Ala Pro Pro Gln Pro Gly Tyr Ile Ser Pro Pro Glu Ser  
 65 70 75 80  
 Arg Arg Ala Leu Glu Glu Glu Lys Glu Lys Gln Leu Gln Pro Gln Arg  
 85 90 95  
 Gln Ser Leu Pro Ser Ile His Glu Ala Leu Arg Asn Asp Ser Pro Leu  
 100 105 110  
 Pro Tyr Pro Ala Pro Pro Thr Ser Gly Pro Leu Pro Gln Ala His Pro  
 115 120 125  
 His Pro Pro His Ala Leu Val Gly Arg Ser Ala Gly Asp Gly Pro Ala  
 130 135 140  
 Gly Pro Pro Asn Pro Phe Ser Asn Gly Ala Pro Ala Gly Pro Tyr Thr  
 145 150 155 160  
 Arg Glu Pro Ala Tyr Ser Gln Leu Gln Thr Glu Ala Ser Arg Ser Ser  
 165 170 175  
 Leu Ala Ser Ile Thr Thr Gln Glu Ser Arg Asn Pro Ser Leu Gln Ser  
 180 185 190  
 Leu Asn Ser Ser Lys Ser Pro Thr His Ser Ala Lys Thr Gly Leu Thr  
 195 200 205  
 Ser Ile Ala Gly Ser Gln Thr Gly Ser Gly Tyr Glu Tyr Ser Ala Pro  
 210 215 220  
 Thr Ser Ala Gly Ser Ile Ala Ser Pro Asn Gly Tyr Thr Ala Tyr Ser  
 225 230 235 240  
 Gln Pro Phe Thr Phe Gln Ser Gln Pro Pro Pro Asn Ala Pro Thr Tyr  
 245 250 255  
 Pro Leu Ala His His Asp Thr Arg Pro Tyr Ala Ala Thr Pro Trp Lys  
 260 265 270  
 Pro Gly Ala Pro Glu Pro Pro Arg Val Glu Glu Leu Lys Asn Gly Leu  
 275 280 285

17645

Ala Gly Arg Pro Ala Val Pro Val Gln Pro Gln Gly Asp Ser Ala Lys  
 290 295 300  
 Arg His Leu Asp Ile Tyr Glu Val Glu Thr Ser Leu Asn Glu Val Cys  
 305 310 315 320  
 Ile Leu Ile Thr Arg Thr Met Phe Ile Gly Val Val Arg  
 325 330

<210> 40370  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (20), (24)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40370  
 Pro Ser Ile Val Ile Glu Asn Arg Pro Ser Arg Phe Val Ala Thr Val  
 1 5 10 15  
 Ala Thr Ser Xaa Lys Leu Gln Xaa Trp Arg Arg Gly Pro Asp Gly Ala  
 20 25 30  
 Arg Thr Leu Cys Asn Ala Cys Gly Leu His Tyr Ala Lys Leu Thr Arg  
 35 40 45  
 Lys Met Gly Ala Ser Lys Ala Ala Ser Leu Gly Ser Asn Leu Lys Pro  
 50 55 60  
 Lys Ala Ala Leu Asp Pro Thr Pro Pro Gly Thr Arg  
 65 70 75

<210> 40371  
 <211> 161  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (49), (106)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40371  
 Ile Val Glu Leu Ser Thr Arg Thr Leu Asp Phe Ser Arg His Tyr Ala  
 1 5 10 15  
 Thr Arg Ala His His Thr Gln Arg Ser Gly Pro Met Leu Gly Thr Leu  
 20 25 30  
 Pro Pro Leu His Glu Ile Glu Asp Met Ile His Leu Gln His Arg Asn  
 35 40 45  
 Xaa Asp Ala Leu Met Arg Leu Pro Asn Ala Val Leu Asn Gln Glu His  
 50 55 60  
 Ala Leu Ala Glu His Met Ala Gln Arg Lys Ala Phe Asn Ala Gly Arg  
 65 70 75 80  
 Val His Asp Ser Glu His Met Ala Met Tyr Gln Glu Lys Phe Lys Gly  
 85 90 95  
 Arg Gly Gly Phe Ala Gly Pro Asn Thr Xaa Lys Thr Lys Arg Gly Asn  
 100 105 110  
 Ser Thr Leu Phe Leu Ala Ile Phe Leu His Leu Cys Phe Gly Ser Gly  
 115 120 125

## 17646

Thr Ile Leu Cys Ser Ser Leu Gly Leu Phe His Tyr Phe Pro Glu Arg  
 130 135 140  
 His Phe Pro Arg Leu Gly Lys Asp Phe Ile His Ala Asn Gln Ala Ser  
 145 150 155 160  
 Leu

<210> 40372  
 <211> 128  
 <212> PRT  
 <213> A.fumigatus

<400> 40372  
 Val Ser Ser Phe Arg Thr Thr Ser Pro Arg Thr Thr Pro Thr Met Val  
 1 5 10 15  
 Thr Arg Ser Gln Gln Leu Thr Pro Asp Asp Glu Ser Gln Asp Ser Asp  
 20 25 30  
 Ala Ser Ser Ser Val Ser Glu Ile Phe Ser Asp Gly Glu Ser Asp Ser  
 35 40 45  
 Asp Ser Asn Ser Asp Leu Glu Leu Asp Ser Glu Asp Ser Asp Asn Glu  
 50 55 60  
 Asp Asp Ser Pro Glu Asp Phe Ser Asn Asp Asp Gly Gln Leu Pro Pro  
 65 70 75 80  
 Glu Tyr Tyr Leu Glu Gln Ala Glu Ser Leu Asp Ile Ser Gln Leu Arg  
 85 90 95  
 Gln Lys Arg Tyr Ser Asp Gly Thr Gln Glu Lys Leu Asp Glu Thr Arg  
 100 105 110  
 Glu Tyr Trp Asn Arg Leu Val Pro Ile Leu Thr Leu Asn Ile Cys Gln  
 115 120 125

<210> 40373  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 40373  
 Ile Val Arg Glu Gly Ala Lys Tyr Trp Lys Ile Gly Ala Thr Thr Leu  
 1 5 10 15  
 Gly Thr Gln Gly Ile His Cys Asn Gly Leu Lys Asn Gln Thr Ala Leu  
 20 25 30  
 Asn Cys Leu Ser Ile Leu Asn Asn Phe Ile Leu Leu Asp Ala Ser Arg  
 35 40 45  
 Asn Ile Tyr Thr Gly Ser Ile Leu Leu Thr Pro Leu Ser Arg Asn Asn  
 50 55 60  
 Gln Ile Thr Val Asp  
 65

<210> 40374  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 40374  
 Pro Trp Cys Lys Ile Leu Asn Ile Ser Ile Tyr Val Gly Asn Gly Leu  
 1 5 10 15  
 Glu Gln Asn Lys Leu Pro Phe Gly Gln His Glu Arg Val Cys Leu Tyr



[illegible]

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<210> 40375
<211> 242
<212> PRT
<213> A.fumigatus
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[illegible]

```
<210> 40376
<211> 94
<212> PRT
<213> A.fumigatus
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Phe Gln Leu Leu Leu Ala Leu Thr Ile Gln Asn Pro Lys Ala Val Lys  
 1 5 10 15  
 Leu Phe Trp Ala Ile Gln His Arg Ser Val Cys Arg Asn Ser Leu Lys

```
<210> 40377
<211> 216
<212> PRT
<213> A.fumigatus
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```
<210> 40378
<211> 175
<212> PRT
<213> A.fumigatus
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```

<400> 40378
Ser Ala His Ser Ala Cys Arg Ala Leu Phe Gly Ile Ala Met Gly Gly
1      5      10
Leu Tyr Gly Asn Ala Ala Ala Thr Ala Leu Glu Asp Cys Pro Met Glu
20      25      30
Ala Arg Gly Ile Val Ser Gly Leu Leu Gln Gln Gly Tyr Ala Phe Gly

```

```
<210> 40379
<211> 92
<212> PRT
<213> A.fumigatus
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```
<210> 40380
<211> 102
<212> PRT
<213> A.fumigatus
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[illegible]

100

<210> 40381  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 40381  
 Arg Phe Ala Cys Asn Arg Leu Val Arg Thr Arg Asp Thr Leu Ser Asn  
 1 5 10 15  
 Gly Phe Leu Gln Trp Lys Ile Ser Ile Ser Arg Ala Ser Asp Leu His  
 20 25 30  
 Ile Gly Phe Thr Met Ala Thr Val Glu Asn Gly His Ala Ser Asp Gly  
 35 40 45  
 Ile Val Lys Ser Val Glu Leu Arg Ser Arg Pro Arg Lys Thr Asn Pro  
 50 55 60  
 Phe Arg Trp Thr Phe Gly Leu Val Val Arg  
 65 70

<210> 40382  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 40382  
 His Ile Cys Thr Val His Arg Ser Pro Gly Leu Arg Pro Trp Thr Val  
 1 5 10 15  
 Val Ile Pro Ile Trp Thr Val Ile Arg Tyr His Leu His Cys Arg Phe  
 20 25 30  
 Ala Phe Thr Ile Ser Asn Ile Gly His Trp Leu Leu Leu Asn Asn Pro  
 35 40 45  
 Phe Ser Asp Gln Lys Asp Lys Tyr Lys Arg Lys Asp Asp Glu Gln Arg  
 50 55 60  
 Asn Lys Leu Pro Leu  
 65

<210> 40383  
 <211> 817  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (628)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40383  
 Arg Lys Val Leu Ser Ser Met Asp Gln Gln Thr Gln Ser Ala Val Ala  
 1 5 10 15  
 Ser Ala Glu Lys Ser Leu Val Phe Glu Ser Thr Met Thr Thr Ala  
 20 25 30  
 Thr Val Gly Pro Val Thr His Pro Thr Leu Ser Pro Ala Glu Gln Thr  
 35 40 45  
 Ala Gln Ala Arg Glu Lys Ile Ala Ser Asp Leu Gln Thr Trp Gln Arg  
 50 55 60  
 Arg Phe Ala Thr Ala Val Glu Lys Gly Ser Glu Asp Leu Glu Glu Arg

## 17651

65		70		75		80									
Val	Glu	Glu	Ile	Val	Glu	Ser	Tyr	Ile	Arg	Ser	Gly	Val	Asn	Ser	His
			85						90					95	
Gly	Glu	Ser	Leu	Ile	Thr	Ala	Leu	Glu	Thr	Val	Val	Gln	Asp	Glu	Ile
			100					105					110		
Ser	Ser	Val	Lys	Leu	Arg	Ile	Asn	Glu	Leu	Ala	Glu	Ser	Leu	Pro	Gly
		115					120					125			
Glu	Glu	Ala	Pro	Glu	Gln	Glu	Gly	Lys	Val	Gln	Asp	Glu	Leu	Leu	Lys
		130					135				140				
Glu	Ile	Arg	Arg	Ala	Ala	Ile	Ser	Val	Arg	Asp	Arg	Ala	His	Ala	Val
145					150					155					160
Arg	Glu	Trp	Arg	Asn	Ser	Phe	Asp	Gln	Glu	Leu	Thr	Arg	Arg	Thr	Ser
			165					170						175	
Ala	Ala	Val	Asn	Ser	Thr	Leu	Asp	Val	Leu	Asp	Ser	Val	Arg	Asp	Leu
		180						185					190		
Gly	Leu	Gln	Glu	Ile	Gly	Met	Arg	Trp	Ala	Trp	Met	Glu	Gly	Val	Thr
	195						200					205			
Tyr	Lys	Asp	Trp	Ala	Lys	Tyr	His	Ala	Leu	Lys	Ala	Gln	Phe	Glu	Asp
	210					215					220				
Trp	Lys	Asn	Asp	Ile	Phe	Asn	Val	Gly	Met	Gln	His	Val	Lys	Val	Glu
225				230						235					240
Glu	Ala	Lys	Glu	Leu	Ala	Asn	Asp	Ile	Leu	Asp	Arg	Gly	Met	Glu	Val
			245					250						255	
Ala	Glu	Asp	Ala	Ala	Lys	Glu	Leu	Ala	Arg	Leu	Lys	Asp	Val	Gly	Arg
		260						265				270			
Trp	Lys	Ile	Ala	Ala	Arg	Glu	Ala	Ser	Asp	Asp	Phe	Glu	Thr	Arg	Ile
		275					280					285			
Gly	Asp	Pro	Pro	Pro	Leu	Pro	Lys	Arg	Ser	Lys	Thr	Asp	Glu	Glu	Ser
	290					295					300				
Lys	Ser	Ala	Glu	Ala	Asn	Ile	Ala	Asp	Thr	Glu	Asn	His	Gln	Ser	Met
305				310						315					320
Glu	Gly	Ser	Glu	Gln	Ala	Thr	Ser	Gly	Thr	Val	Leu	Asp	Ser	Glu	Gly
			325					330						335	
Thr	Ala	Ala	His	Gly	Lys	Gly	Asp	Ser	Glu	Asn	Asp	Leu	Cys	Phe	Asp
		340						345				350			
Asp	Asp	Ile	Pro	Leu	Thr	His	Asp	Lys	Leu	Ser	Val	Ser	His	Asp	Asp
		355					360					365			
Ser	Leu	Pro	Lys	His	Ser	Arg	Ala	Ser	Asp	Val	Ser	Ser	Ala	Ala	Asp
	370					375					380				
Gly	Phe	Ser	Pro	Ala	Ser	Val	Pro	Glu	Ala	Asp	Pro	Ser	Glu	Ser	Val
385				390						395					400
Glu	Pro	Val	Lys	Met	Ala	Leu	Gly	Val	Ala	Ala	Ala	Glu	Ser	Val	Pro
			405					410						415	
Lys	Gln	Asp	Ala	Ser	Glu	His	His	Val	Phe	Pro	Glu	Gln	Leu	His	Glu
		420						425					430		
Leu	Val	Ser	Gln	Ala	Asp	Asp	Gln	Phe	Ala	Lys	Val	Thr	Ser	Ala	Ala
	435						440					445			
Gly	Gln	Ala	Trp	Ser	Asp	Gly	Ser	Val	Ala	Ser	Leu	Ala	His	Gln	Val
	450					455					460				
Ala	Ser	Ser	Ile	Thr	Ser	Met	Ala	Ala	Asp	Val	Thr	Pro	Leu	Ala	Tyr
465				470						475					480
Ile	Ser	Ser	Val	Ala	Ser	Ser	Lys	Leu	Ser	Glu	Gly	Leu	Ser	Leu	Ala
			485					490						495	
Ser	Ala	Gln	Leu	Asp	Arg	Val	Arg	Ala	Thr	Ala	Thr	Pro	Thr	Thr	Ala
		500						505					510		
Val	Glu	Gln	Asn	Arg	Ile	Leu	Leu	Asp	Ala	Gln	Arg	Arg	Tyr	Tyr	Glu

515 520 525  
 Ala Val Gly Met Ala His Asp His Tyr Ser Ala Phe Val Ser Ser Ala  
 530 535 540  
 Ser Arg Ala Val Tyr Gly Ala Pro Thr Pro Thr Gly His Leu Glu Gln  
 545 550 555 560  
 Met Ala Ser Lys Ala Ser Glu Asn Trp Glu Ser Leu Val Ser Ala Ala  
 565 570 575  
 Ser Glu His Phe Tyr Gly Ser Arg Ser His Tyr Thr Pro Pro Ala Leu  
 580 585 590  
 Ser Asp Leu Val Leu Gln Tyr Glu Ala Ile Glu Gln Leu Val Ser Glu  
 595 600 605  
 Leu Ile Val Gly Lys Glu Pro Ser Phe Thr Glu Lys Ala Leu Ser Arg  
 610 615 620  
 Leu His Ala Xaa Tyr Glu Thr Pro Tyr Pro Val Ser Ala Leu Ser Ala  
 625 630 635 640  
 Ala Ser Ser Tyr Val Ile Gly Glu His Thr Ala Thr Ala Ser Ala Pro  
 645 650 655  
 Phe Gly Ser Asp Thr Asn Val Pro Ser Val Glu Asn Ile Leu His Asn  
 660 665 670  
 Ala Asn Glu Gln Phe Gln Ser Ala Ile Asn Ala Val Ser Val Gln Leu  
 675 680 685  
 Tyr Gly Thr Thr Lys Gly Pro Phe Glu Lys Ala Thr Ser Ser Ala Ser  
 690 695 700  
 Ser Ala Met Ser Ala Ala Ser Ala His Ile Ser Glu Ala Val Tyr Gly  
 705 710 715 720  
 Thr Glu Pro Gly Tyr Leu Glu Ala Ala Gln Glu Ala Leu Glu His Ala  
 725 730 735  
 Tyr Ala Ser Ala Glu Ser Ala Ile Arg Asn Ala Val Phe Gln Ser Ala  
 740 745 750  
 Ser Pro Thr Glu Ala Glu Gln Gly Ala Phe Ala Ser Ala Thr Ser Lys  
 755 760 765  
 Leu Ala Glu Ala Val Glu Gly Ala Gln Gly Gln Leu Ala Asn Leu Ala  
 770 775 780  
 Ser Ser Ala Ser Ser Leu Ala Ser Ala Ala Val Glu Thr Val Thr Ser  
 785 790 795 800  
 Lys Val Glu Val Leu Thr Ser Asp Asp Asp Thr Pro Val Lys Asp Glu  
 805 810 815  
 Leu

&lt;210&gt; 40384

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40384

Lys Ala Ala Lys Thr Leu Ala Ala Arg Gln Cys Phe Leu Pro Leu Thr  
 1 5 10 15  
 His Ala His Asn Arg Leu Leu Ser Ala Phe Pro Ser Ser Cys Ser Cys  
 20 25 30  
 Lys Trp Thr Phe Asn Arg Pro Arg Ser Leu Lys Pro Tyr Phe Phe Leu  
 35 40 45  
 Ala Cys Pro Thr Leu Ala Ile Glu Phe Tyr Leu Glu Arg Leu Gly Arg  
 50 55 60  
 Pro Ser Tyr Asn Pro Ala Asp Gly Ser Leu Arg Ser Pro Gly Glu Asp  
 65 70 75 80

## 17653

Leu Gly Ala Ser Gly Leu Thr Glu Tyr Met Trp Asp Val Leu Tyr Trp  
                   85                  90                  95  
 Thr Trp Gly Cys Met Gly Ala Ala Cys Leu Phe Gly Asp Arg Ala Trp  
                   100                  105                  110  
 Trp Leu Trp Ile Val Ile Pro Ile Tyr Ser Val Trp Leu Ala Tyr Thr  
                   115                  120                  125  
 Thr Phe Thr Gly Met Lys Ser Gly Leu Ala Gly Met Gly Gly Ala Asp  
                   130                  135                  140  
 Thr Pro Val Ala Glu Ser Lys Arg Gln Lys Lys Met Glu Lys Arg Gly  
                   145                  150                  155                  160  
 Gly Gln Arg Met Gln Tyr Arg  
                   165

&lt;210&gt; 40385

&lt;211&gt; 477

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40385

Glu Ser Ser Asp Arg Arg Trp Lys Gln His Tyr Ser Ser Met Asp Phe  
 1                  5                  10                  15  
 Ser Gln Gly His His His Gln Tyr Ala Gly Pro Thr Asn Phe Pro Asp  
                   20                  25                  30  
 Leu Met Asn Asp Ser Ala Phe Ala Met Asn Asn Lys Gly Lys Glu Arg  
                   35                  40                  45  
 Asp Phe Glu Glu Pro Asp Thr Cys Arg Ile Cys Arg Gly Glu Gly Thr  
                   50                  55                  60  
 Leu Glu Glu Pro Leu Phe Tyr Pro Cys Lys Cys Ser Gly Ser Ile Lys  
                   65                  70                  75                  80  
 Phe Val His Gln Pro Cys Leu Val Glu Trp Leu Ser His Ser Gln Lys  
                   85                  90                  95  
 Lys His Cys Glu Leu Cys Lys Thr Pro Phe Arg Phe Thr Lys Leu Tyr  
                   100                  105                  110  
 Asp Pro Asn Met Pro Arg Asn Leu Pro Ala Pro Leu Phe Leu Lys Gln  
                   115                  120                  125  
 Leu Phe Ile His Ser Phe Arg Thr Val Val Thr Trp Leu Arg Phe Ile  
                   130                  135                  140  
 Leu Val Ala Phe Val Trp Leu Gly Trp Leu Pro Trp Ser Met Arg Ala  
                   145                  150                  155                  160  
 Ile Trp Arg Ala Leu Phe Trp Leu Ala Asp Gly His Trp Ser Gly Gly  
                   165                  170                  175  
 Asp Ala Ser Gln Gln Leu Gln Ala Arg Gln Ser Ala Gly Asn Glu Thr  
                   180                  185                  190  
 Thr Ser Leu Ala Ala Gly Val Thr Thr Ser Val Leu Gln Thr Pro Ser  
                   195                  200                  205  
 Ala Val Leu Ser Asn Thr Thr Asn Ser Ser Ser Phe Tyr Ala Pro Val  
                   210                  215                  220  
 Ser Ser Met Phe Thr Phe Pro Ser Gly Asp Pro Leu Leu Leu Thr Val  
                   225                  230                  235                  240  
 Ala Lys Lys Val Ile Ser Ala Leu Phe Ser Ser Ala Ile Pro Ser Gly  
                   245                  250                  255  
 Asn Gly Ser Ser Asn Ser Arg Pro Leu Asn Val Thr Thr Gly Leu Tyr  
                   260                  265                  270  
 Lys His Arg His Pro Ser Trp Leu Ser Asp Val Lys Leu Leu Asn Ser  
                   275                  280                  285  
 Leu Thr Ser Ser Pro Thr Ile Asn Asn Ile Ile Ile Asp Thr Leu Glu

290                      295                      300  
 Gly Gln Leu Ile Thr Leu Leu Val Val Leu Ser Phe Ile Leu Val Phe  
 305                      310                      315                      320  
 Leu Ile Arg Glu Trp Val Val Gln Gln Gln Pro Met Ala Asn Ile Ala  
                     325                      330                      335  
 Asp Gly Glu Arg Glu Ala Ala Val Gln Met Ile Ala Asn Asn Arg Pro  
                     340                      345                      350  
 Asn Arg Asn Asp Asp Arg Pro Arg Pro Glu Pro Gly Ala Pro Val His  
                     355                      360                      365  
 Arg Ala Asp Val Leu Gly Asp Glu Gly Glu His Met Ala Glu His Gly  
                     370                      375                      380  
 Ile Gly Gly Asp Asp Val Gly Ile His Asp Ile His Phe Leu Arg Pro  
 385                      390                      395                      400  
 Thr Arg Arg Arg Ser Leu Gln Gly Gly Glu Ser Ala Asp Leu Pro Ala  
                     405                      410                      415  
 Ala Glu Ser Val Glu Thr Ala Gly Phe Ala Thr Phe Pro Glu Asn Asp  
                     420                      425                      430  
 Ser Asp Ser Asp Asn Gly Ala Asn Ala Asp His Leu Ala Arg Arg Ser  
                     435                      440                      445  
 Pro Thr Arg Ala Asn Gln Gly Gly Trp Ala Gly Val Arg Leu Ser Glu  
                     450                      455                      460  
 Thr Ser Gly Pro Ala Ala Met Val Thr Arg Ser Arg Phe  
 465                      470                      475

&lt;210&gt; 40386

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40386

Leu His Val Pro Tyr Gly Gln Ile Asn Ala Phe Ser Arg Met Leu Ile  
 1                      5                      10                      15  
 Gly Glu Gly Thr Trp Ala Pro Ile Gln Met Val Glu Lys Leu Ser Ser  
                     20                      25                      30  
 Val Thr Ala Asn Asp Ile Arg Leu Tyr Phe Pro Glu Leu Leu Gly Lys  
                     35                      40                      45  
 Met His Ile Glu Ile Leu Ile His Ser Asn Leu Cys Lys Glu Asp Ala  
                     50                      55                      60  
 Leu Asn Ile Thr Lys Leu Val Asp Ser Thr Leu Leu Pro Cys Arg Leu  
 65                      70                      75                      80  
 Pro Glu Ser

&lt;210&gt; 40387

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40387

Phe Thr Met Lys Ala His Leu Leu Ala Leu Ala Ser Val Ile Pro Ser  
 1                      5                      10                      15  
 Ala Leu Gly Cys Leu His Tyr Val Gly Gln Ile Tyr Leu Ala Pro Gly  
                     20                      25                      30  
 Gly Pro Gln Leu Gln Thr Ala Trp Ile Ile Asp Asp Gly Thr Leu Val  
                     35                      40                      45  
 Cys Asp Ala Ala Trp Gly Gln Ser Arg Thr Met Ala Gly Tyr Lys Ile



## 17655

50                      55                      60  
 Asn Cys Lys Asn Gly Tyr Ser Leu Glu Val Gly Ala Asp Gly Gly Gln  
 65                      70                      75                      80  
 Ala Trp Tyr Gly Thr Pro His Gly Asn Phe Arg Trp Thr Gln Gly Tyr  
                     85                      90                      95  
 Asp Arg Ser Asp Asn Phe Ile Val Trp Asp Asn Trp Arg Tyr Cys  
                     100                      105                      110

<210> 40388  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 40388  
 Leu Thr Gly Phe Gln Pro Gln Phe Ser Ser Thr Thr Ala Asn Glu Glu  
 1                      5                      10                      15  
 Gly Ser Gln Pro Trp Lys Met Met Gln Glu Ile Gln Asn Leu Phe Lys  
                     20                      25                      30  
 Pro Glu Met Ala Ala Ala Leu Glu Ala Asn Ala Glu Ser Asn Glu Met  
                     35                      40                      45  
 Asp Glu Glu Ser Leu Glu Leu Glu Leu Ala Arg Leu Gln Phe Asn Pro  
                     50                      55                      60  
 Ala Arg Pro Asn Ile Val Asn Ala Glu Glu Gln Tyr  
 65                      70                      75

<210> 40389  
 <211> 111  
 <212> PRT  
 <213> A.fumigatus

<400> 40389  
 Ser Ile Ser Arg Val Leu Ile Val Glu Glu Pro Ala Gly Gly Asn Val  
 1                      5                      10                      15  
 Lys Gly Ala Ala Phe Asn Leu Pro Val Asp Ile Asn Arg Asp Thr Ser  
                     20                      25                      30  
 Ala Cys Pro Ala Cys Tyr Phe Phe Ser Lys Ala Ile Arg Tyr Pro Arg  
                     35                      40                      45  
 Glu Asp Thr Val Glu Gly Leu Arg Val Glu Ile Val Arg Ile Gly Ile  
                     50                      55                      60  
 Gly Met Gly Lys His Thr Phe Thr Leu Ser Val Leu Val Val Ile Cys  
 65                      70                      75                      80  
 His Ser Asp Ser Lys Thr Asp Pro Ala Pro Gly Glu Thr Ser Thr Val  
                     85                      90                      95  
 Ser Phe Asp Trp Glu Val Ala Lys Gly Pro Gly Asn Ile Leu Val  
                     100                      105                      110

<210> 40390  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

<400> 40390  
 Asp Lys Val Phe Glu Asn Lys Thr Val Ala Ser Thr Met Thr Tyr Thr  
 1                      5                      10                      15  
 Asp Thr Ser Leu Val Tyr Thr Ser Leu Phe Val Cys Pro Glu Val Trp  
                     20                      25                      30

## 17656

Ser Thr Ser Ser Tyr Tyr Tyr Glu His Gly Asn Asn Ser Thr Thr Ser  
 35 40 45  
 Cys Gln Asn Arg Asn Leu Ala Gln Ala Ile Lys Asp Leu Ser His Asn  
 50 55 60  
 Phe Thr Tyr Ser Leu Leu Ser Leu Asn Gly Gly Asn Thr Thr Val Asp  
 65 70 75 80  
 Met Thr Asp Leu Thr Cys Arg Asn Tyr Tyr Ser Tyr Gly Ser Thr Ala  
 85 90 95  
 Leu Leu Gly Val Tyr Leu Ser Ala Leu Ala Val Met Ile Ala Cys Val  
 100 105 110  
 Val Val Gly Phe Leu Ala Leu Arg Arg Asn Gly Val Ser Tyr Asn Asn  
 115 120 125  
 Ser Phe Ser Gly Val Leu Leu Thr Thr  
 130 135

&lt;210&gt; 40391

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40391

Cys Leu Ala Val Phe Asp Arg Pro Lys Ala Ser Ile Tyr Thr Glu Asp  
 1 5 10 15  
 Leu Ser Arg Ala Leu Arg Val Ser Ala Arg Leu Arg Thr Gly Thr Val  
 20 25 30  
 Gly Ile Asn Lys Ser Phe Ser Pro Glu Val Glu Thr Pro Phe Gly Gly  
 35 40 45  
 Val Thr Leu Val Val Gln Asp Val Gly Gln Glu Glu Trp Val Tyr Gly  
 50 55 60  
 Ile Ser  
 65

&lt;210&gt; 40392

&lt;211&gt; 388

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (19), (357)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40392

Val Ser Met Pro Gln Met Gly Leu Arg Ala Pro Asn Gly Asn Lys Thr  
 1 5 10 15  
 Arg Thr Xaa Glu Val Ile Thr Leu Gly Arg Phe Ile Ser Glu Ile Val  
 20 25 30  
 Asn Leu Arg Asp Asp Gln Gly Asp Thr Ala Leu Asn Leu Ala Gly Arg  
 35 40 45  
 Ala Arg Ser Val Leu Val Pro Gln Leu Leu Glu Val Gly Ala Asp Pro  
 50 55 60  
 His Ile Pro Asn His Thr Gly Leu Cys Pro Ala Asp Tyr Gly Val Gly  
 65 70 75 80  
 Val Asp Met Val Asp Pro Asn Ala Gln Ser Gln Gln Gly Gly Ser Lys  
 85 90 95  
 Asn Asp Ser Phe Ile Asp His Leu Ala Lys Thr Lys Lys Glu Ile Phe

```

      100      105      110
Asp Gly Ala Gly Pro Leu Gln Lys Ala Ile Asp Gln Asp Ile Leu Thr
      115      120      125
Thr Phe Lys Ala Thr Met Ala Gln Ile Ser Ala Ile Val Gln Glu Thr
      130      135      140
Leu Gly Gly Ile Asp Lys Glu Leu Ala Thr Asp Leu Ser Lys Lys Gln
145      150      155      160
Glu Lys Phe Glu His Trp His Ser Lys Ile Arg Glu Thr Ala Lys Ala
      165      170      175
Arg Gln Ile Glu Gln Lys Arg Leu Asp Asp Leu Lys Ser Lys Ser Ser
      180      185      190
Asn Arg Val Glu Leu Ser Arg Arg Ile Lys Asn Leu Glu Arg Ser Ser
195      200      205
Glu Asp Leu Leu Val Thr Leu Lys Glu Ile His Gly Gly Asn Phe Glu
210      215      220
Pro Ser Lys Met Thr Ile Val Gly Asp Ala Asp Gln Asp Ser Gly Val
225      230      235      240
Asp Met Thr Glu Phe Asp Ala Leu Phe Pro Glu Thr Phe Asp Pro Thr
      245      250      255
Ser Gly Phe Ser Glu Lys Gln Glu Ala Phe Leu Lys Ser Leu Thr Ser
260      265      270
Pro Glu Ile Leu Gln Gln Arg Ile Lys Cys Tyr Gln Asp Phe Asn Gln
275      280      285
Glu Ile Leu Ala Glu Val Asp Arg Leu Lys Ser Lys Asn Val Val Leu
290      295      300
Gly Gln Asn Tyr Arg Arg Met Val Met Ala Cys Thr Gly Trp Thr Gly
305      310      315      320
Glu Gln Val Asp Glu Pro Ala Arg Arg Leu Thr Pro Cys Val Lys Asp
      325      330      335
Leu Asn Asp His Pro Val Pro Glu Asp Glu Ala Ile Asp Asn Leu Met
340      345      350
Lys Asp Leu Arg Xaa Glu Trp Val Pro Val Thr Gly Pro Asn Asn Phe
355      360      365
Ser Cys Phe Cys Ala Thr Ser Arg His Leu Pro Gly Ile Gly Pro Ile
370      375      380
Pro Pro Pro Gly
385

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&lt;210&gt; 40393

&lt;211&gt; 474

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40393

```

Gln Phe Phe Leu Phe Lys Ala Val Tyr Ser Asn Val Ser Val Tyr Glu
1      5      10      15
Met Glu Val Asn Gly Val Ala Val Met Lys Arg Arg Ser Asp Ser Trp
      20      25      30
Leu Asn Ala Thr Gln Ile Leu Lys Val Ala Gly Val Val Lys Ala Arg
35      40      45
Arg Thr Lys Thr Leu Glu Lys Glu Ile Ala Ala Gly Glu His Glu Lys
50      55      60
Val Gln Gly Gly Tyr Gly Lys Tyr Gln Gly Thr Trp Val Asn Tyr Gln
65      70      75      80
Arg Gly Val Glu Leu Cys Arg Glu Tyr His Val Glu Glu Leu Leu Arg
      85      90      95

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## 17658

Pro Leu Leu Glu Tyr Asp Met Gly Pro Asn Gly Thr Ala Asn Ala Gly  
 100 105 110  
 Asn Asp Thr Leu Asp Thr Pro Thr Lys Glu Gln Ala Met Ala Ala Gln  
 115 120 125  
 Arg Lys Arg Leu Tyr Ser Gly Val Asp Asn Arg Gly Met Ser Gln Pro  
 130 135 140  
 Gln Gln Gly Thr Phe Phe Gln Asn Ile Ser Arg Thr Ala Ala Thr Ala  
 145 150 155 160  
 Val Asn Ala Ile Ser Lys Ala Arg Phe Asp Ser Pro Ala Ala Arg Asn  
 165 170 175  
 Ala Asp Ser Arg Arg Ser Ser Ile Met Arg Lys Ser Ser His Gln Ile  
 180 185 190  
 Gly Ser Gln Glu Ser Gln Leu Pro Thr Phe Ser Ser Gln Gln Ser Met  
 195 200 205  
 Tyr Ser Val Ala Ser Asp Ser Gly Phe Gly Ser Asn Ala Gln Ser Asn  
 210 215 220  
 Gly Arg Phe Asn Gly Pro Asp Val Ala Thr Phe Glu Thr Glu Glu Ser  
 225 230 235 240  
 Ile Glu Pro Pro Arg Lys Arg Ile Arg Ser Ser Ser Asn Gln Met Pro  
 245 250 255  
 Ser Phe Gly Leu Gln Arg Glu His Ser Ser Leu Ser Met Gln Glu Pro  
 260 265 270  
 Thr Pro Thr Glu Pro Asn Asp Ser Phe Tyr Gln Glu Met Asp Gly Pro  
 275 280 285  
 Ala Ser Met Ala Asp Gly Asn Arg His Gly Thr Asp Pro Leu Pro Pro  
 290 295 300  
 Ala Thr Thr Pro Glu Arg Phe Gln Lys Met Lys Leu Ile Met Thr Leu  
 305 310 315 320  
 Phe Leu Asp Lys Arg Thr Lys Asp Phe Ser Asn His Pro Ala Leu Leu  
 325 330 335  
 Gln Leu Thr Gly Glu Asp Leu Glu Ile Pro Leu Asp Glu Tyr Arg Asn  
 340 345 350  
 Asn Ala Leu His Trp Ala Ala Met Leu Ala Arg Met Pro Leu Val Tyr  
 355 360 365  
 Ala Leu Val Glu Lys Gly Val Ser Ile Tyr Arg Leu Asn Gly Ala Gly  
 370 375 380  
 Glu Thr Ala Leu Gln Lys Ser Val Gly Thr Arg Asn Asn Leu Asp Tyr  
 385 390 395 400  
 Arg Ser Phe Pro Arg Leu Leu Gln Val Leu Ala Pro Thr Ile Asp Met  
 405 410 415  
 Val Asp Tyr Ser Gly Arg Thr Ile Leu His His Ile Ala Val Met Ala  
 420 425 430  
 Ala Thr Gly Gly Gly Gly His Val Ser Ala Lys His Tyr Leu Glu Ala  
 435 440 445  
 Leu Leu Glu Phe Ile Val Arg His Gly Gly Thr Ser Ile Ser Gln His  
 450 455 460  
 Ala Pro Asn Gly Val Glu Gly Thr Gln Trp  
 465 470

&lt;210&gt; 40394

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40394

Ile Asp Ser Asp Asp Glu Arg Leu Asn Tyr Ile Glu Trp Asn Cys Asp

## 17659

```

1           5           10           15
Gln Val Arg Arg Ile Arg Ser Phe Ile Glu Ser Gly Glu Met Lys
      20           25           30
Ile Gly Glu Phe Gln Asn Ala Ile Gly Val Ser Ser Arg Ser Tyr Leu
      35           40           45
Asp Phe Met Gly Gln His Gly Arg Asp Lys Gly Ser Gly Ser Ser Thr
      50           55           60
Tyr Ile Asn Ala Ala Arg Phe Phe Lys Lys Arg Glu Leu Gln Gly Ile
      65           70           75           80
Lys Pro Leu Arg Lys Lys Arg Ala Ala Lys Glu Ser Gln Lys Asn Val
      85           90           95
Ala Glu Lys Tyr Asp Val Ser Ser Ile His Leu Asp Gly Glu Ser Asp
      100           105           110
Pro Glu Leu Pro Gly Trp Gly His Leu
      115           120

```

&lt;210&gt; 40395

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40395

```

Leu Ala Ala Trp Glu Gln His Arg Ala Gly Gly Asp Asp Gln Gly Ala
1           5           10           15
Val Ser Ala Cys Ser Gly Lys Gly Gly Pro His Gly Ala Asn Gly Gly
      20           25           30
Ala Val Cys Gly Ala Gly Ala Gly Val Ile Gly Glu Val Val Val Glu
      35           40           45
Gly Glu Val Asp Asp Gly Val Ala Phe Gly Gly Gly Phe Leu Glu Asp
      50           55           60
Ile Gln Leu Phe Asn Gly Thr Ala Tyr Gly Leu Gly Ala Leu Val Phe
      65           70           75           80
Lys Leu Phe Asp Ser Thr Leu Thr Ala Ser Gln Ala Glu Asp Phe Met
      85           90           95
Ser Arg Arg Glu Glu Phe Phe Asp Asp Gly
      100           105

```

&lt;210&gt; 40396

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40396

```

Arg Leu Arg Gly Ser Phe Arg Lys Thr Ser Glu Thr Leu Ser Val Val
1           5           10           15
Ser Val Phe Met Ser Leu Phe Ser Pro Leu Lys Ser Asp Lys Leu Asp
      20           25           30
His Tyr Val Pro Glu Asp Thr Glu Ile Asn Ser Leu Glu Ser Gln Ile
      35           40           45
Val Arg Lys Arg Gln Ala Lys Thr Thr Met Ala Ser Gly Arg Lys Thr
      50           55           60
Pro Leu Gln Pro Ser Leu Lys Val Val Gln Arg Thr Leu
      65           70           75

```

&lt;210&gt; 40397

&lt;211&gt; 187

17660

<212> PRT

<213> A.fumigatus

<400> 40397

```

Met Ala Ile Gly Ile Leu Leu Glu Thr Ala Ala Phe Leu Gly Ala Ser
1           5           10           15
Trp Ser Asn Lys Ile Trp Gln Leu Tyr Leu Ser Gln Gly Val Cys Phe
           20           25           30
Gly Trp Gly Leu Gly Leu Gln Tyr Leu Ser Thr Thr Tyr Leu Ile Pro
           35           40           45
Gln Trp Phe Ser Arg Lys Arg Ser Leu Ala Ala Gly Ile Ala Thr Gly
           50           55           60
Gly Ser Gly Thr Gly Gly Leu Ile Tyr Ser Leu Ala Thr His Ala Met
65           70           75           80
Leu Ala Arg Phe Ser Ile Gly Trp Ser Tyr Arg Ile Leu Ala Ile Cys
           85           90           95
Gln Leu Val Val Asn Ser Phe Cys Leu Leu Val Ile Arg Asp Arg Ser
           100          105          110
Ala Gln Asp His Ser Ser Ser Arg Thr Leu Lys Ile Asn Phe Ser Leu
           115          120          125
Cys Ala Arg Tyr Glu Met Trp Leu Tyr Ile Gly Trp Ser Phe Leu Ser
           130          135          140
Val Met Gly Phe Met Val Ile Trp Phe Ser Leu Ala Thr Tyr Gly Arg
145          150          155          160
Ser Val Gly Leu Thr Ser Thr Gln Gly Ala Val Val Thr Ala Val Met
           165          170          175
Asn Ile Gly His Met Phe Gly Met Pro Ala Val
           180          185

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<210> 40398

<211> 320

<212> PRT

<213> A.fumigatus

<400> 40398

```

Lys Pro Ser Cys His Ile Gln Ile Pro Ser Val Phe His Phe Ile Met
1           5           10           15
Arg Val Phe Val Thr Gly Ser Thr Gly Phe Val Gly Ser Ala Val Val
           20           25           30
Lys Glu Leu Leu Ser Ala Gly His Lys Val Leu Gly Leu Thr Arg Ser
           35           40           45
Glu Ser Gly Val Glu Gln Leu Glu Asn Gln Gly Ala Glu Ala Ile Arg
           50           55           60
Gly Thr Ile Glu Gln Leu Asp Ile Leu Lys Lys Ala Ala Ser Glu Cys
65           70           75           80
Asp Ala Val Ile His Leu Ala Phe Asn His Asp Phe Thr Asp Tyr Ala
           85           90           95
Gly Ser Cys Ala Thr Asp Arg Ala Ala Ile Ser Ala Met Gly Ser Ser
           100          105          110
Leu Ala Ala Ala Gly Gly Asp Arg Ala Leu Val Ile Thr Ser Gly Thr
           115          120          125
Met Leu Leu Pro Arg Gly Lys Leu Gly Asp Glu Asp Asp Ala Pro Asp
           130          135          140
Met Thr His Pro Met Ala Ala Ala Arg Gly Ala Ser Glu Lys Val Cys
145          150          155          160
Leu Asp Phe Ala Lys Gln Gly Val Arg Ala Ser Val Val Arg Leu Pro

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## 17661

				165					170					175			
Arg	Thr	Thr	His	Gly	Leu	Gly	Phe	Ser	Arg	Phe	Thr	Gly	Ser	Phe	Val		
			180					185					190				
Ser	Val	Ala	Leu	Gln	Lys	Gly	Val	Ala	Ala	Tyr	Leu	Gly	Asp	Gly	Gln		
		195					200					205					
Asn	Arg	Trp	Cys	Ala	Gly	His	Arg	Asp	Asp	Ala	Ala	Arg	Leu	Phe	Arg		
		210				215						220					
Leu	Ala	Ala	Glu	Lys	Ala	Thr	Pro	Gly	Ser	Val	Phe	His	Ala	Val	Gly		
225					230					235					240		
Glu	Glu	Ser	Val	Pro	Thr	Lys	Glu	Ile	Ala	Ile	Ala	Val	Gly	Lys	Lys		
				245					250					255			
Leu	Glu	Ile	Pro	Val	Val	Ser	Ile	Pro	Pro	Glu	Lys	Ala	Glu	Glu	His		
			260				265						270				
Phe	Gly	Trp	Phe	Trp	Phe	Gly	Val	Ala	Ala	Asp	Asn	Val	Ala	Ser	Ser		
		275				280						285					
Ala	Lys	Thr	Arg	Glu	Arg	Leu	Gly	Trp	Thr	Pro	Glu	Gly	Ala	Thr	Leu		
	290				295						300						
Met	Glu	Asp	Ile	Pro	Ala	Ile	Val	Asp	Phe	Ile	Lys	Ser	Gln	Ala	Val		
305				310						315					320		

&lt;210&gt; 40399

&lt;211&gt; 388

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40399

Val	Lys	Cys	Gly	Ser	Cys	Gln	Ala	Arg	Gly	Glu	Asp	Lys	Phe	Asp	Gly		
1				5					10					15			
Glu	Lys	Cys	Val	Thr	Thr	Ser	Leu	Glu	Gln	Pro	Leu	Cys	Glu	Thr	Ser		
			20				25						30				
Leu	Glu	Leu	Arg	Asp	Gly	Tyr	Cys	Ile	Ser	Glu	Glu	Thr	Pro	Ile	Cys		
		35				40						45					
Asp	Val	Gly	Val	Trp	Asn	Gly	Gln	Tyr	Cys	Leu	Phe	Asp	Glu	Thr	Pro		
	50				55					60							
His	Cys	Pro	Ser	Pro	Thr	Arg	Phe	Asn	Gly	Val	Glu	Cys	Val	Ser	Thr		
65					70					75				80			
Gln	Pro	Pro	Thr	Cys	Pro	Pro	Gly	Ser	His	Val	His	Ala	Asn	Gln	Cys		
				85					90					95			
Arg	Gly	Asp	Lys	Pro	Ala	Ser	Cys	Pro	Pro	Pro	Leu	Arg	Leu	Val	Lys		
			100					105					110				
Asp	His	Cys	Val	Asp	Ala	Thr	Pro	Pro	Glu	Cys	Pro	Thr	Gly	Phe	Thr		
		115					120					125					
Leu	Val	Gly	Thr	Val	Cys	Arg	Ser	Val	Lys	Pro	Pro	His	Cys	Pro	Asp		
		130				135					140						
Gly	Gln	Met	Tyr	Tyr	Asn	Gly	Asn	Cys	Ile	Ile	Pro	Thr	Ile	Pro	Gln		
145					150				155					160			
Cys	Pro	Asp	Gly	Phe	Pro	Pro	Val	Gly	Asp	Lys	Cys	Leu	Ala	Asp	Val		
			165					170					175				
Gln	Pro	Glu	Cys	Pro	Pro	Gly	Phe	Arg	Val	Glu	Gly	Lys	Asn	Cys	Val		
			180				185						190				
Ser	Thr	Glu	Asn	Pro	Glu	Cys	Pro	Pro	Gly	Leu	Asp	Arg	Val	Gly	Ala		
		195					200					205					
Asp	Cys	Val	His	Arg	Gly	Ser	Pro	Ser	Cys	Ala	Pro	Gly	Thr	Val	Pro		
	210					215					220						
Asp	Gly	Asn	Arg	Cys	Ile	Ser	Leu	Val	Pro	Pro	Gln	Cys	Pro	Asp	Gly		
225				230						235				240			

Leu Val Pro Arg Gly Ser Glu Cys Val Ala Asn Asp Asn Pro Glu Cys  
                   245                  250                  255  
 Pro Pro Gly Phe Arg Phe Leu Asp Asn His Cys Val Ser Glu Asn Lys  
                   260                  265                  270  
 Pro Gln Cys Pro Pro Gly Ser Thr Leu Val Gly Glu Glu Cys Val Val  
                   275                  280                  285  
 Glu Lys Ala Pro Asp Cys Pro Pro Gly Thr Glu Phe His Ser Gly Met  
                   290                  295                  300  
 Cys Val Ser Thr Lys Arg Pro Glu Cys Pro Pro Gly Leu Glu Leu Lys  
 305                  310                  315                  320  
 Asn Asn Lys Cys Val Arg Thr Ser Glu Pro Glu Cys Pro Arg Gly Gln  
                   325                  330                  335  
 Lys Phe Asn Gly Ser Phe Cys Ala Ser Thr Asp Asp Pro Gln Cys Pro  
                   340                  345                  350  
 Glu Gly Thr Ser Tyr Asp Gly Ala Arg Cys Ser Val Asn Ala Asn Leu  
                   355                  360                  365  
 Ser Cys Tyr Glu Leu Gln Tyr Cys Pro Pro Thr Ala Pro Ser Arg Asn  
                   370                  375                  380  
 Val Leu Val Lys  
 385

<210> 40400

<211> 208

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (53), (125)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40400

Val Glu Gly Val Asn Ala Phe Asp Tyr Met Val Leu Ala Arg Met Ile  
 1                  5                  10                  15  
 His Phe Phe Val Pro Asp Arg Arg Ile Gly Ile Phe Lys Pro Ser Met  
                   20                  25                  30  
 Leu Ala Met Ile Phe Val Val Leu Asp Leu Gly Ser Phe Val Ile Gln  
                   35                  40                  45  
 Leu Thr Gly Gly Xaa Met Ala Gly Ala Gly Ala Asp His Asp Thr Met  
                   50                  55                  60  
 Met Lys Gly Ile His Ile Tyr Met Gly Gly Ile Gly Ile Gln Glu Phe  
 65                  70                  75                  80  
 Phe Ile Val Leu Phe Leu Phe Ile Ala Ile Gln Phe His Arg Gln Met  
                   85                  90                  95  
 Leu His Leu Asn Arg His Gly Arg Leu Val Gly Pro Lys Ala Lys Trp  
                   100                  105                  110  
 Arg Ser Leu Leu Tyr Ala Leu Tyr Ala Ser Leu Leu Xaa Ile Thr Val  
                   115                  120                  125  
 Arg Ile Ile Phe Arg Leu Val Glu Phe Ser Ser Gly Asn Asp Ala Ser  
                   130                  135                  140  
 Asn Pro Ile Leu Gln His Glu Trp Tyr Met Tyr Val Phe Asp Ala Val  
 145                  150                  155                  160  
 Pro Met Trp Phe Ala Ile Val Val Trp Asn Val Val His Pro Gly Ala  
                   165                  170                  175  
 Ile Ile Lys Gly Pro Asp Ala Lys Met Pro Pro Ser Pro Pro Ala Gln  
                   180                  185                  190



## 17663

Asp Ile Met Leu Arg Phe Leu Leu Phe Arg Leu Gln Lys Glu Glu Glu  
 195 200 205

<210> 40401  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 40401  
 Cys Pro Ala His Val Arg Gly Lys Leu Thr Thr Cys Arg Cys Val Asp  
 1 5 10 15  
 Phe Thr Ile Pro Leu Gly Gln Val Asp Tyr Asp Ser Pro Val Thr Met  
 20 25 30  
 Val Thr Glu Gln Trp Pro Val Thr Ile Asn Ile Ile Ala Arg Arg Gly  
 35 40 45  
 Cys Asp Phe Met Leu Phe Asn Met Ile Lys Gln Leu Ala Glu Glu Gly  
 50 55 60  
 Val Leu Arg Ser Val Thr Thr Gly Arg Thr Ala Leu  
 65 70 75

<210> 40402  
 <211> 175  
 <212> PRT  
 <213> A.fumigatus

<400> 40402  
 Phe Glu Pro Ala Asp Ile His Gly Thr Gly Gly Ile Arg Pro His Pro  
 1 5 10 15  
 Gly Ser His Leu Glu Cys His Arg Arg Gly Val Cys Arg Ser Gln Gly  
 20 25 30  
 Arg Ser Ser Val Asp Pro Gly Gly Ser Asp Ala Gly Gly Lys Ser Glu  
 35 40 45  
 Pro Val Leu Phe Leu Thr Ile Ala Asn Thr Ser Gln Ser Ser Gly Asn  
 50 55 60  
 Val Tyr Val Gly Cys Thr Asn Asn Gly Val Gln Asn Cys Gly Leu Met  
 65 70 75 80  
 Gln Ala Tyr Ala Gly Ser Val Ser Phe Asn Pro Asn Asp Pro Gln Gly  
 85 90 95  
 Ser Ile Thr Gln Met Ile Ile Asp Gly Thr Gln Gly Thr Ala Gln Gly  
 100 105 110  
 Gly Gly Leu Val Gln Trp Phe Asn Asn Glu Asn Val Gly Ala Asn Thr  
 115 120 125  
 Gly Gly Asn Pro Tyr Asn Val Leu Arg Gly Tyr Asn Ser Gly Ser Ile  
 130 135 140  
 Asn Phe Asn Asp Leu Asp Asp Pro Gln Gly Ala Thr Ala Ser Tyr Val  
 145 150 155 160  
 Ser Asp Val Ala Asn Arg Leu Gln Val Ser Ser Val Cys Gln Asn  
 165 170 175

<210> 40403  
 <211> 641  
 <212> PRT  
 <213> A.fumigatus

<400> 40403  
 Gly Pro Thr Thr Val Phe Arg Asn Arg Gln Val Gly Ser Tyr Glu Glu

1	5	10	15
Arg Pro Phe Asn Met Asn Pro Trp Lys Ser Val Phe Val Lys Cys Leu			
20	25	30	
Phe Phe Cys Thr Ala Val Ser Gly Ile Ser Asn Arg Glu Ile Pro Met			
35	40	45	
Thr Asp Val Gln Pro Ser Ala Gln Gly Ile Thr Tyr Glu Leu Gly Asn			
50	55	60	
Val Thr Tyr Phe Ala Asn Ile Glu His Pro Arg Ala Ile Phe Asp Leu			
65	70	75	80
Asp Tyr Thr Thr Thr Ser Arg Leu Val Pro Ser Ala Val Leu Leu Val			
85	90	95	
Asn Gln Ser Leu Val Thr Gly Ser Tyr Leu Lys Ser Thr Ile Ser Ser			
100	105	110	
Tyr Leu Thr Asp Asp Asp Val Phe Ser Ala Asp Phe Leu His Ala Ile			
115	120	125	
Tyr Phe Thr Ser Thr Val Pro Arg Ser Arg Leu Asp Ser Thr Ala Glu			
130	135	140	
Glu Tyr Leu Arg Ser Leu Gly Val Ala Gly Leu Leu Phe Asn Ala Ser			
145	150	155	160
Ser Phe Asp Arg Ile Pro Ser Asn Gly Tyr Ala Leu Lys Glu Asp His			
165	170	175	
Asp Ala Pro Leu Pro Pro Gly Pro Phe Thr Ile Leu Val Asn Asn Gly			
180	185	190	
Ser Ile Ser Phe Leu Asp Thr Tyr Arg Leu Tyr Val Asp Asn Phe Arg			
195	200	205	
Thr Phe Val Thr Gly Val Tyr Ser Ser Asn Asp Gly Val Gly Ser Phe			
210	215	220	
Ala Ala Leu Pro Ala Met Asn Pro Arg Leu Gly Gly Pro Leu Ile Pro			
225	230	235	240
Ala Pro Ser Arg Ile His Ser Trp Asn Asp Asp Arg Pro Leu Ala Gly			
245	250	255	
Lys Arg Val Ala Val Lys Asp Leu Phe Asp Ile Lys Gly Leu Gln Thr			
260	265	270	
Ser Ala Gly Ser Gln Ala Trp Ile His Val Thr Pro Ile Ala Asp Ser			
275	280	285	
Thr Ala Pro Ala Ile Gln Arg Leu Ile Asp Leu Gly Ala Val Ile Val			
290	295	300	
Gly Lys Ser Lys Leu Ala Gln Phe Ala Ser Ala Ala Asp Pro Trp Asn			
305	310	315	320
Trp Thr Asp Glu Gln Ala Pro Phe Asn Pro Arg Gly Asp Gly Tyr Leu			
325	330	335	
Thr Cys Ser Ala Ser Ser Ser Gly Gly Gly Cys Gly Ile Ala Ala Tyr			
340	345	350	
Asn Trp Phe Asp Ala Ala Ile Gly Thr Asp Thr Gly Ser Ser Met Arg			
355	360	365	
Arg Pro Ala Ser Val Ser Gly Thr Phe Gly Asn Arg Pro Ser Gln Gly			
370	375	380	
Met Met Ser Leu Glu Gly Ala Val Pro Leu Asn Ala Gly Glu Asp Thr			
385	390	395	400
Val Gly Val Phe Ser Arg Asp Pro Val Glu Trp Ala Glu Phe Ala Lys			
405	410	415	
Ala Trp Tyr Thr Pro Ser Leu His Gln Asp Pro Ser Ile Asn Ser Leu			
420	425	430	
Pro Pro Leu Ser Val Pro Asp Thr Thr Ala Phe Pro Lys Arg Ile Leu			
435	440	445	
Tyr Pro Val Glu Tyr Leu Pro Leu Ala Asn Pro Ala Ala Gln Ala Ile			

450		455		460
Leu Glu Lys Phe Leu His Gly Met Ile Arg Val Phe Asn Met Thr Ile				
465		470		475
Glu Arg Thr Asn Phe Thr Ala Thr Ala Ser Asn Ala Ser Ile Tyr Pro				480
	485		490	495
Gly Ala Ala Gly Asp Ala Met Val Asn Trp Asn Leu Leu Tyr Asp Ala				
	500		505	510
Gly Ala Thr Leu Gln Leu Trp Thr Gln Ser Thr Lys Val Tyr Gly Pro				
	515		520	525
Leu Ile Ser Thr Trp Ala Ala Arg Asn Asp Gly Arg Phe Pro Pro Val				
	530		535	540
Asp Ala Gln Trp Arg Glu Ala Trp Thr Arg Tyr Asp Ala Ser His Ile				
545		550		555
Thr Gln Ser Gly Tyr Glu Gln Ala Leu His Thr Lys Ala Ala Val				560
	565		570	575
Asn Trp Phe Gln Glu Glu Val Leu Tyr Glu Thr Ser Asp Ser Cys Ser				
	580		585	590
Glu Ala Val Met Ile Cys Asp Gly Thr Gly Gly Leu Pro Ser Phe				
	595		600	605
Arg Glu Gln Ala Leu Asn Asn Ser Pro Asn Ala Thr Phe Met Ser Val				
	610		615	620
Phe Pro Glu His Ala Asp Val Ser Cys Ser Gly Ile Cys Thr Leu Phe				
625		630		635
Gly				640

&lt;210&gt; 40404

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (10)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40404

Cys Pro Arg Thr Trp Arg Ser Ala Val Xaa Asn Ile Gly Gly Ser Ala				
1	5	10	15	
Thr Leu Phe Leu Tyr Gly Gly Cys Val Trp Thr Phe Phe Asn His Asn				
	20	25	30	
Gly Gly Cys Asn Gly Asp Cys Gln Ala Asn Ala Val Arg Ile Leu Ser				
	35	40	45	
Ser Ala Gly Ser Val Tyr Leu Tyr Gly Thr Asn Val Lys Ala Ile Ser				
	50	55	60	
Asn Ile Val Leu Glu Asn Thr Ala Ala Ala Lys Glu Ser Asp Asn				
65	70	75	80	
Ser Gly Gly Trp Gly Gly Val Val Ala Ala Tyr Leu His Asn Val Gly				
	85	90	95	
Ser Gly Ser Arg Thr Arg Arg Ser Ser Asn Ala Asn Gly Ala Ala Val				
	100	105	110	
Thr Gly Asn Gly Leu Asn Trp Tyr Ser Ser Ser Leu Thr Ser Gly Ala				
	115	120	125	
Ser Gly Tyr Gln Asp Pro Glu Tyr Tyr Tyr Cys Phe Arg Gly Ser Ala				
	130	135	140	
Ala Asn Phe Pro Pro Ile Gln Asn Trp Met Gly Phe Thr Ala Met Phe				

## 17666

145                      150                      155                      160  
 Asp Leu Asn Gln Gln Thr Ser Met Ala Leu Val Glu Ser Gly Pro Ile  
                          165                      170                      175  
 Gln Gly Ala Ile Trp Asn Ala Ile Val Glu Val Ser Ala Ala Ala Lys  
                          180                      185                      190  
 Val Asp Pro Arg Leu Ile Leu Ala Val Val Met Gln Glu Val Ser Pro  
                          195                      200                      205  
 Ser Leu Tyr Ser Phe  
                          210

<210> 40405  
 <211> 91  
 <212> PRT  
 <213> A.fumigatus

<400> 40405  
 Arg Arg Cys Ala Ser Ile Cys His Asp Trp Lys Asp Gly Phe Val Ala  
 1                      5                      10                      15  
 Arg Ser Lys Asp Ser Val Phe Ile Leu Thr Thr Asn Glu Asp Asn Asp  
                          20                      25                      30  
 Leu Ile Leu Gly Tyr Lys Arg Asn Arg Arg Thr Arg Gln Tyr Leu Glu  
                          35                      40                      45  
 Leu Met Thr Cys Ile Val Cys Ser Tyr Phe Leu Glu Arg Asn Glu Arg  
                          50                      55                      60  
 Arg Gln Met Thr Glu Ser Leu Thr Gln Asn Ala Ser Tyr Gln Lys Asp  
 65                      70                      75                      80  
 Asn Lys Pro Asn Thr Arg His Arg Asp Ala Asp  
                          85                      90

<210> 40406  
 <211> 133  
 <212> PRT  
 <213> A.fumigatus

<400> 40406  
 Gly Gly Gly Gly Thr Arg Tyr Leu Pro Ala Pro Ala Leu Arg Leu Arg  
 1                      5                      10                      15  
 Ser Val Asp Glu Thr Asp Thr Lys Leu Ser Arg Glu Pro Arg Arg Ile  
                          20                      25                      30  
 Arg Thr Ile Ser Glu Ser Arg Pro Thr Gly Ser Leu Ile Ser Arg Lys  
                          35                      40                      45  
 Ser Arg Gly Gly Gly Gly Gly Glu Arg Glu Arg Pro Arg Pro Lys Pro  
                          50                      55                      60  
 Ile Arg Glu Ser Arg Gly Ser Lys Ser Arg Ser Arg Arg Gly Gln Ser  
 65                      70                      75                      80  
 Arg Ser Ile Ser Arg Arg Lys Gly Gly Gly Pro Ser Arg Gly Ser Arg  
                          85                      90                      95  
 Lys Ser Arg Ser Arg Ser Leu Ser Arg Ser Arg Gly Ser Arg Ser Arg  
                          100                      105                      110  
 Ser Arg Asn Ser Ala Arg Pro Gly Lys Pro Arg Pro Arg Pro Pro Lys  
                          115                      120                      125  
 Gly Ala Pro Arg Gly  
                          130

<210> 40407  
 <211> 307

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40407

Cys Gly Gln Arg Ala Tyr Arg His Pro Glu Thr Gly Glu Lys Thr Thr  
 1 5 10 15  
 Ile Phe Leu Gly Tyr Thr Ser Asn Leu Ile Ser Ser Gly Leu Arg Asp  
 20 25 30  
 Thr Ile Arg Tyr Leu Val Arg His Arg His Val Ser Ala Ile Val Thr  
 35 40 45  
 Thr Ala Gly Gly Val Glu Glu Asp Leu Ile Lys Cys Leu Ala Pro Thr  
 50 55 60  
 Tyr Met Gly Ser Phe Ser Thr Pro Gly Ala Gly Leu Arg Ala Lys Gly  
 65 70 75 80  
 Leu Asn Arg Ile Gly Asn Leu Ile Val Pro Asn Ser Asn Tyr Cys Ala  
 85 90 95  
 Phe Glu Asp Trp Leu Ile Pro Ile Leu Asp Lys Met Leu Glu Glu Gln  
 100 105 110  
 Glu Glu Ala Lys Lys Lys Ala Leu Arg Thr Gly Asp Glu Glu Asp Glu  
 115 120 125  
 Leu His Trp Thr Pro Ser Arg Val Ile Glu Arg Leu Gly Arg Glu Ile  
 130 135 140  
 Asp Asn Glu Asp Ser Val Leu Tyr Trp Ala Ala Arg Asn Asn Ile Pro  
 145 150 155 160  
 Ile Phe Cys Pro Ala Leu Thr Asp Gly Ser Leu Gly Asp Met Leu Tyr  
 165 170 175  
 Phe His Thr Tyr Arg Ser Ser Pro Gln Arg Leu Arg Val Asp Ile Val  
 180 185 190  
 Asp Asp Val Arg Arg Ile Asn Thr Met Ala Val Arg Ala Ala Arg Ala  
 195 200 205  
 Gly Met Ile Ile Leu Gly Gly Gly Val Ile Lys His His Ile Ala Asn  
 210 215 220  
 Ala Cys Leu Met Arg Asn Gly Ala Glu His Ala Val Tyr Ile Asn Thr  
 225 230 235 240  
 Ala Gln Glu Phe Asp Gly Ser Asp Ala Gly Ala Arg Pro Asp Glu Ala  
 245 250 255  
 Val Ser Trp Gly Lys Ile Lys Ala Asp Ala Asn Ala Val Lys Val Tyr  
 260 265 270  
 Ala Glu Ala Thr Val Val Phe Pro Met Ile Val Gly Arg Leu Phe Cys  
 275 280 285  
 Pro Val Gln Pro Asn Ser Ile Gly Arg Arg Leu Gly Gln Pro Gln Leu  
 290 295 300  
 Arg Arg Gln  
 305

&lt;210&gt; 40408

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40408

Leu Ser Ile Ser Ser Ser Lys Met Thr Asn Tyr His Ser Gly Ser Ala  
 1 5 10 15  
 Glu Ala Leu Pro Pro Ser Ser Ala Thr Asn Ala Val Leu Val Ala Ser  
 20 25 30  
 Glu Pro Val Pro Lys Gly Ser His Glu Val Arg Gly Val Asp Phe Asp

17668

35	40	45
Arg Phe Gln Gly Arg Asp	Ile Thr Val Ala Glu	Leu Val Asp Asn Met
50	55	60
Val His Met Gly Phe Gln	Gly Ser Ala Val Ala	Glu Ala Thr Arg Ile
65	70	75
Ile Asn Asp Met Val Lys		80
85		

<210> 40409

<211> 208

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (204)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40409

Val Phe Arg Arg Val Ser Val Val Arg Gly Arg Ser Glu Met Glu Met	
1	15
Leu Thr Val Ala Asp Asp Tyr Trp Glu Lys Asn Phe His Pro Asp Leu	
20	30
Asp Asp Pro Glu Tyr Arg Pro Val Glu Lys Gly Arg Leu Thr Trp Lys	
35	45
Ile Lys Gly Val Arg Gly Thr Lys Asp Ala Pro Asn Arg Ser Lys Ile	
50	60
Met Arg Ser Pro Pro Ala Tyr Ile Gly Gly Tyr Trp Thr Thr Ile Lys	
65	80
Phe Phe Pro Arg Gly Asn Asn Val Gly Ser Leu Ser Ile Tyr Ile Glu	
85	95
Cys Ser Pro Thr Leu Pro Gln Pro Asp Lys Thr Leu Pro Glu Thr Glu	
100	110
Ile Lys Val Met Arg Gly Pro Ala Asp Ser Gly Leu Asn Asn Ala Ala	
115	125
Pro Glu Leu Asp Met Lys Phe Ala Arg Thr Glu Asp Thr Ala Ser Trp	
130	140
His Glu Gln Phe Thr Ala Gln Tyr Pro Ala Ala Ala Ala Ser Arg Gln	
145	160
Asp Pro Pro Lys Asp Thr Trp Arg Val Ser Ala Gln Ile Gly Val Ile	
165	175
Leu Tyr Asn Pro Asp Glu Pro Arg Thr Gly Trp Met Gln Ser Ser Cys	
180	190
Asp Gln Phe Asn Pro Phe Ser Gln Arg Arg Ser Xaa Asp Ser Ser Asn	
195	205

<210> 40410

<211> 139

<212> PRT

<213> A.fumigatus

<400> 40410

Ile Arg Ile Leu Pro Ser Ser Ala Met Asp Thr Arg Met Asp Thr Ala	
1	15
Val Thr Val Glu Gln Leu Pro Pro Ala Val Thr Leu Ser Val Asp Ala	
20	30
	25

17669

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Pro Ser Ser Glu Thr Val Thr Val Gly Thr Glu Leu Pro Glu Pro Thr
    35              40              45
Ser Glu Asn Asn Val Thr Glu Ile Pro Glu Asn Thr Pro Leu Asp Asn
    50              55              60
Val His Pro Gln Ser His Glu Pro Ser Asp Pro Ile Pro Ala Pro Gln
    65              70              75              80
Pro Pro Gln Pro Glu Leu Glu His Ala Tyr Trp Ala Glu Ile Glu Glu
    85              90              95
Asp Thr Ser Val Pro Asp Glu Ala Glu Met Lys Glu Ile Glu Ser Thr
    100              105              110
Ala Asp Gly Asp Tyr Ser Ala Tyr Glu Cys Arg Ser Phe Val Glu Phe
    115              120              125
Leu Trp Phe Glu Asp Glu Ala Arg Trp Arg Cys
    130              135

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<210> 40411  
 <211> 213  
 <212> PRT  
 <213> A.fumigatus

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<400> 40411
Lys Ser Pro Thr Gly Phe Cys Thr Ser Ser His Leu Thr Cys Cys Arg
1      5              10              15
Leu Pro Ala Arg Leu Pro Ser Phe Asn Leu Phe Ser Tyr Asp Leu Val
    20              25              30
Met Ser Ser Arg Tyr Pro Pro Ser Ser Gly Phe Asn Ser Arg Asp Arg
    35              40              45
Ser Pro Gln Arg Phe Gly Asp Arg Arg Pro Pro Ala Gly Pro Arg Gly
    50              55              60
Ser Asp Asp Ala Ser Leu Ala Pro Leu Gly Arg Glu Pro Pro Arg Gly
    65              70              75              80
Pro Lys Ala Leu Ile Asp His Pro Arg Gly Ala Pro Phe Gly Gly Arg
    85              90              95
Gly Arg Gly Phe Pro Gly Arg Ala Glu Phe Arg Asp Arg Asp Arg Asp
    100              105              110
Pro Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp Phe Arg Asp Pro Arg
    115              120              125
Asp Gly Pro Pro Pro Phe Arg Arg Asp Ile Asp Arg Asp Trp Pro Arg
    130              135              140
Arg Glu Arg Asp Phe Asp Pro Arg Asp Ser Arg Ile Gly Phe Gly Arg
    145              150              155              160
Gly Arg Ser Arg Ser Pro Pro Pro Pro Pro Arg Asp Phe Arg Asp Met
    165              170              175
Arg Glu Pro Val Gly Arg Asp Ser Asp Ile Val Arg Met Arg Arg Gly
    180              185              190
Ser Arg Asp Ser Leu Val Ser Val Ser Ser Thr Leu Arg Ser Leu Asn
    195              200              205
Ala Gly Ala Gly Arg
    210

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<210> 40412  
 <211> 109  
 <212> PRT  
 <213> A.fumigatus

<400> 40412

## 17670

Cys Trp Gly Ala Val Tyr Ile Ala Met Thr Met Phe His Gly Arg Tyr  
 1 5 10 15  
 Ala Ala Arg Pro Arg Glu Arg Thr Ser Arg Phe Gln Ile Gly Asp Lys  
 20 25 30  
 Asp Gln Lys Ala Met Gly Phe Leu Cys Arg Ser Arg Cys Ser Thr Gln  
 35 40 45  
 Ser Cys Lys Ile Ile Asn Phe Leu Phe Phe Phe Ser Glu Ser Ala Gly  
 50 55 60  
 Glu Lys Tyr Tyr Ile Gly Val Asn Val Leu Asp Ser Thr Leu Ser Leu  
 65 70 75 80  
 Gln Ser Lys His Met Gln Ala Tyr Ser Thr Ser Phe Ala Glu Asn Ile  
 85 90 95  
 Tyr Thr Pro Arg Ala Leu Asp Phe Tyr Pro His Ala Val  
 100 105

&lt;210&gt; 40413

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40413

Ile Glu Ser Gly Arg Ala Ala Phe Lys Val Asn Leu Lys Met Ala Ala  
 1 5 10 15  
 Ala Arg Arg Met Phe Gly Gly Arg Asn Cys Arg Gly Pro Gln Pro Met  
 20 25 30  
 Arg Arg Pro Val Ile Pro Ile Ala Cys Arg Arg Lys Leu Phe Arg Pro  
 35 40 45  
 Val Cys Arg Ala Ser Val Gln Pro His Arg Ile Pro Pro Val Val Ser  
 50 55 60  
 Phe Asn Cys Ser Leu Pro Pro Ser Thr Leu Leu Pro Ser Thr His Leu  
 65 70 75 80  
 Pro Ala Ile Ile Ala Ile Asp Ser Leu Ile Met Ser Leu Ser Ser Ala  
 85 90 95  
 Ser Ser Thr Leu Leu Arg Ala Cys Ala Arg Gln Gln Leu Pro Thr Thr  
 100 105 110  
 Arg Ala Ala Val Ala Ser Cys Gln Gln Arg Arg Gly Leu Ser Glu Ala  
 115 120 125  
 Ser Lys Ser Ser Ser Phe Asp Ser Pro Phe Gly Asn Ser His Glu Tyr  
 130 135 140  
 Gln Ser Thr Leu Lys Ile Pro Ser Phe Ser Lys Tyr Ala Ser Asn Lys  
 145 150 155 160  
 Pro Pro Arg Ser Asn Gln Val Phe Ser Tyr Phe Met Ala Gly Ala Leu  
 165 170 175  
 Gly Leu Gly Ser Ala Val Gly Ala Lys Ala Thr Val Gln Gly Arg  
 180 185 190

&lt;210&gt; 40414

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40414

Thr Val Thr Asp Ser Glu Leu Leu His Arg Glu Gly Val Cys Thr His  
 1 5 10 15  
 Leu Gly Cys Val Pro Ile Gly Glu Ser Gly Asp Phe Gly Gly Trp Phe  
 20 25 30



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Cys Pro Cys His Gly Ser His Tyr Asp Ile Ser Gly Arg Ile Arg Lys  
 35 40 45  
 Gly Pro Ala Pro Leu Asn Leu Glu Val Pro Gln Tyr Ser Phe Pro Asp  
 50 55 60  
 Glu Ser Thr Leu Val Ile Gly  
 65 70

<210> 40415  
 <211> 106  
 <212> PRT  
 <213> A.fumigatus

<400> 40415  
 Arg Met Thr Ala Thr Ala Val Ser Arg Ile Asp Asn Leu Glu Phe Leu  
 1 5 10 15  
 Ala Asp Val Ile Pro Lys Thr Thr Thr Tyr Lys Gln Phe Lys Glu Lys  
 20 25 30  
 Lys Glu Lys Glu Ala Asn Lys Asp Ala Ala Phe Glu Lys Gly Gln Arg  
 35 40 45  
 Thr Leu Asn Gly Thr Met Pro Ser Met Ile Lys Glu Asn Gly Glu Gly  
 50 55 60  
 Gly Gln Gln Lys Ala Asp Lys Pro Ser Ile Ser Pro Arg Ala Pro Ser  
 65 70 75 80  
 Leu Ser Thr Leu Met Ala Asp Arg Thr Val Glu Ala Gln Thr Gly Glu  
 85 90 95  
 Asn Asp Arg Asp Val Glu Met Val Asp Gln  
 100 105

<210> 40416  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus  
 <220>  
 <221> UNSURE  
 <222> (44), (75)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40416  
 Lys Ser Leu Arg Asn Thr Ile Ala Gly Asp Ser Ala Ile Gly Val Ile  
 1 5 10 15  
 Trp Tyr His Val Glu Gln Val Ala Asp Met Gln Phe Phe Leu Gln Asn  
 20 25 30  
 Phe Phe Val Asn Met Ser Ala Ser Ala Asp Val Xaa Ala Gln Ala Lys  
 35 40 45  
 Val Glu Ile Gly Leu Asp Ser Ile Pro Glu Gly Lys Asn Val Arg Val  
 50 55 60  
 Pro Phe Ile Arg Gln Ala Ser Arg Thr Leu Xaa Tyr Ser Glu Asn Pro  
 65 70 75 80  
 Tyr

<210> 40417  
 <211> 121  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40417

Pro Thr Asn Pro Gln Val Ile Ile Lys Trp Arg Gly Lys Pro Val Phe  
 1 5 10 15  
 Ile Arg His Arg Thr Gln Asp Glu Ile Gln Glu Ala Gln Gln Ile Asp  
 20 25 30  
 Trp Lys Thr Leu Arg Asp Pro Gln Pro Asp Glu Asp Arg Val Gln Lys  
 35 40 45  
 Pro Glu Trp Leu Val Met Leu Gly Met Ser Ser Arg His Leu Ile Leu  
 50 55 60  
 Leu Tyr Ala Phe Glu Arg Leu Leu Ile Ala Asn Cys Ser Ile Val Lys  
 65 70 75 80  
 Val Ser Ala Leu Thr Leu Ala Val Ser Pro Leu Val Asn Pro Val Thr  
 85 90 95  
 Ser Ala Ala Gly Ser Ala Pro Ala Thr Val Pro Thr Met Ile Ser Pro  
 100 105 110  
 Ala Val Ser Gly Arg Val Leu Pro Leu  
 115 120

&lt;210&gt; 40418

&lt;211&gt; 320

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40418

Leu Phe Gly Arg Thr Glu Glu Arg Leu Arg Glu Ala Arg Gln Arg Val  
 1 5 10 15  
 Arg Glu Ala Lys Asn Ala Tyr Ala Ala Ala Ile Asn Arg Arg Ser Ala  
 20 25 30  
 Ser Gln Arg Glu Val Asn Glu Leu Leu Gln Arg Lys His Ala Trp Ser  
 35 40 45  
 Ala Ala Asp Leu Glu Arg Phe Thr His Leu Tyr Arg Asn Asp His Thr  
 50 55 60  
 Asn Glu Val Ala Glu Met Glu Thr Gln Glu Ala Leu Ser Ala Ala Glu  
 65 70 75 80  
 Arg Glu Ser Glu Glu Ala Ala Ala Gln Leu Ser Lys Ser Ile Leu Ser  
 85 90 95  
 Arg Tyr His Glu Glu Gln Val Trp Ser Asp Lys Ile Arg Arg Met Ser  
 100 105 110  
 Thr Trp Gly Thr Trp Gly Leu Met Gly Val Asn Val Leu Leu Phe Leu  
 115 120 125  
 Val Phe Gln Ile Ala Val Glu Pro Trp Arg Arg Lys Arg Leu Val Lys  
 130 135 140  
 Gly Phe Glu Glu Lys Val Ile Glu Ala Ile Glu Lys Glu Lys Ala Ile  
 145 150 155 160  
 Asn His Ile Glu Ile Leu Lys Pro Gln Pro Ala Leu Thr Ser Thr Ser  
 165 170 175  
 Pro Ser Ser Lys Glu Glu Ala Ala Glu Pro Thr Pro Thr Ser Thr Ala  
 180 185 190  
 Ala Gly Asp Thr Pro Thr Thr Asp Glu Ser Thr Pro Ala Ala Thr Asp  
 195 200 205  
 Glu Thr Ile Thr Ser Glu Pro Val Val Trp Asp Ser Asp Pro Ile Pro  
 210 215 220  
 Thr Phe Val Thr Asn Ile Thr Ala Glu Ile Ala Thr Glu Thr Thr Glu  
 225 230 235 240  
 Asp Ser Ala Pro Lys Ser Ala Thr Ile Asn Gly Val Glu Pro Arg Lys

[illegible]

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<210> 40419
<211> 192
<212> PRT
<213> A.fumigatus
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Thr	Ala	Pro	Gln	His	His	Val	His	Ala	Asp	Tyr	Ala	Leu	Thr	Ala	Lys
1				5					10					15	
Glu	Asn	Cys	Gly	Met	Ser	Ser	Met	Pro	Gly	Ser	Ser	Thr	Ala	Pro	Arg
			20					25					30		
Ser	Pro	Ser	Val	Leu	Ser	Glu	Arg	Arg	Ser	Trp	Arg	Leu	Ser	Gly	Leu
		35					40					45			
Ser	Val	Thr	Ser	Pro	Val	Asp	Pro	Ser	Pro	Pro	Asp	Asp	Asn	Gly	His
	50					55					60				
Pro	Asn	Ala	Ile	Thr	Asp	Glu	Ile	Arg	Glu	Ile	Lys	Arg	Tyr	Glu	Asp
65					70					75					80
Phe	Thr	Thr	Ile	Asp	Trp	Val	Gln	Asp	Ala	Ile	Gln	Glu	Gln	Ala	Arg
				85					90					95	
Arg	Arg	Ala	Lys	Arg	Arg	Asp	Gly	Ser	Gly	Phe	Trp	Asp	Gln	Glu	Gly
			100					105					110		
Thr	Phe	Gly	Trp	Arg	Arg	Lys	Val	Ser	Glu	Ser	Tyr	His	Ala	Gly	Gln
		115					120					125			
Ala	Trp	Leu	Val	Ile	Thr	Ile	Val	Gly	Ala	Ala	Ile	Gly	Leu	Ile	Ser
	130					135					140				
Ala	Val	Leu	Asn	Ile	Ile	Thr	Glu	Trp	Leu	Ser	Asp	Ile	Lys	Leu	Gly
145					150					155					160
His	Cys	Thr	Thr	Ala	Phe	Tyr	Leu	Asn	Glu	Gln	Phe	Cys	Cys	Trp	Gly
				165					170					175	
Ala	Glu	Gly	Gly	Met	His	Ile	Ala	Tyr	Ala	Leu	Tyr	Ser	Trp	Trp	Ser
			180					185					190		

<211> 159

<213> A.f.

<221> UNSURE

<222> (22)

<223> Identity of amino acid sequences at the above locations are unknown.

Gly Gly Phe Gln Ala Tyr Leu Ala Pro Ile Asn Lys Leu Phe Ser Val  
1 5 10 15  
Gly Phe Lys Val Gly Xaa Cys Thr Ala Asp Ser Ile Ile Asn Leu Ala  
20 25 30

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<210> 40421
<211> 192
<212> PRT
<213> A.fumigatus
```

Leu	Ala	Met	Gln	Pro	Met	Pro	Leu	Leu	Leu	Arg	Gln	Ser	Leu	Arg	Ser
1				5					10					15	
Ser	Ala	Asn	Phe	Ala	Arg	Thr	Ser	Leu	Pro	Ile	Arg	Pro	Gln	Phe	Leu
			20					25					30		
Pro	Ala	Ala	Gly	Pro	Asn	Leu	Gln	Pro	Ala	Gln	Glu	Ile	Gln	Arg	Ser
		35					40					45			
Phe	Ser	Val	Cys	Val	Arg	Cys	Gln	Phe	Arg	Ser	Gln	Ser	Pro	Leu	Tyr
50						55					60				
Ser	Ser	Pro	Glu	Lys	Asp	Thr	Ser	Lys	Asp	Asp	Ala	Ala	Thr	Gln	Gln
65					70					75					80
Ser	Lys	Asp	Gly	Ser	Ser	Thr	Leu	Thr	Pro	Gly	Asp	Glu	Ser	Ala	Lys
				85					90					95	
Val	Glu	Pro	Asp	Ala	Glu	Thr	Gln	Arg	Pro	Ser	Pro	Ala	Ala	Gly	Glu
			100					105					110		
Gln	Asp	Thr	Leu	Gln	Gly	Phe	Tyr	Gln	Asp	Ala	Lys	Asn	Glu	Pro	Lys
		115					120					125			
Arg	Glu	Ser	Ala	Glu	Lys	Lys	Gly	Leu	Pro	Ser	Tyr	Leu	Glu	Glu	Arg
		130				135					140				
Arg	Ser	Gln	Leu	Ser	Lys	Gln	Phe	Thr	Glu	Met	Met	Asp	Asn	Leu	Gln
145					150					155					160
Ser	Asn	Ile	Phe	Val	Ala	Gly	Gln	Arg	Leu	Asn	Asp	Leu	Thr	Gly	Tyr
			165						170					175	
Ser	Ala	Ile	Glu	Ala	Leu	Lys	Lys	Asp	Ile	Gln	Leu	Gln	Gly	Gly	Phe
			180					185					190		

```
<210> 40422
<211> 245
<212> PRT
<213> A.fumigatus
```

Ile	Phe	Asp	Pro	Gln	Ser	Val	Leu	Met	Asn	Ser	Pro	Gly	Gly	Arg	Asn
1				5				10						15	

## 17675

Pro Glu Phe Phe Gln Ser Leu Ser Gly Leu Phe Thr Ser Arg Ser Glu  
                   20                  25                  30  
 Arg Arg Arg Ser Ile Thr Ser Thr Thr Val Asn Thr Asp Arg Ala Val  
           35                  40                  45  
 Glu Gln Phe Pro Arg Gln Ser Gln Asn Arg Arg Ile Ser Ile Leu Arg  
       50                  55                  60  
 Arg Leu Ala Gly Pro Arg Glu Asn Ala Lys Arg Phe Leu Arg Leu Gly  
 65                  70                  75                  80  
 Ala Pro Pro Ser Asn Cys Ser Pro Ser Pro Pro Leu Thr Asn Thr Ala  
                   85                  90                  95  
 Ser Ala Thr Ala Thr His Leu Met Ser Arg Thr Val Arg Pro Arg Pro  
           100                  105                  110  
 Val Ser Glu Ile Ile Val Ser Pro His Asp Ala Gln Ile Leu Val Ser  
       115                  120                  125  
 Ala Ala Ala Ala Arg Arg Met Arg Ser Asp Ser Ser Ser Thr Val Ser  
       130                  135                  140  
 Met Ser Leu Gly Pro Ala Ser Gly Gln Asp Thr Pro Ser Ala Ser Asp  
 145                  150                  155                  160  
 Ala Thr Ala Ser Phe Pro Ala Leu Arg His Glu Lys Ile Val Ala Thr  
           165                  170                  175  
 Gly Ser Gly Ile Ala Val Gly Ile Ala Leu Thr Glu Pro Val Leu Phe  
       180                  185                  190  
 Leu Gln Gly Tyr Asp Gln Asn Asp Pro Ser Thr Lys Lys Ser Ala Ile  
       195                  200                  205  
 Leu Arg Gly Gln Leu His Leu Lys Ile Thr Lys Ser Val Lys Val Lys  
       210                  215                  220  
 Lys Ile Ser Ile Cys Phe Arg Gly His Ala Gln Thr Asp Trp Pro Asp  
 225                  230                  235                  240  
 Gly Met Phe Ser Ser  
                   245

&lt;210&gt; 40423

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40423

Phe Ser Phe Thr Gly Ser Arg Phe Val Arg Phe Ser Asn Val Phe Val  
 1                  5                  10                  15  
 Val Phe Pro Cys Tyr Gln Arg Leu Gly Asn Ser Ile Arg Pro His Thr  
           20                  25                  30  
 Lys His Leu Phe Leu Ile Lys Gly Asp Asp Asn Thr Phe Ala Asn Phe  
       35                  40                  45  
 Pro Asp Arg Leu Arg Ala Val Val Ala Arg Ala Leu Pro Ala Ile Lys  
       50                  55                  60  
 Val Thr Thr Val Val Tyr Pro Lys Tyr Glu Thr Arg Gly Gly Leu Lys  
 65                  70                  75                  80  
 Glu Cys Val Gly Lys Phe Arg Glu Trp Tyr Val Tyr Val Glu Met Thr  
           85                  90                  95  
 Gly Leu Asp Cys Ser Leu Phe Ile Cys Asp Leu Ala Asp Thr Thr Leu  
       100                  105                  110  
 Leu Glu

&lt;210&gt; 40424

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40424

```

Asn Ser Phe Leu Gly Ile Pro Pro Lys Lys Ile His Phe His Asp Lys
1      5      10      15
Lys Asp Leu Val Thr His Gly Val Ile Tyr Phe Asn His Gly Asp Thr
      20      25      30
Ala Leu Met Gln Asn Asp Tyr Gly Ala His Phe Tyr Gln His Thr Lys
      35      40      45
Pro Val Thr Ser Val Thr Gly Lys Asp Gly Ser Thr Thr Thr Thr Arg
      50      55      60
Glu Leu Phe Ser Lys Ser Gly Ser Ser Pro Ser Leu Asn Gln Ser Thr
65      70      75      80
Ala Lys Glu Leu

```

&lt;210&gt; 40425

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40425

```

Arg Leu Ser Leu Gln Ala Asn His Ala Tyr Ser Arg Ser Phe Gly Lys
1      5      10      15
Asn Glu Met Pro Ser Ser Asn Gln Ser His His Gln Arg Asn Tyr Arg
      20      25      30
Met Phe Pro Ile Gly Asp Tyr Leu Tyr Asn Phe Glu Phe Pro Ile Asp
      35      40      45
Gly Ser Leu Pro Glu Thr Ile Lys Thr Asp Leu Gly Phe Val Arg Tyr
      50      55      60
Asp Leu Glu Ala Ile Val Glu Arg Ala Gly Ala Phe Arg Pro Asn Leu
65      70      75      80
Met Gly Thr Leu Glu Val Pro Val Ile Arg Thr Pro Ala Glu Gly Ser
      85      90      95
Leu Glu Gln Val Glu Pro Ile Ala Ile Ser Arg Asn Trp Glu Asp Gln
      100      105      110
Leu His Tyr Asp Ile Val Ile Ser Gly Lys Ser Phe Pro Leu Gly Ser
      115      120      125
Gln Val Pro Ile Ala Phe Lys Leu Thr Pro Leu Ala Lys Val Glu Cys
      130      135      140
His Arg Ile Lys Val Tyr Val Thr Glu Asn Ile Gln His Trp Thr Ala
145      150      155      160
Asp Lys Ser Val His Arg Leu Gln Pro Ala Lys Lys Val Leu Leu Phe
      165      170      175
Glu Lys Arg Ala Asp Ser Ala Ser Val Ser Thr Tyr Pro Gly Ser Ser
      180      185      190
Met Arg Val Thr Ala Gly Gly Gly Ile Asp Trp Asp His Arg Ala Ala
195      200      205
Ala Ala Arg Gly Glu Glu Ile Val Asp Arg Asn Arg Thr Asn Leu Leu
210      215      220
Gly Asn Leu Ala Asn Asp Ser Gly Val Gly Pro Thr Glu Met Glu Phe
225      230      235      240
Asn Val Gln Leu Pro Ser Cys His Glu Met Lys Asn Arg Asp Glu Ser
      245      250      255
Gln Arg Leu His Phe Asp Thr Thr Tyr Glu Asn Ile Gln Ile Asn His

```

260  
Trp Ile Lys Val Arg  
275

265

270

<210> 40426  
<211> 216  
<212> PRT  
<213> A.fumigatus

<400> 40426  
Ile Val Leu Arg Leu Ser Arg Leu Asp Glu Arg Asp Pro Asn Lys Arg  
1 5 10 15  
Arg His Phe Glu Ile Ser Ile Asp Ser Pro Phe His Leu Leu Ser Cys  
20 25 30  
Lys Ala Thr Gln Ala Asn Ile Tyr Leu Pro Ala Tyr Thr Thr Pro Ser  
35 40 45  
Ser Glu Pro Gly Leu Pro Ala Gln Glu Tyr Glu Cys Gly Cys Pro Gly  
50 55 60  
Ala Ala Met Val Asn Arg Asn Ser Ser Ser Ser Gln Leu Leu Val Ser  
65 70 75 80  
Asp Arg Glu Asp Ala Pro Asn Gly Gly Thr Val Ser Arg Ser Phe Thr  
85 90 95  
Asn Gly Ser Gly Gly Leu Ala Arg Pro Pro Gln Ala His Leu Ala His  
100 105 110  
Glu Ala Asn Glu Arg Phe Pro Arg Pro Met His Leu Leu Arg Ala Pro  
115 120 125  
Ser Phe Ala Pro Pro Ala Phe Glu Asp Val Pro Pro Pro Pro Pro Leu  
130 135 140  
Ile Thr Pro Pro Pro Glu Tyr Asn Ser Ile Val Gly Asn Asn Asp Arg  
145 150 155 160  
Asp Ala Val Leu Gln Asp Tyr Phe Ser Arg Leu Ser Phe Tyr Glu Glu  
165 170 175  
Gly Asp Gly Asp Glu Arg Gly Arg Gly Arg Val Asp Val Pro Leu Thr  
180 185 190  
Pro Gly Gly Arg Val Asn Arg Ser Met Asp Val Pro Arg Glu Trp Val  
195 200 205  
Arg Leu Gly Glu Pro Ala Val Gln  
210 215

<210> 40427  
<211> 86  
<212> PRT  
<213> A.fumigatus

<400> 40427  
Leu Gly Asp Asp Gln Val Tyr Leu Leu Glu Arg Gly Ser Arg Pro Asp  
1 5 10 15  
Asp Ile Asp Asn Asp Val Asp Val Cys Thr Ile Ala Val Pro Asn Gly  
20 25 30  
Cys Gln Gln Leu Leu His Lys Phe Ala Ile Val Arg Gln Leu Leu Leu  
35 40 45  
Asp Ala Ile Ser Arg Asn Leu Thr Thr Phe Val Gly Ile Leu Val Asp  
50 55 60  
Asp Ala Ile Ser Ala Val Glu Gly Ala Phe Gly Thr Trp Gly Thr Gly  
65 70 75 80  
Arg Val Cys Thr Ala Leu

<210> 40428  
 <211> 99  
 <212> PRT  
 <213> A.fumigatus

<400> 40428  
 Val Pro Asp His Glu Ser Leu Phe Arg Ile Ala Leu Ser Pro Ala Ser  
 1 5 10 15  
 Gly Asp Asp Ser Arg Gly Pro Pro Phe Gly Ser Leu Thr Thr Gly Asp  
 20 25 30  
 Ala Ser Ala Asp Thr Pro Ser Gly Ser Phe Ala Ser Gly Asp Glu Phe  
 35 40 45  
 Pro Asp Thr Pro Ser Gly Ser Phe Ala Ser Gly Asp Glu Phe Pro Asp  
 50 55 60  
 Met Pro Ser Gly Ser Phe Ala Ser Gly Asp Glu Phe Pro Asp Met Pro  
 65 70 75 80  
 Ser Gly Ser Leu Phe Gly Ser Gln Thr Leu Ile Ser Arg Pro Ser Ala  
 85 90 95  
 Ser Leu Val

<210> 40429  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 40429  
 His Trp Val Val Ile Lys Cys Gly Ile Ser Ser Cys Ala Glu Tyr Leu  
 1 5 10 15  
 Asn Ala Gly Cys Ser Arg Ser Gly Leu Val Asp His Pro Val Thr  
 20 25 30  
 Cys Ser Ser Val Asp Ala Glu Val Ser Cys Asn Tyr Ser Phe Lys Val  
 35 40 45  
 Ala Lys Glu Glu Phe Thr Asp Arg Trp Trp Lys Ile Lys Ser Thr Ala  
 50 55 60  
 Lys Phe Gln Ser Val Asn  
 65 70

<210> 40430  
 <211> 198  
 <212> PRT  
 <213> A.fumigatus

<400> 40430  
 Ile His His Ser Asp Met Leu Leu Ser Leu Leu Val Leu Lys Cys Ser  
 1 5 10 15  
 Ala Asn Ser Thr Gly Ala Pro Cys Ser Glu Cys Ala Leu His Gly Arg  
 20 25 30  
 Asp Cys Ile Val Asp Glu Tyr Ala Asp Lys Arg Arg Lys Val Ala Arg  
 35 40 45  
 Asp Arg Ile Gln Glu Glu Leu Ala Tyr Tyr Arg Glu Phe Val Gln Gln  
 50 55 60  
 Leu Leu Ala Ala Ile Arg His Gly Asn Cys Thr Asp Val Asp Val Ile  
 65 70 75 80



## 17679

Ile Asn Val Ile Arg Ser Gly Ala Ser Leu Glu Lys Ile His Leu Ile  
85 90 95  
Val Ala Gln Ser Leu Ser His Thr Asn Glu Ala Asp Gly Leu Glu Ile  
100 105 110  
Arg Val Cys Asp Pro Asn Lys Glu Pro Asp Gly Ile Ser Gly Asn Ser  
115 120 125  
Ser Pro Asp Ala Lys Glu Pro Asp Gly Ile Ser Gly Asn Ser Ser Pro  
130 135 140  
Asp Ala Lys Glu Pro Asp Gly Val Ser Gly Asn Ser Ser Pro Asp Ala  
145 150 155 160  
Lys Glu Pro Asp Gly Val Ser Ala Glu Ala Ser Pro Val Val Asn Glu  
165 170 175  
Pro Asn Gly Gly Pro Leu Glu Ser Ser Pro Asp Ala Gly Leu Ser Ala  
180 185 190  
Ile Leu Asn Asn Asp Ser  
195

&lt;210&gt; 40431

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40431

Val Leu Tyr Met Arg Asn Arg Gly Leu Ala Thr Gln Glu Asn Phe Ala  
1 5 10 15  
Met Lys Gly Glu Pro Leu Arg Thr His Phe Leu Val Tyr Lys Tyr Ser  
20 25 30  
Glu Thr Thr Ser Glu Arg Trp Tyr Ala Ala Ser Arg Trp Val Ser Ser  
35 40 45  
Met Glu Ser Gly Pro Pro Arg Leu Glu Ser Val Gln Ala Arg Leu Gly  
50 55 60  
Gln Cys Leu Tyr Leu Leu Ser Ser Ser Arg Ala Asn Glu Cys Trp Tyr  
65 70 75 80  
Thr Phe Gly Thr Ala Leu Gln Leu Val Thr Ala Leu Gly Leu His Arg  
85 90 95  
Lys Trp Pro Ala Lys Met Ser Lys His Gly Asn Ser Tyr Leu Glu Gln  
100 105 110  
Gln Leu Arg Lys Arg Ile Phe Trp Ser Ala Tyr Thr Leu Asp Lys Tyr  
115 120 125  
Leu Ser Val Met Phe Gly Arg Pro Arg Leu Leu His Asp Glu Asp Thr  
130 135 140  
Asp Gln Glu Leu Pro Asp Glu Ile Asn Asp Glu Asp Ile Ser Glu Glu  
145 150 155 160  
Asp Pro Arg Arg Arg Thr Gly Ser Pro Asp Ser Met Met Ile Ala Ser  
165 170 175  
Val Leu His Tyr Arg Phe Val Asn Arg Phe Tyr Ala Ile Ser Ser Cys  
180 185 190  
Asn

&lt;210&gt; 40432

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40432

## 17680

Val Ile Pro Thr Arg Pro Met Ala Leu Arg Ser Gly Ser Ala Ile Arg  
 1 5 10 15  
 Thr Arg Ser Arg Met Ala Tyr Leu Gly Thr Arg Leu Pro Met Arg Lys  
 20 25 30  
 Ser Arg Met Ala Tyr Leu Gly Thr Arg Leu Pro Met Arg Lys Ser Arg  
 35 40 45  
 Met Ala Tyr Leu Gly Thr Arg Leu Pro Met Arg Lys Ser Arg Met Ala  
 50 55 60  
 Tyr Leu Arg Lys Arg Leu Pro Leu Ser Thr Ser Gln Met Val Gly Leu  
 65 70 75 80  
 Trp Asn Arg Pro Pro Met Leu Gly  
 85

&lt;210&gt; 40433

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40433

Ala Ala Gly Ile Glu Val Phe Ser Ala Thr Arg Tyr Pro Ala Phe Asn  
 1 5 10 15  
 Tyr Asn Pro Met Ser Pro Ala Pro Val Phe Ser Phe Phe Asn Trp His  
 20 25 30  
 Gly Gly Phe Phe Thr Ala Leu Ala Thr Gly Ser Gly Gly Val Pro Ser  
 35 40 45  
 Ser Ser Gln Val Thr Asn Pro Ala Arg Leu Gln Thr Leu Thr Lys Ala  
 50 55 60  
 Leu Arg Leu Arg Lys Arg Arg  
 65 70

&lt;210&gt; 40434

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40434

Lys Thr Asp Leu Cys Arg Val Pro Val Ser Leu Ser Gly Pro Met Arg  
 1 5 10 15  
 Ala Ser Leu Met Asp Gly Val His Thr His Leu Ser Pro Gly Asn Gly  
 20 25 30  
 Thr Val Val Gly Met Ser Thr Asp Gly Ala Tyr Leu Ala Gly Arg Lys  
 35 40 45  
 Arg Lys Ala Ser Asp Ser Ser Ser Pro Ala Thr Lys Gly Pro Val Gln  
 50 55 60  
 Arg Gln Lys Ile Thr Arg Ala Cys Asp Tyr Cys Lys Glu Lys Lys Thr  
 65 70 75 80  
 Arg Cys Thr Gly Thr Leu Pro Cys Met Arg Cys Thr Arg Leu Ala Leu  
 85 90 95  
 Arg Cys Glu Tyr Asn Ala Ala Tyr Ser Arg Gly Leu Pro Pro Ala Pro  
 100 105 110  
 Leu Pro Ala Pro Pro Ser Ser Ser Leu Leu Val Asn Tyr Ala Asp Glu  
 115 120 125  
 Asp His Ala Arg Gly Asp Thr Arg Thr Ala Arg Arg Ser Val Ser Gln  
 130 135 140  
 Arg Ser Ser Arg Glu Ser Pro Arg Thr Gly Val Gly Leu Arg Ser Gln  
 145 150 155 160

17681

His Gly Arg Ala Gly Ser Glu Ala Ser Leu Arg Asp Ser Pro Glu Pro  
 165 170 175  
 Val Val Thr Asp Phe Glu Gly Asn Tyr Leu Gly Pro Ala Ser Gly Val  
 180 185 190  
 Ser Phe Leu Lys Arg Val Trp Ser Arg Leu His Gln Asp Glu Ser Ser  
 195 200 205  
 Ala Ile Pro Gly Glu Leu Gln Asp Glu Asn Val Ser Arg Asn Thr Ser  
 210 215 220  
 Val Phe Lys Phe Gly Asp Lys Pro Tyr Ser Asn Tyr Gln Glu Ala Gly  
 225 230 235 240  
 Phe Thr Leu Pro Ser Phe Glu Lys Ala Arg Glu Leu Val Gly Ile Tyr  
 245 250 255  
 Phe Asp Phe Ser Ile Val Thr Tyr Arg Phe Leu His Arg Gly Ser Val  
 260 265 270  
 Glu Glu Trp Leu Lys Gln Val Tyr Ala Asp Asn Ile Cys Phe Ala Asn  
 275 280 285  
 Pro Pro Thr Gly Val Met Val Ala Arg Thr Ala Ile Ile Leu Met Ile  
 290 295 300  
 Phe Ala Val Ser Thr Leu Tyr Glu Glu Gln Arg Pro Gly Asp Pro Gly  
 305 310 315 320  
 Glu Phe Arg Asn Glu Arg  
 325

<210> 40435  
 <211> 389  
 <212> PRT  
 <213> A.fumigatus

<400> 40435  
 Ser Leu Leu Arg Asp Thr Leu Cys Met Leu Thr Gly Ser Asp Ser Leu  
 1 5 10 15  
 Gln Pro Gln Arg Ile Arg Val Arg Thr Asp Glu Asn Ala Pro Val Ala  
 20 25 30  
 Leu Pro Gly Asn Lys Thr Ile His Arg Asn Lys Ser Thr Pro Ala  
 35 40 45  
 Leu Ser Ala Ala Phe Gln Asn Gly Thr Thr Arg Asn Gly Leu Arg Arg  
 50 55 60  
 Ala Ala Phe Gly Asp Val Ser Asn Thr Ala Asn Leu Val Lys Gly Ser  
 65 70 75 80  
 Arg Asp Asp Ala Ser Leu Ala Gly Lys Lys Gln Val Lys Val Val Glu  
 85 90 95  
 Lys Ala Pro Ala Val Val Pro Ala Arg Arg Thr Thr Ile Leu Ser Gln  
 100 105 110  
 Pro Ala Gln Arg Pro Met Ser Met Thr Ser Leu Lys Gly Leu Val Asn  
 115 120 125  
 Asn Ala Ser Asn Leu Lys Ala Leu Glu Pro Ser Ala Lys Gln Met Gly  
 130 135 140  
 Ile Thr Gln His Ala Gln Asn Thr Arg Lys Pro Leu Asn Lys Arg Asn  
 145 150 155 160  
 Thr Val Phe Lys Asp Thr Leu Glu Pro Leu Ala Glu Thr Lys Glu Ser  
 165 170 175  
 Ala Ser Lys Glu His Val Thr Glu Val Thr Asp Asp Asn Glu Gly Thr  
 180 185 190  
 Thr Thr Ser Leu Pro Ala Thr Gly Gln Gly Ile Thr Lys Asp Asp Ala  
 195 200 205  
 Arg Leu Ile Gln Asp Ser Lys Ile Gln Ser Asp Asp Thr Glu Glu Tyr

## 17682

210                      215                      220  
 Ser Ile Val Asn Ser Asp Asp Ile Asp Arg Ala Asn Arg Asp Leu Tyr  
 225                      230                      235                      240  
 Lys Ala Asp Asp Asp Asn Cys Lys Val Gln Val Ile Glu Gln Leu His  
                     245                      250                      255  
 Glu His Cys Ala Asn Thr Ser Glu Ala Asp Asp Leu Pro Lys Ser His  
                     260                      265                      270  
 Arg Glu Ser Ala Ser Ser Ala His Leu Ala Gln Ser Glu Pro Glu Glu  
                     275                      280                      285  
 Tyr Trp Asp Glu Glu Asp Asp Glu Asn Glu Glu Asp Asp Gly Tyr Val  
                     290                      295                      300  
 Thr Ala Arg Ser Tyr Arg Ser Arg Gly Asp Asn Thr Thr Gly Gly Ala  
 305                      310                      315                      320  
 Thr Thr Ile Leu Phe Pro Lys Tyr Asn Ser Gln Val Arg Arg Glu Leu  
                     325                      330                      335  
 Ala Leu Ala Lys Gln Val Val Glu Ala Thr Arg Thr Ala Glu Asp Ile  
                     340                      345                      350  
 Glu Asp Glu Tyr Trp Asp Thr Ser Met Val Ala Glu Tyr Ser Asp Glu  
                     355                      360                      365  
 Ile Phe Glu Tyr Met Arg Glu Gln Glu Val Cys Cys Ser Ile Ser Leu  
                     370                      375                      380  
 Thr Asp Leu Ala Ser  
 385

&lt;210&gt; 40436

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40436

Ile Arg Met Leu Pro Asn Ala His Tyr Met Asp Asn Gln Ala Glu Ile  
 1                      5                      10                      15  
 Gln Trp Ser Met Arg Ser Val Leu Met Asp Trp Leu Val Gln Val His  
                     20                      25                      30  
 His Arg Phe Ser Leu Leu Pro Glu Thr Leu Phe Leu Cys Val Asn Tyr  
                     35                      40                      45  
 Ile Asp Arg Phe Leu Ser Ser Lys Ile Val Ser Leu Gly Lys Leu Gln  
                     50                      55                      60  
 Leu Val Gly Ala Thr Ala Ile Phe Ile Ala Ala Lys Tyr Glu Glu Ile  
 65                      70                      75                      80  
 Asn Cys Pro Ser Val Gln Glu Ile Val Tyr Met Val Asp Gly Gly Tyr  
                     85                      90                      95  
 Thr Val Asp Glu Ile Leu Lys Ala Glu Arg Phe Met Leu Ser Met Leu  
                     100                      105                      110  
 Gln Phe Glu Leu Gly Trp Pro Gly Pro Met Ser Phe Leu Arg Lys Ile  
                     115                      120                      125  
 Ser Lys Ala Asp Asp Tyr Asp Leu Glu Thr Arg Thr Leu Ala Lys Tyr  
                     130                      135                      140  
 Phe Leu Glu Val Thr Ile Met Asp Glu Arg Phe Val Gly Ser Pro Pro  
 145                      150                      155                      160  
 Ser Phe Leu Ala Ala Gly Ala His Cys Leu Ala Arg Leu Met Leu Arg  
                     165                      170                      175  
 Lys Gly Thr Trp Val Arg Ser Leu Ala Leu Ser Gln  
                     180                      185

&lt;210&gt; 40437

<211> 153  
 <212> PRT  
 <213> A.fumigatus

<400> 40437

```

Thr Pro Ser His Val His Tyr Ala Gly Tyr Thr Tyr Ser Gln Leu Tyr
1          5          10          15
Pro Leu Val Ser Leu Ile Leu Glu Cys Cys Glu Ile Pro Arg Lys His
          20          25          30
His Ser Ala Ile Phe Glu Lys Tyr Thr Asp Lys Arg Phe Lys Arg Ala
          35          40          45
Ser Leu Phe Ala Glu Ala Gly Ile Lys Glu Gly Phe Cys Leu Pro Glu
          50          55          60
Val Thr Lys Glu Ala Thr Ser Asn Glu Arg Asn Ser His Tyr Glu Pro
65          70          75          80
Ala His His Leu Glu Thr Ser Leu Ser Cys Val His Ser Leu Ile Tyr
          85          90          95
Glu Pro Leu Tyr Leu Ser Thr Tyr Ser Lys Pro Gly Asn Ser Leu Thr
          100          105          110
Ser Ile Ser Ala Phe Gln Arg Ala Phe Phe Ser Leu Leu Ser Ser Leu
          115          120          125
Glu Pro Asn Val Pro Asn Pro Gln Leu Ala Ile Ser Cys Ser Tyr Asn
          130          135          140
Asp Ile Ile Thr Trp Met Thr Ile Ser
145          150

```

<210> 40438  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 40438

```

His Asp Gly Pro Ile Ser Ala Cys Cys Arg Phe Val Asp Gly Trp Leu
1          5          10          15
Arg Leu Arg Gly Trp Ala Arg Ile Gly Val Leu Val Ser Arg Leu Arg
          20          25          30
Leu Met Leu Asp Glu Ile Ile Ala Ala Arg Ile Asp Asn Pro Gly Phe
          35          40          45
Ser Pro Ala Ser Asn Asp Val Gly Asp Arg Val Ile Glu Ile Val Lys
          50          55          60
Lys Leu Val Glu Phe Asn Gly Leu Asp Gln
65          70

```

<210> 40439  
 <211> 187  
 <212> PRT  
 <213> A.fumigatus

<400> 40439

```

Gly Ile Asp Glu Val Val Met Ile Tyr Tyr Val Tyr Glu Gln Trp Ala
1          5          10          15
Met Asp Met Ile Pro Arg His Pro Pro Ser Phe Ile Arg Lys Ser Thr
          20          25          30
Ser Ile Gly His Pro Ser Pro Ala Ala Met Thr Ile Pro Asp Arg Ser
          35          40          45
His Gly Arg Pro Arg Arg Ala Pro Pro Glu Ala Trp Ala Pro Pro Ala

```

17684

```

      50              55              60
Ser Ser Leu Pro Ala Gly Gly Gln Gly Trp Glu Arg Trp Ser Ala Glu
65              70              75              80
Gln Ser Ala Val Ala Val Ala Ala Arg Gln Arg Arg Pro Ala Pro Gly
      85              90              95
Thr Ala Ala Gly Arg Gly Cys Gly Ser Ala Pro Leu Arg Arg Lys Ser
      100             105             110
Ser Cys Ala Ser Pro Ala Arg Arg Arg Arg Pro Arg Ser Gly Ser Arg
      115             120             125
Met Ser Ser Gly Arg Trp Ala Arg Arg Arg Arg Arg Ala Arg Cys Ala
      130             135             140
Gly Thr Gly Ala Pro Ala Leu Pro Arg Pro Ile Tyr Ala Thr Pro Gly
145             150             155             160
Arg Arg Pro Ala Cys Gly Arg Ala Asp Arg Val Arg Arg Gly Trp Arg
      165             170             175
Trp Gly Thr Asn Ala Gly Arg Gly Ser Trp Ala
      180             185

```

<210> 40440

<211> 105

<212> PRT

<213> A.fumigatus

<400> 40440

```

Asp Leu Phe Gly Ile Phe Ser Cys Ala Phe Cys Ser Ile Glu Ile Pro
1              5              10              15
Ala Ser Ser Ser Leu Ser Leu Ala Leu Lys His Cys Asp Ser Asn Phe
      20              25              30
His Pro Gly Tyr Thr Arg His Ser Ser Val Asp Ser Ser Pro Arg Pro
      35              40              45
Leu Ser Ser Ile Ile Ser Arg Ser Leu His Tyr Lys Thr Lys Leu Ser
      50              55              60
Val Leu Ile Met Ser Asp Leu Gln Gly Arg Lys Val Phe Lys Val Phe
65              70              75              80
Asn Gln Asp Phe Ile Val Asp Glu Arg Tyr Asn Val Thr Asn Glu Leu
      85              90              95
Gly Gln Gly Ala Tyr Arg Ile Val Trp
      100             105

```

<210> 40441

<211> 123

<212> PRT

<213> A.fumigatus

<400> 40441

```

Phe Tyr Ala Glu Leu Met Glu Cys Asp Leu Ala Ala Ile Ile Arg Ser
1              5              10              15
Gly Gln Pro Leu Thr Asp Ala His Phe Gln Ser Phe Ile Tyr Gln Ile
      20              25              30
Leu Cys Gly Leu Lys Tyr Ile His Ser Ala Asn Val Leu His Arg Asp
      35              40              45
Leu Lys Pro Gly Asn Leu Leu Val Asn Ala Asp Cys Glu Leu Lys Ile
      50              55              60
Cys Asp Phe Gly Leu Ala Arg Gly Phe Ser Ile Asp Pro Glu Glu Asn
65              70              75              80
Ala Gly Tyr Met Thr Glu Tyr Val Ala Thr Arg Trp Tyr Arg Ala Pro

```

## 17685

85 90 95  
 Glu Ile Met Leu Ser Phe Gln Ser Tyr Thr Lys Ala Ser Met Ser Tyr  
 100 105 110  
 Leu Ile Leu Val Ala Ile Arg Ala Pro Ile Cys  
 115 120

<210> 40442  
 <211> 483  
 <212> PRT  
 <213> A.fumigatus

<400> 40442  
 Ile Ile Met Gln Arg Leu His Ser Phe Ser Gln Leu Arg His Ala Ser  
 1 5 10 15  
 Pro Leu Lys Leu Phe Ala Leu Ala Ala Phe Ile Leu Val Ser Ala  
 20 25 30  
 Ser Leu Val Phe Tyr Ser Arg Pro Ala Ser Pro Ser Asp Val Asp Leu  
 35 40 45  
 Leu Pro Ser Gln Pro Ser Thr Gly Asn Glu Ile Glu Asn Lys Gly Thr  
 50 55 60  
 Cys Tyr Val Asp Leu Asp Phe Leu Arg Ser Gln Gly Tyr Asn Glu Thr  
 65 70 75 80  
 Ala Lys Tyr Ala Arg Leu Glu Ile Ala Val Arg Arg Thr Ala Asn Phe  
 85 90 95  
 Thr Gly Phe Ser Asp Thr Leu Pro Thr Arg Phe Pro Ala Tyr Gln Lys  
 100 105 110  
 Ile Arg Leu Asp Thr Ala Asp His Glu Ala Pro Leu Ser Pro Glu Thr  
 115 120 125  
 Cys Ser Pro Ala Val Thr Ile Gln Ala Pro Leu Pro Val Ala Pro Pro  
 130 135 140  
 Asn Ala Ser His Ile Leu Phe Gly Val Ala Thr Leu Arg Arg Leu  
 145 150 155 160  
 Asp Asp Ser Leu Pro Ala Phe Ala His Trp Ala Ala Gly Thr Asn Ala  
 165 170 175  
 Arg Ile Tyr Ala Ser Val Asp Ser Asp Thr Gly Ser Pro Ile Arg Arg  
 180 185 190  
 Val Glu Gln Arg Ala Lys Glu Leu Asp Val Arg Leu Thr Ile Ile Gln  
 195 200 205  
 Ser Asp Glu Glu Arg Leu Asp Gln Tyr Phe Ser Leu Leu Arg Val Leu  
 210 215 220  
 Leu Lys His Arg Asp Ala Ser Thr Gln Trp Ala Val Leu Ile Asp Asp  
 225 230 235 240  
 Asp Thr Phe Phe Pro Ser Met Arg Asn Leu Val Asp Arg Leu Ala Thr  
 245 250 255  
 Tyr Asp Ala Thr Lys Pro Gln Tyr Val Gly Ala Val Thr Glu Asp Leu  
 260 265 270  
 Ala Gln Val Phe Ser Trp Ser Tyr Met Ala Phe Gly Gly Ala Gly Ile  
 275 280 285  
 Phe Leu Ser Ile Pro Leu Leu Glu Gln Leu Asp Lys Val Tyr Asp Asp  
 290 295 300  
 Cys Asn Ser Phe Lys Thr Thr Gly Asp Arg Arg Val Ala Arg Cys Ile  
 305 310 315 320  
 Tyr Ser His Thr His Thr Lys Leu Thr Trp Asp Arg Asp Leu Tyr Gln  
 325 330 335  
 Leu Asp Leu Arg Gly Asp Ala Ser Gly Phe Tyr Glu Ser Gly Arg Pro  
 340 345 350

17686

```

Leu Pro Leu Ser Val His His Trp Lys Ser Trp Phe Gln Ala Asp Met
      355                      360                      365
Val Gly Leu Gly Gln Val Ala Ala Val Cys Gly Asp Asp Cys Gln Leu
      370                      375                      380
His Arg Trp Arg Leu Lys Asp Asn Trp Phe Leu Val Asn Gly Phe Ser
385                      390                      395                      400
Met Ile Lys Tyr Thr Ser Ala Arg Asn Val Asp Leu Met Glu Lys Thr
      405                      410                      415
Trp Glu Asp Ser Lys Tyr Arg Gly Gly Asp Gly Phe Ala Phe Ser Leu
      420                      425                      430
Gly Pro Phe Arg Pro Lys Asp Lys Gly Lys Val Ser Phe Arg Leu Arg
      435                      440                      445
Asn Ala Thr Gln Gln Ala Gly Ser Val Arg Gln Val Tyr Ile His Asp
      450                      455                      460
Ser Gly Pro Asp Glu Pro Pro Glu Val Leu Glu Val Val Trp Lys Pro
465                      470                      475                      480
Thr Ser Gly

```

<210> 40443

<211> 223

<212> PRT

<213> A.fumigatus

<400> 40443

```

Ser Ala Asp Met Leu Thr Thr Ile Val Asp Val Trp Ser Val Gly Cys
1          5          10          15
Ile Leu Ala Glu Leu Leu Gly Gly Arg Pro Phe Phe Lys Gly Arg Asp
      20          25          30
Tyr Val Asp Gln Leu Asn Gln Ile Leu His Tyr Leu Gly Thr Pro Asn
      35          40          45
Glu Glu Thr Leu Ser Arg Ile Gly Ser Pro Arg Ala Gln Glu Tyr Val
      50          55          60
Arg Asn Leu Pro Phe Met Pro Lys Ile Pro Phe Gln Arg Leu Phe Pro
65          70          75          80
Asn Ala Asn Pro Asp Ala Leu Asp Leu Leu Asp Arg Met Leu Ala Phe
      85          90          95
Asp Pro Ala Ser Arg Ile Ser Val Glu Glu Ala Leu Glu His Pro Tyr
      100         105         110
Leu His Ile Trp His Asp Ala Ser Asp Glu Pro Thr Cys Pro Thr Thr
      115         120         125
Phe Asp Phe His Phe Glu Val Val Asp Asp Val Gln Glu Met Arg Lys
      130         135         140
Met Ile Tyr Asp Glu Val Val Arg Phe Arg Asn Leu Val Arg Gln Gln
145         150         155         160
Ser Gln Ala Gln Ala Ala Ala Ala Gln Gln Gln Gln Gln Ile
      165         170         175
Ala Gln Gln Thr Asn Val Pro Ile Pro Asp His Gln Gln Gly Gly Trp
      180         185         190
Lys Gln Glu Glu Pro Lys Pro Gln Glu Val His Ala Ala Gly Gly His
      195         200         205
Val Asn Asp Leu Glu Ser Ser Leu Gln Arg Gly Met Asp Val Gln
      210         215         220

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<210> 40444

<211> 76



&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40444

Asp	Phe	Phe	Tyr	Ile	Cys	Pro	Val	His	Leu	Gln	Asp	Arg	His	Phe	Cys
1				5					10					15	
Ser	Pro	Ile	Val	Asp	Ser	Glu	Gln	Ala	Ala	Ala	Asn	Ala	Lys	Gln	Glu
			20					25					30		
Ala	Leu	Ala	Arg	Glu	Ile	Glu	Ile	Val	Lys	Lys	Glu	Tyr	Glu	Glu	Lys
		35					40					45			
Gln	Arg	Arg	Lys	Lys	Glu	Lys	Glu	Lys	Glu	Lys	Lys	Ala	Asp	Asp	Glu
	50				55						60				
Pro	Lys	Asn	Ser	Asp	Lys	Lys	Ser	Lys	Lys	Ser	Asp				
65					70					75					

&lt;210&gt; 40445

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40445

Leu	Ile	Asn	Arg	Ser	Ser	His	Arg	Leu	Gly	Ser	Leu	Leu	Met	Asp	Leu
1				5					10					15	
Asp	Ala	Leu	Ala	Gly	Ile	Ile	Ala	Tyr	Lys	His	Ala	Gly	Asp	Ser	Val
			20					25					30		
Pro	Thr	Val	Thr	Ala	Ala	Val	Asp	Arg	Ile	Thr	Ile	Glu	His	Pro	Leu
		35					40					45			
Met	Glu	Ile	Cys	Asp	Leu	Glu	Leu	Ser	Gly	Gln	Val	Thr	Tyr	Ala	Thr
	50				55						60				
Gly	Arg	Ser	Ser	Met	Glu	Val	Ser	Leu	Gln	Val	Thr	Arg	Val	Pro	Ala
65				70					75					80	
Glu	Gly	Glu	Pro	Val	Lys	Pro	Glu	Asp	Val	Leu	Ile	Thr	Cys	Ala	Phe
			85					90						95	
Thr	Met	Val	Ser	Leu	Asp	Pro	Ala	Thr	Lys	Lys					
			100					105							

&lt;210&gt; 40446

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40446

Val	Leu	Ser	Ile	Lys	Met	Trp	Glu	Thr	Ser	Thr	Asp	Ile	Pro	Ile	Arg
1				5					10					15	
Pro	Val	Pro	Ile	Ala	Pro	Leu	Leu	Val	Glu	Asn	Ala	Glu	Glu	Arg	Leu
			20					25					30		
Leu	Phe	His	Lys	Gly	Glu	Glu	Asn	Tyr	Gln	Ala	Lys	Lys	Ala	Leu	Arg
		35					40					45			
Thr	Arg	Ser	Leu	Leu	Glu	Lys	Ala	Pro	Asp	Ala	Glu	Glu	Ser	Asn	Leu
	50				55						60				
Ile	His	Asn	Met	Trp	Thr	Lys	Glu	Met	Ala	Tyr	Leu	Ser	Glu		
65					70					75					

&lt;210&gt; 40447

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40447

Val Ser Asp Asn Asn Pro Phe Ser Cys Ser Asn Ala Asp Ala Asn Ala  
 1 5 10 15  
 Gly Thr Asp Pro Glu Ser Pro Ala Gln Arg Pro Asp Asn Met Val Phe  
 20 25 30  
 Met Ser Asp Thr Val Leu Lys Ser Ala Met Ile Met Gln Pro Gln Asp  
 35 40 45  
 Arg Asn Arg His Asn Phe Met Ile Phe Gly Gly Phe Leu Leu Lys Gln  
 50 55 60  
 Thr Phe Glu Leu Ala Phe Cys Cys Ala Ala Ser Phe Ser His Ala Arg  
 65 70 75 80  
 Pro Asn Phe Ile Ser Leu Asp Pro Ser Thr Phe Glu Asn Pro Val Pro  
 85 90 95  
 Val Gly Ser Val Leu Tyr Leu Arg Ala Thr Val Ala His Thr Glu Pro  
 100 105 110  
 Leu Gln Arg Asp Gly Thr Thr Tyr Thr Lys Val Gln Val Arg Val Asp  
 115 120 125  
 Ser Lys Val Arg Asp Val Glu His Gly Ser Lys Lys Ser Thr Gly Gln  
 130 135 140  
 Phe Asn Tyr Thr Phe Leu Val Glu Lys Asp Ile Gln Val Met Pro Arg  
 145 150 155 160  
 Thr Tyr Gly Glu Phe Met Leu Trp Thr Asp Ala Arg Arg Arg Ala Gln  
 165 170 175  
 Asn Ala Ala Ala Met Val Thr Gly Ser Lys Glu Pro Ser Thr Leu Arg  
 180 185 190  
 Asn Ile Lys Asp Ser Val Thr Glu  
 195 200

&lt;210&gt; 40448

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40448

Trp Ser Asn Phe Gln Phe Ala Pro Gly Ser Val Tyr Phe Tyr Gln Asp  
 1 5 10 15  
 Gln Gly Pro Lys Gly Val Pro Leu Ala Cys Leu Met Ser Ser Asn Gln  
 20 25 30  
 Glu Pro Ala Ala Ser Gly Leu Gly Arg Leu Ser Ala Phe Ile Gln Asp  
 35 40 45  
 Ser Gly Leu Lys Thr His Ile Pro Thr Arg Leu Leu Gly Gly Pro  
 50 55 60

&lt;210&gt; 40449

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40449

Leu Tyr Glu His Ser Leu Phe Tyr Tyr Arg Ala Ile Asp Val Pro Asp  
 1 5 10 15  
 Gln Ser Ala Tyr Thr Met Ser Asp Pro Asn Asn Pro Asn Ile Glu Gln  
 20 25 30  
 Arg Ser Thr Pro Gln Trp Ala Leu Tyr Gln Arg Glu Asn Phe Leu Lys

35                      40                      45  
 Ala Arg Glu Gly Lys Thr Val Pro Phe Asn Thr Gly Met Phe Ser Leu  
 50                      55                      60  
 Thr Lys  
 65

<210> 40450  
 <211> 288  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (180), (237)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40450  
 Lys Ala Gln Pro Arg Arg Leu Val Cys Pro Gln Gly Arg Val Ser Met  
 1                      5                      10                      15  
 Asp Lys Pro Asp Thr Lys Ala Leu His Arg Tyr Tyr Ala Ser Ser Asn  
 20                      25                      30  
 Ala Gly Met Ser Asn Thr His Leu Ala Asn Arg Gln Ala Phe Tyr Arg  
 35                      40                      45  
 His Arg Ile Val Pro Arg Gln Leu Val Asp Thr Asn Leu Arg Asp Thr  
 50                      55                      60  
 Thr Thr Glu Ile Phe Gly His Lys Val Ser Ala Pro Ile Gly Phe Ala  
 65                      70                      75                      80  
 Pro Ile Gly Ile Asn Lys Ile Tyr His Pro Ala Ala Glu Val Ala Val  
 85                      90                      95  
 Ala Lys Val Ala His Glu Leu Asn Leu Pro Tyr Cys Leu Ser Thr Ala  
 100                      105                      110  
 Gly Ser Thr Pro Ile Glu Lys Val Gly Glu Ala Asn Gly Ser Gly Pro  
 115                      120                      125  
 Arg Phe Tyr Gln Leu Tyr Met Pro His Asp Glu Glu Leu Met Leu Ser  
 130                      135                      140  
 Leu Leu Asn Arg Ala Trp Lys Ser Gly Phe Asp Val Leu Val Leu Thr  
 145                      150                      155                      160  
 Thr Asp Thr Trp Gln Leu Gly Trp Arg His Asp Asp Val Ala Asn Ser  
 165                      170                      175  
 Asn Tyr Ala Xaa Tyr Arg Gly Ile Gly Ala Asp Leu Gly Leu Thr Asp  
 180                      185                      190  
 Pro Val Phe Gln Lys Arg Cys Gln Glu Ala Gly Ile Asp Ile Glu Lys  
 195                      200                      205  
 Thr Ser Trp Pro Leu Arg Pro Ser Gly Ser Thr Pro Ser Gly Met Gly  
 210                      215                      220  
 Arg Ala Trp Ser Trp Asp Thr Ile Pro Cys Leu Ile Xaa Lys Trp Lys  
 225                      230                      235                      240  
 Val Ile Ser Gly Gly Arg Pro Val Val Ile Lys Gly Ile Gln Ser Val  
 245                      250                      255  
 Pro Asp Ala Arg Lys Cys Val Gln Val Arg Gly Asp Arg Asn Arg Gly  
 260                      265                      270  
 Asn Asn Leu Ala Ala Pro Gln Val Asp Gly Pro Asn Val Cys Leu Val  
 275                      280                      285

<210> 40451  
 <211> 114

17690

<212> PRT

<213> A.fumigatus

<400> 40451

```

Gly Ser His Leu Ile Phe Leu Leu Pro Leu Lys Asn Leu Tyr Asn Ser
1           5           10           15
Ile Leu Val Leu Glu Val Thr Tyr Cys Ser Cys Ala Asp Ala Ala Val
20           25           30
Met Gly Phe Ile Ala Gly Cys Pro Glu Ala Gly Cys Thr Ile Ser Asn
35           40           45
Gln Tyr Asn Tyr Gln Pro Asp Val Thr Phe Ser Arg Thr Tyr His Ser
50           55           60
Cys Thr Pro Ser Leu Leu Met Ala Leu Pro Thr Ser Val Ser Leu Ser
65           70           75           80
Pro Ser Ser Thr Asp Arg Ile Asn Gly Pro Ala Thr Ser Ala Ser Ser
85           90           95
Ala Pro Phe Phe Ile Ser Ser Ala Val Pro Pro Pro Lys Pro Val
100          105          110
Ala Arg

```

<210> 40452

<211> 122

<212> PRT

<213> A.fumigatus

<400> 40452

```

Phe Ser Tyr Leu Ile Pro Arg Ser Gly Leu Arg Pro Trp Ile Cys Gln
1           5           10           15
Leu Asp Ile His Ser Ile Gly Cys Gly Ser Leu Arg Arg Ile Val Ser
20           25           30
Leu Ala Ala Thr Arg Asn Leu Pro Cys Thr Val Met Thr Glu Ser Glu
35           40           45
Ser Leu Gly Ser Pro Glu Lys Gly Asp Pro Thr Ala Asn Leu Ser Asp
50           55           60
Ile Asn Asn Thr Gln Arg Ser Glu Thr Gly Asp Asp Glu Glu Ile Lys
65           70           75           80
Arg Ala Lys Ser Asp Gln Asp Asp Ala Tyr Gln Glu Gln Ser Thr Thr
85           90           95
Lys Val Val Leu Leu Leu Val Ser Ile Met Met Thr Met Phe Leu Val
100          105          110
Ala Leu Asp Arg Thr Ile Ile Ser Thr Val
115          120

```

<210> 40453

<211> 105

<212> PRT

<213> A.fumigatus

<400> 40453

```

Leu Trp Thr Lys Ala Ile Pro Gln Ile Thr Asn Glu Phe Asp Ser Leu
1           5           10           15
Ser Asp Val Gly Trp Tyr Gly Ser Ala Tyr Leu Leu Thr Cys Cys Ala
20           25           30
Phe Gln Leu Leu Phe Gly Lys Ile Tyr Thr Phe Tyr Pro Val Lys Ala
35           40           45

```

17691

```

Val Met Leu Ser Ser Ile Leu Leu Phe Glu Val Gly Ser Val Val Cys
  50          55          60
Gly Ala Ala Pro Asn Ser Thr Ala Phe Ile Val Gly Arg Ala Leu Ala
 65          70          75          80
Gly Ile Ala Ala Ala Gly Ile Phe Ala Gly Ser Val Ser Asp Pro Val
          85          90          95
Ser Leu Lys Val Gln Val Leu Thr Val
    100          105

```

<210> 40454  
 <211> 131  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40454
Val Val Cys Ile Val Tyr Ala Val Pro Leu Glu Lys Arg Pro Lys Ile
 1          5          10          15
Gln Gly Leu Phe Gly Ala Val Phe Gly Leu Ala Ser Ile Val Gly Pro
    20          25          30
Leu Val Gly Gly Ala Phe Thr Ser His Val Thr Trp Arg Trp Cys Phe
    35          40          45
Tyr Ile Asn Leu Pro Cys Gly Gly Leu Ala Met Ala Ala Ile Pro Phe
    50          55          60
Cys Leu Lys Val Pro Asp Arg Asn Thr Thr Lys Val Thr Trp Thr Glu
 65          70          75          80
Lys Leu Lys Gln Leu Asp Val Pro Gly Met Cys Cys Leu Val Pro Gly
          85          90          95
Val Val Cys Leu Val Leu Ala Leu Gln Trp Gly Gly Gln Lys Tyr Asp
    100          105          110
Val Arg Leu Ser Gln Arg Arg Gly Cys Leu Thr Pro Val Leu Thr Ala
    115          120          125
Ser Val Glu
    130

```

<210> 40455  
 <211> 228  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40455
Leu Val Tyr Phe Leu Pro Ile Trp Phe Gln Ser Ile Lys Gly Val Ser
 1          5          10          15
Ala Val Asp Ser Gly Leu Arg Leu Leu Pro Leu Met Leu Ser Met Val
    20          25          30
Ala Ala Ser Ile Leu Ser Gly Val Thr Thr Gln Lys Val Gly Tyr Tyr
    35          40          45
Thr Pro Leu Ala Ile Ile Gly Ser Cys Ile Met Ala Ile Gly Ala Gly
    50          55          60
Leu Leu Thr Thr Leu Gln Ile His Thr Gly His Gly Lys Trp Ile Gly
 65          70          75          80
Tyr Gln Ile Leu Tyr Gly Phe Gly Met Gly Met Cys Phe Gln Gln Pro
          85          90          95
Asn Leu Ala Ala Gln Thr Val Leu Pro Thr Lys Asp Val Pro Val Gly
    100          105          110
Ile Ala Val Met Phe Phe Ser Gln Leu Leu Gly Ala Ala Ala Phe Val
    115          120          125

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## 17692

Pro Val Gly Glu Asn Val Leu Ala Asn Gln Leu Met Met Arg Leu Ser  
 130 135 140  
 Gly Ile Pro Gly Ile Asp Ser Asp Ile Val Thr Ser Gly Gly Ala Thr  
 145 150 155 160  
 Ser Leu Leu Ser Leu Val Pro Ser Asp Leu Arg Gly Thr Val Leu Thr  
 165 170 175  
 Ala Tyr Asn Glu Ala Leu Arg Lys Val Phe Gln Ile Gly Leu Ile Val  
 180 185 190  
 Ala Cys Leu Thr Ile Leu Gly Thr Ala Ser Phe Glu Trp Val Ser Ile  
 195 200 205  
 Arg Lys Lys Ser Glu Ala Ser Ser Gly Val Gly Asn Gly His Ala Pro  
 210 215 220  
 Lys Glu Glu Gln  
 225

&lt;210&gt; 40456

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (21)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40456

Ala Asp Asp Leu Gln Pro Lys Ser Thr Ala Pro Phe Val Pro Phe Arg  
 1 5 10 15  
 Val Asn Ser Gln Xaa Ala Lys Ala Ser Phe Thr Pro Phe Arg Ser Thr  
 20 25 30  
 Ser Asn Pro Thr Thr Arg Ser Asn Thr Pro Pro Lys Thr Ser Ala Pro  
 35 40 45  
 Ser Ser Glu Asp Ser Thr Leu Ser Ser Ile Thr Pro Val Cys Leu Leu  
 50 55 60  
 Ile Ser Ser Val Arg Gly Ile His Leu Asn Val Pro Gly Ala Trp Phe  
 65 70 75 80  
 Asp Ala Gln Ala Asn Ala Thr Met Thr Glu Arg Gln Met Trp Ala Lys  
 85 90 95  
 Thr Trp Asp Val Asn Val Thr Gly Thr His Leu Leu Thr Ser Ala Leu  
 100 105 110  
 Met Pro Leu Leu Leu Lys Ser Pro Asp Pro Arg Leu Leu Phe Val Thr  
 115 120 125  
 Ser Gly Ala Ala Arg Leu Ala Gly Thr Asp Asp Leu Arg Leu Pro Ile  
 130 135 140  
 Asn Arg Ser Pro Pro Ala Gly Trp Pro Lys Pro Ala Gly Met Thr Ala  
 145 150 155 160  
 Thr Ala Tyr Arg Ser Ala Lys Thr Gly Leu Ser Met Val Leu Arg Glu  
 165 170 175  
 Trp Gly Arg Ile Leu Lys Asn Asp Gly Val Lys Ile Trp Gly Ile Ala  
 180 185 190  
 Pro Gly Tyr Leu Ala Thr Gly Leu Gly Gly Gly Thr Ala Glu Glu Met  
 195 200 205  
 Lys Lys Asn Gly Ala Glu Asp Ala Asp Val Ala Gly Pro Phe Ile Arg  
 210 215 220  
 Ser Val Leu Glu Gly Asp Arg Asp Thr Glu Val Gly Arg Ala Ile Arg  
 225 230 235 240

Arg Glu Gly Val Gln Glu Trp  
245

<210> 40457  
<211> 158  
<212> PRT  
<213> A.fumigatus

<400> 40457  
Thr Thr Ala Gly Asp Pro Gly Met Asn Glu Lys Cys Gly Leu Pro Gly  
1 5 10 15  
Asn Gln Gly Asp Ser Ala Ala Glu His Pro Gly Asn Cys Thr Arg Thr  
20 25 30  
Glu Pro Asp Glu Gly Arg Gln Lys Lys Leu Glu Asp Glu Ile Gly Thr  
35 40 45  
Thr Ile Lys Val Ala Ala Glu Arg Gln Glu Arg Thr Ala Glu Asn Pro  
50 55 60  
His Leu Leu Pro Glu Thr Val Lys Val Thr Gly Val His Ala Ser Ala  
65 70 75 80  
Ala Ala Ala Thr Gly Pro Pro Tyr Cys Ile Leu Ser Glu Arg Lys Lys  
85 90 95  
Ile Phe Val Ile Leu Leu Val Ser Phe Ala Ala Ile Ile Ser Pro Ile  
100 105 110  
Ser Ser Ser Ile Tyr Phe Pro Ala Leu Asn Ser Leu Ala Lys Asp Leu  
115 120 125  
Asn Val Ser Val Ser Leu Ile Asn Ile Thr Ile Thr Thr Tyr Leu Val  
130 135 140  
Arg His Pro Arg Ile Asp Gly Lys Gln Ser Thr Glu Ser Ser  
145 150 155

<210> 40458  
<211> 222  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (119), (120)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40458  
Ile Phe Gln Gly Ile Ala Pro Ser Phe Ile Ala Asn Phe Ala Asp Thr  
1 5 10 15  
His Gly Arg Arg Pro Ala Tyr Leu Ile Cys Phe Thr Ile Tyr Leu Ala  
20 25 30  
Ala Asn Ile Gly Leu Ala Val Gln Asp Ser Tyr Ala Ser Leu Leu Val  
35 40 45  
Leu Arg Cys Leu Gln Ser Ser Gly Ser Ser Gly Thr Ile Ala Leu Gly  
50 55 60  
Ser Ala Val Val Ala Asp Leu Ser Thr Arg Ala Glu Arg Gly Lys Tyr  
65 70 75 80  
Ile Gly Tyr Ala Ser Leu Gly Val Asp Leu Gly Pro Ala Leu Gly Thr  
85 90 95  
Ile Met Gly Gly Leu Leu Asp His Tyr Leu Gly Trp Arg Ala Val Phe  
100 105 110  
Trp Phe Leu Val Ile Leu Xaa Xaa Val Leu Gly Asp Arg His Cys Tyr

```

      115              120              125
His Leu Ala Arg Asn Leu Pro Arg Gly Gly Gly Lys Arg Leu Arg Pro
      130              135              140
Cys Cys Gln Val Glu Ser Ala Cys Met Ala Asp Thr Ala Ala Glu Pro
145              150              155              160
Glu Gly Ser Lys Ala Asn Ala Asn Ala Gly Leu Ser His His Arg Glu
      165              170              175
Thr Ala Ser Thr Arg Gln Ser Asp Arg Ile Cys Pro Asp Arg His Arg
      180              185              190
Gln Gly Ser Thr His His Ser Asp Leu Gln Leu Ala Leu Val Leu Arg
      195              200              205
Leu His Gly Arg Leu Glu His Leu Asp Phe Pro Ala Ala Lys
      210              215              220

```

<210> 40459

<211> 292

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (1),(2),(275),(288)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40459

```

Xaa Xaa Ser Ser Gly Thr Val Ile Ala Ile Ile Leu Pro Glu Thr Cys
1              5              10              15
Arg Ala Val Val Gly Asn Gly Ser Val Pro Ala Ala Lys Trp Asn Arg
      20              25              30
Pro Ala Trp Gln Ile Leu Arg Gln Asn Arg Arg Ala Gln Arg Gln Thr
      35              40              45
Pro Thr Pro Asp Tyr His Thr Ile Glu Lys Arg Arg Arg Ala Asn
      50              55              60
Pro Ile Ala Ser Ala Leu Ile Ala Thr Asp Lys Glu Ala Leu Ile Ile
      65              70              75              80
Leu Ile Tyr Ser Ser Leu Leu Phe Ser Gly Tyr Met Ala Val Leu Ser
      85              90              95
Thr Leu Thr Ser Gln Leu Gln Ser Arg Phe His Phe Asn Ser Ile Gln
      100              105              110
Val Gly Leu Cys Tyr Leu Pro Ile Gly Ile Gly Ser Leu Ser Ser Arg
      115              120              125
Trp Thr Val Gly Arg Ile Leu Asp Trp Asn Phe Arg Arg Glu Ala Arg
      130              135              140
Arg Gln Gly Leu Ala Ile Glu Lys Asn Arg Gln Gln Asp Ile Arg His
      145              150              155              160
Phe Asn Ile Glu Ala Ala Arg Leu Ala Val Thr Ile Pro Leu Val Tyr
      165              170              175
Cys Ala Cys Leu Cys Ile Val Ala Tyr Gly Trp Val Met Glu Tyr Lys
      180              185              190
Thr Ala Leu Ala Gly Pro Val Val Met Leu Phe Phe Met Gly His Leu
      195              200              205
Thr Ser Gly Ala Phe Ser Ser Leu Ser Thr Leu Ile Val Asp Leu Asn
      210              215              220
Arg Gln Ser Pro Ala Thr Ala Val Ala Ala Asn Asn Leu Phe Pro Cys
      225              230              235              240
Leu Leu Gly Ala Gly Ser Leu Ala Ala Ala Asp Pro Val Ile Gln His

```



Variable	Mean	Standard Deviation	Minimum	Maximum
Age	35.2	12.5	18	65
Gender	0.45	0.50	0	1
Marital Status	0.60	0.49	0	1
Education	12.5	2.1	9	16
Income	3500	1500	1000	8000
Health	0.75	0.43	0	1
Smoking	0.20	0.40	0	1
Alcohol	0.15	0.35	0	1
Exercise	0.30	0.45	0	1
Stress	0.55	0.50	0	1
Sleep	0.65	0.48	0	1
Work	0.70	0.46	0	1
Family	0.80	0.42	0	1
Friends	0.75	0.43	0	1
Community	0.60	0.49	0	1
Society	0.50	0.50	0	1
Nature	0.40	0.50	0	1
Art	0.30	0.45	0	1
Music	0.20	0.40	0	1
Reading	0.10	0.30	0	1
Travel	0.05	0.20	0	1
Volunteering	0.02	0.10	0	1
Philanthropy	0.01	0.05	0	1
Activism	0.00	0.00	0	1
Leadership	0.00	0.00	0	1
Influence	0.00	0.00	0	1
Power	0.00	0.00	0	1
Control	0.00	0.00	0	1
Authority	0.00	0.00	0	1
Responsibility	0.00	0.00	0	1
Accountability	0.00	0.00	0	1
Integrity	0.00	0.00	0	1
Honesty	0.00	0.00	0	1
Trustworthiness	0.00	0.00	0	1
Reliability	0.00	0.00	0	1
Consistency	0.00	0.00	0	1
Stability	0.00	0.00	0	1
Endurance	0.00	0.00	0	1
Persistence	0.00	0.00	0	1
Perseverance	0.00	0.00	0	1
Determination	0.00	0.00	0	1
Resolve	0.00	0.00	0	1
Willpower	0.00	0.00	0	1
Strength	0.00	0.00	0	1
Power	0.00	0.00	0	1
Influence	0.00	0.00	0	1
Control	0.00	0.00	0	1
Authority	0.00	0.00	0	1
Responsibility	0.00	0.00	0	1
Accountability	0.00	0.00	0	1
Integrity	0.00	0.00	0	1
Honesty	0.00	0.00	0	1
Trustworthiness	0.00	0.00	0	1
Reliability	0.00	0.00	0	1
Consistency	0.00	0.00	0	1
Stability	0.00	0.00	0	1
Endurance	0.00	0.00	0	1
Persistence	0.00	0.00	0	1
Perseverance	0.00	0.00	0	1
Determination	0.00	0.00	0	1
Resolve	0.00	0.00	0	1
Willpower	0.00	0.00	0	1
Strength	0.00	0.00	0	1

```
<210> 40460
<211> 162
<212> PRT
<213> A.fumigatus
```

[illegible]

```
<210> 40461
<211> 112
<212> PRT
<213> A.fumigatus
```

<221> UNSURE

<223> Identity of amino acid sequences at the above locations are unknown.

```

>400> 40481
Ser Gln Leu Asn Thr Val Ala Ser Lys Ile Val Leu Ile Thr Gly Ala
1          5          10          15
Asn Thr Gly Ile Gly Phe Gln Val Val Arg Ala Leu Cys Asn Ser Thr
          20          25          30
Gln Thr Tyr Ser Ile Ile Val Gly Gly Arg Ser Pro Ala Lys Val His
          35          40          45
Ser Ala Ile Arg Ala Ile Gln Ser Glu Phe Thr Xaa Cys Gln Ser Gln
          50          55          60

```

## 17696

Phe Tyr Pro Leu Gln Ile Asp Leu Glu Ser Asp Asp Ser Ile Lys His  
 65 70 75 80  
 Ala Ser Glu Asp Ile Ser Thr Lys Phe Gly Arg Leu Asp Ala Leu Val  
 85 90 95  
 Asn Asn Ala Gly Met Ser Phe Asp Leu Phe Cys Pro Arg Tyr Thr Ser  
 100 105 110

<210> 40462

<211> 105

<212> PRT

<213> A.fumigatus

<400> 40462

Ile Leu Val Pro Cys Leu Glu Gly Asp Tyr Tyr Leu Gln Ala Arg Cys  
 1 5 10 15  
 Ile Val His Ser Thr Arg Ala Tyr Met Phe Trp Ile Met Phe Thr Ser  
 20 25 30  
 Phe Val His Lys His Leu Val Met Pro Gly Leu Asp Arg Gln Ile Met  
 35 40 45  
 Tyr Thr Thr Cys Leu Ala Glu Ile Leu Glu Tyr Leu Gln Ser Ile Leu  
 50 55 60  
 Val Glu Phe His Thr Leu Ala Ser Ile Pro Ile Arg Thr Ala Thr Val  
 65 70 75 80  
 Thr Ala Ser Ile Gly Gln Pro Pro Asn Asn Asn Ser Leu Thr Trp His  
 85 90 95  
 Asp Val Ile Glu His Met Arg Gly Met  
 100 105

<210> 40463

<211> 150

<212> PRT

<213> A.fumigatus

<400> 40463

Arg Leu Leu Ser Ser Ala Thr Ser Ile Leu Asn Arg Gln Ser Ser Asn  
 1 5 10 15  
 Asn Leu Gln Thr Arg Glu Thr Arg Arg Asn Met Ser Leu Ser Ser Ile  
 20 25 30  
 Lys Gly Leu Leu Ser Asn Tyr Ser Pro Val Ser Glu Ser Leu Asp Leu  
 35 40 45  
 Glu Lys Ile Tyr His Tyr Pro Leu Arg Asn Ala Ser Glu Asp Leu Glu  
 50 55 60  
 Ser Ala Ser Gly Ser Glu Ala Asn Lys Pro Ile Gln Arg Glu Gly Gly  
 65 70 75 80  
 Glu Lys Lys Glu Ser Lys Ile Ile Asp Gly Arg Thr Val Ser Asp Ala  
 85 90 95  
 Ile Ile Gly Leu Ser Asp Gly Leu Thr Val Pro Phe Ala Leu Thr Ala  
 100 105 110  
 Gly Leu Ser Ala Leu Gly Asp Thr Lys Val Val Val Phe Gly Gly Leu  
 115 120 125  
 Ala Glu Leu Ile Ala Gly Ala Ile Ser Met Gly Leu Gly Gly Tyr Leu  
 130 135 140  
 Gly Ala Lys Ser Glu Glu  
 145 150

<210> 40464

<211> 182  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (158), (159)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40464  
 Cys Phe Thr Ser Arg Glu Ser Tyr Arg Ala Thr Leu Lys Glu Thr Arg  
 1 5 10 15  
 Asn Lys Val Val Ala Asp Pro Ser Ala Thr Thr Glu Thr Ile Ser Glu  
 20 25 30  
 Ile Phe Ala Pro Tyr Asp Leu Pro Ser Glu Leu Val Ser Gln Leu Thr  
 35 40 45  
 Asp His Leu Ser Ala Ser Pro Met Leu Pro Ser Phe Leu Met Asn Phe  
 50 55 60  
 His His Thr Leu Pro Glu Pro Ser Gly Ser Arg Ala Leu Ile Cys Ala  
 65 70 75 80  
 Leu Thr Ile Ala Leu Gly Tyr Phe Ile Gly Gly Phe Val Pro Leu Leu  
 85 90 95  
 Pro Tyr Phe Phe Val Gly Pro His Asp Ala Phe Ile Ala Leu Arg Trp  
 100 105 110  
 Ser Ile Ala Thr Met Ala Ile Ala Leu Phe Leu Phe Gly Tyr Gly Lys  
 115 120 125  
 Thr Cys Phe Val Ser Gly Trp Arg Gly Arg Gln Asn Ile Arg Arg Gly  
 130 135 140  
 Phe Ile Gly Gly Met His Met Val Leu Val Gly Gly Val Xaa Xaa Gly  
 145 150 155 160  
 Ser Ala Met Gly Leu Val Lys Gly Phe Gln Leu Leu Ala Ser Ile Gly  
 165 170 175  
 Glu Gly His Gly Glu Gln  
 180

<210> 40465  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 40465  
 Pro Cys Arg Phe Arg Ser Gln Arg Gly Val Asp Pro Arg Phe Gly Trp  
 1 5 10 15  
 Tyr Ala Ser Phe Ile Leu Val Pro Ser Gly Ser Leu Glu Asn Cys Ser  
 20 25 30  
 Ser Arg Ser Gly Leu Asn Tyr Gly Ser Ala Thr Lys Cys His Thr Met  
 35 40 45  
 Ala Ala Thr Ile Lys Arg Gly Thr Ala Ile Ile Thr Arg Leu Leu Ile  
 50 55 60  
 Val Cys Ser Thr Ser Gln Leu Leu Trp Glu Gly Thr Ala Cys  
 65 70 75

<210> 40466  
 <211> 270  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40466

Cys Arg Ser Trp Asp Ser Leu Arg Arg Ser Gln Ile Leu Lys Val Glu  
 1 5 10 15  
 Asn Ile Val Asp Met Ala Leu Leu Gln Arg Tyr Ser Ser Gly Leu Ile  
 20 25 30  
 Phe Thr Pro Gln Lys Ala Leu Asn Arg Gly Asn Phe Val Arg Asn Pro  
 35 40 45  
 Pro Asp Trp Leu Ser Lys Gly Pro Lys Val Glu Glu Asn Trp Ser Leu  
 50 55 60  
 Glu Leu Gln Thr Leu Glu Gly Leu Ser His Trp Val Trp Ser Val Thr  
 65 70 75 80  
 Phe Ser Gln Asp Gly Gln Leu Leu Ala Ser Gly Ser Asp Asp Arg Thr  
 85 90 95  
 Ile Lys Leu Trp Asp Pro Thr Thr Gly Ala Leu Lys His Thr Leu Glu  
 100 105 110  
 Gly His Ser Asp Ser Ile Arg Ser Val Ala Phe Ser Arg Asp Gly Gln  
 115 120 125  
 Leu Leu Ala Ser Gly Ser Asp Glu Thr Ile Lys Leu Trp Asp Pro  
 130 135 140  
 Thr Thr Ser Ile Leu Met Gln Thr Leu Glu Gly His Ser Asp Ser Val  
 145 150 155 160  
 Trp Thr Val Ala Phe Ser Gln Asp Gly Gln Leu Leu Ala Ser Gly Ser  
 165 170 175  
 His Asp Lys Thr Ile Lys Leu Trp Asp Pro Thr Thr Gly Asn Leu Lys  
 180 185 190  
 His Thr Leu Glu Gly His Ser Asp Trp Val Arg Ser Val Ala Phe Trp  
 195 200 205  
 Lys Asp Ser Gln His Leu Ala Ser Gly Ser Asp Asp Lys Ser Thr Lys  
 210 215 220  
 Leu Trp Asp Pro Thr Thr Gly Asn Leu Lys His Thr Leu Glu Gly His  
 225 230 235 240  
 Ser Asp Trp Val Gln Ser Val Ala Phe Ser Gln Asn Ser Ser Gly Ile  
 245 250 255  
 Ser Pro Leu Ala Pro Ser Thr Tyr Ser Gly Cys Trp Arg Tyr  
 260 265 270

&lt;210&gt; 40467

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40467

Ile Ser Cys Arg Ser Ser Asn Thr Arg Arg Gln Tyr His Pro Ser Pro  
 1 5 10 15  
 Gly Leu Ile Ser Phe Ser Phe Asp Arg Thr Ser Glu Ser Tyr Leu Pro  
 20 25 30  
 Lys Gln Ala Leu Gln Phe Ser Phe Arg Asn Tyr Leu Val Asp Asn Pro  
 35 40 45  
 Thr Lys Ile Lys Lys Phe Tyr Ile Pro Ile Ile Ala  
 50 55 60

&lt;210&gt; 40468

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (56)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40468

```

Arg Lys Ile Lys Ser Cys Ile Gln Thr Thr Val Arg Ala His Val Leu
1           5           10           15
Phe Ser Asn Pro Met Leu Thr Gly Asn Phe Thr Leu Phe Pro Phe Cys
           20           25           30
Pro Phe Ser Val Ser Pro Leu Leu Pro Ser Phe Thr Ser Pro Cys Ser
           35           40           45
Gln Ile Gln Val Leu Gly Ala Xaa Met Ala Gly Trp Ile
           50           55           60

```

&lt;210&gt; 40469

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40469

```

Ala His Arg Leu Phe Phe Leu Leu Val Cys Asn Met Ala Ala Lys Leu
1           5           10           15
Gln Phe Leu Asn Asn Leu Pro Arg Glu Ile Trp Leu Ser Ile Arg Asp
           20           25           30
Leu Val Leu Pro Ser Ala Ser Ala Asn Glu Leu Lys Ile Ala Pro Ala
           35           40           45
Leu Trp Ser Ser Ile Phe Lys Ser Asp Arg Trp Leu Asn Met Ala Thr
           50           55           60
Arg Glu Phe Lys Cys Ser Pro Ile Leu Ile Gly Cys Asp Leu Ser Ala
           65           70           75           80
Phe Arg Pro His Arg Val Ser Asn Arg Ile Tyr Leu Ala Leu Ile Ala
           85           90           95
Asn Asp Tyr Ser Gly Asp Leu Arg Phe Arg Gln Asp Glu Leu Leu Glu
           100          105          110
Thr Phe Gln Asp Gly Ala Lys Phe Asp Ala Asp Thr Tyr Glu Val Lys
           115          120          125
Leu Pro Ser Gly Ile Val Val Asn Ile Tyr Glu Val Ile Thr Gly Ser
           130          135          140
Glu Thr Ala Glu Leu Pro Leu Glu Lys Leu Phe Ser Arg Glu Asn Ser
           145          150          155          160
Gly Val His Thr Glu Tyr Cys Phe Tyr Thr Lys Lys Val Ile Gly Ser
           165          170          175
Leu Gly Pro Ala Asp Ile Ile Gly Leu His Gly Pro Cys His Lys Trp
           180          185          190
Arg Asp Phe Lys Tyr Gly Gly Ala Ile Arg Val Pro Tyr Gly Gly Lys
           195          200          205
Val Lys Gln Tyr Phe Ile Gln Ala Lys Gly Lys Arg Glu Leu Trp Val
           210          215          220
Val Lys Arg Asp Asp Glu Ser Lys Leu Val Ser Ser Phe Ser Lys Glu
           225          230          235          240
Pro Arg Asn Glu Gln Gly Leu Leu Tyr
           245

```

&lt;210&gt; 40470

17700

<211> 73  
<212> PRT  
<213> A.fumigatus

<400> 40470  
Pro Ala Gln Val Ser Ser Ile Leu His Pro Val Ser Asp Leu Ser Leu  
1 5 10 15  
Gln Ala Phe Ser Lys Ile Ser Cys Thr Cys Phe Leu Asn Thr Asn Tyr  
20 25 30  
Ser Leu Cys Phe Pro Asp Lys Ala Tyr Glu Ala Thr Thr Asn Lys Leu  
35 40 45  
Tyr Tyr Ile Trp Gln Val Lys Leu Ser Thr Lys Trp Asn Ala Thr Phe  
50 55 60  
Arg Val Asp Pro Asn Ser Gln Ser Met  
65 70

<210> 40471  
<211> 76  
<212> PRT  
<213> A.fumigatus

<400> 40471  
Met Thr Val Ile Lys Val Asn Lys Tyr Arg Glu Thr Arg Trp Thr Ile  
1 5 10 15  
Phe Ala Leu Ile Ser Gln Ala Asp His Ser Trp Gln Ile Gln Cys Asn  
20 25 30  
Val Leu Asp Ile Ala Ala Lys Ser Ile Thr Gly Ile Ala Ala Val Asn  
35 40 45  
Leu Thr Glu Phe Thr Glu Pro Thr Ser Ala Arg Tyr Ser Phe Pro Val  
50 55 60  
Trp Val Thr Cys Tyr Met Ile Thr Gln Ser Leu Tyr  
65 70 75

<210> 40472  
<211> 78  
<212> PRT  
<213> A.fumigatus

<400> 40472  
Glu Tyr Trp Val Ser Gly Thr Tyr Arg Cys Ile Ser Glu Asn Ile Tyr  
1 5 10 15  
Val Ser Ile Ile Arg Ile Asn Tyr Leu Val Ser Pro Lys Leu Phe Arg  
20 25 30  
Thr Pro Ile Ser Thr Lys Cys Ile Gln Asn Gln Val Tyr Asn Tyr Leu  
35 40 45  
Ser Lys Arg Gly Leu Ala Ala Gly Gly Leu Leu Gly Leu Tyr Tyr Ser  
50 55 60  
Lys His Ile Thr Thr Thr Pro Pro Leu Gln Arg Gly Leu Ser  
65 70 75

<210> 40473  
<211> 72  
<212> PRT  
<213> A.fumigatus

<400> 40473

## 17701

Tyr Asn Asn Lys Glu Val Leu Tyr Pro Ile Ile Phe Phe Ser Lys Lys  
 1 5 10 15  
 Leu Leu Val Thr Lys Tyr Asn Tyr Lys Ile Tyr Asn Lys Glu Leu Leu  
 20 25 30  
 Thr Ile Ile His Tyr Phe Lys Glu Trp Arg Pro Lys Leu Glu Gly Ile  
 35 40 45  
 Leu Leu Leu Ile Lys Val Ile Thr Asn Tyr Tyr Asn Leu Glu Tyr Phe  
 50 55 60  
 Met Ser Thr Lys Leu Leu Asn Arg  
 65 70

<210> 40474  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 40474  
 Lys Asn Leu Gly Leu Phe Cys Ile Lys Lys Ile Ile Ser Leu His Ala  
 1 5 10 15  
 Tyr Lys Leu Asp Leu Leu Ala Ser Ile Lys Ile His Pro Val Phe Asn  
 20 25 30  
 Val Ser Leu Leu Cys Ser Ile Ala Lys Asp Pro Val Pro Gly Gln Arg  
 35 40 45  
 Gln Pro Pro Leu Leu Leu Val Glu Val Asp Ser Leu Glu Glu Trp Ile  
 50 55 60  
 Ile Lys Asp Ile Leu Asp Ser Cys Trp Glu Tyr  
 65 70 75

<210> 40475  
 <211> 139  
 <212> PRT  
 <213> A.fumigatus

<400> 40475  
 Ala His Leu Thr Leu Ser Phe Phe Phe Val Phe Pro Ser Phe Asn Ser  
 1 5 10 15  
 Val Ile Arg Ser Val Pro Thr Ser Arg Met Lys Tyr Ala Ala Phe Leu  
 20 25 30  
 Pro Thr Ile Gly Ala Leu Val Ser Gln Ala Ile Ala Ile Gly Val Gln  
 35 40 45  
 Gly Thr Ala Glu Gly Phe Ala Ser Ser Val Thr Gly Gly Gly Ser Ala  
 50 55 60  
 Thr Pro Val Tyr Pro Ser Thr Thr Asp Glu Leu Val Ser Tyr Leu Gly  
 65 70 75 80  
 Asp Ser Glu Ala Arg Val Ile Val Leu Thr Lys Thr Phe Asp Phe Thr  
 85 90 95  
 Gly Thr Glu Gly Thr Thr Thr Ala Thr Gly Cys Ala Pro Trp Gly Thr  
 100 105 110  
 Ala Ser Gly Cys Gln Val Ala Ile Asn Lys Asp Asn Trp Cys Thr Asn  
 115 120 125  
 Tyr Gln Ser Ser Ala Pro Ser Val Ser Val Thr  
 130 135

<210> 40476  
 <211> 186  
 <212> PRT

17702

<213> A.fumigatus

<400> 40476

```

Thr Ala Arg Ile Gly Arg Gln His Tyr Val Leu Gly Thr Glu Ala Ser
1           5           10           15
Asn Arg Ile Thr Leu Ser Asn Asn Tyr Ile Asp Gly Glu Ser Asp Tyr
          20           25           30
Ser Ala Thr Cys Asp Asn His His Tyr Trp Asn Ile Tyr Leu Asp Gly
          35           40           45
Ser Ser Asp Lys Val Thr Leu Lys Gly Asn Tyr Leu Tyr Lys Thr Ser
          50           55           60
Gly Arg Ala Pro Lys Val Gln Gly Asn Thr Tyr Leu His Ala Val Asn
65           70           75           80
Asn Tyr Trp Asn Asp Asn Ser Asn His Ala Phe Glu Ile Gly Asp Gly
          85           90           95
Ala Tyr Val Leu Ala Glu Gly Asn Leu Phe Ser Asp Val Thr Ala Ala
          100          105          110
Val Glu Ser Ser Ser Phe Thr Gly Glu Leu Phe Gly Ser Ala Ser Ala
          115          120          125
Ser Ser Thr Cys Gln Ser Tyr Ile Gly Arg Asp Cys Val Ala Asn Ser
          130          135          140
Phe Ser Ser Ser Gly Thr Leu Ser Gly Ser Asn Val Asp Val Leu Ser
145          150          155          160
Lys Phe Lys Gly Glu Thr Val Ala Ser Ala Ser Ala Ala Gly Thr Ser
          165          170          175
Pro Ala Ser Ser Ala Gly Gln Gly His Leu
          180          185

```

<210> 40477

<211> 139

<212> PRT

<213> A.fumigatus

<400> 40477

```

Thr Val Ala Met Pro Ile Glu Pro Phe Val Ser Ala Thr Pro Leu Arg
1           5           10           15
Phe Arg Gly Ile Pro Asp Ser Leu Ala Val Phe His Leu Glu Gly Ser
          20           25           30
Glu Cys Cys Leu Ile His Ala Asp Asn Pro Leu Ser Gly His Gln Gly
          35           40           45
Val Tyr Leu Asn Pro Lys Val Arg Val Gly Tyr Asn Gly Pro Ala Tyr
          50           55           60
Glu Ala Val His Pro Ala Gly Ser Trp Leu Ser Pro Gln Tyr Ile Ala
65           70           75           80
Leu Ala Leu Trp Glu Asn Arg Phe Arg Arg Trp Ala Thr Thr Thr Leu
          85           90           95
Phe Lys Lys Phe Val Val Arg Arg Arg Leu Ala Gln Trp Lys Ala Leu
          100          105          110
Ser Ser Gly Arg His Glu Pro Gly Lys Phe Cys Leu Ile Asn Glu Met
          115          120          125
Gln Val Leu Val Ala Asn Gly Trp Ala His Val
          130          135

```

<210> 40478

<211> 101

<212> PRT



&lt;213&gt; A.fumigatus

&lt;400&gt; 40478

```

Arg Gly Asn Asp Phe Ser Pro Cys Gly Cys Pro Gln Val Asp Asp Val
1          5          10          15
Ile Glu Leu Leu Asn Thr Asn Glu Gly Val Tyr Ala Ala Ala Cys Ser
20          25          30
Ile Asp Tyr Ser Arg Pro Pro Leu Tyr Tyr Asp Thr Phe Ala Leu Arg
35          40          45
Asp Ser Tyr Gly Asp Glu His Val Met Gln Thr Trp Pro Tyr Phe Arg
50          55          60
Ser Thr Val Ser Arg His Ala Leu Phe Asn Met Ser Pro Val Pro Val
65          70          75          80
Lys Ser Cys Trp Asn Gly Met Gly Arg Leu Ile Phe Pro Phe Ser His
85          90          95
Ser Thr Leu Cys Ser
100

```

&lt;210&gt; 40479

&lt;211&gt; 479

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40479

```

Gln Tyr Trp Ser Leu Leu Pro Ser Thr Leu Ala His Phe Leu Tyr Ser
1          5          10          15
Ser Leu Ile Pro Val Ser Ser Leu Ile Leu Thr Gln Ser His Ser Thr
20          25          30
Ser Ile Ser Gln Phe Pro Pro Tyr Pro Asn Met Leu Pro Val Phe His
35          40          45
Ala Asp Asn Phe Lys Thr Trp Thr Pro Pro Phe Arg Ile Arg Ser Ser
50          55          60
Ser Met Arg Ser Arg Leu His Pro Pro Ser Asn Lys Ser Pro Ala Ile
65          70          75          80
Lys Phe Arg Gln Ser Pro Leu Pro Gln Ala Leu Pro Leu Pro Lys His
85          90          95
Gln Leu Pro Ala Arg Pro Pro Ala Glu Val Cys Ile His Ala Ser Ala
100          105          110
Val Thr Pro Ser Gly Thr Ser Arg Asp Pro Gln Ser Pro Ser Arg Glu
115          120          125
Ser Phe Arg Leu His Ser Ala Thr Thr Pro Ala Arg Thr Pro Ala Ile
130          135          140
Ser Ser Asp Pro Gln His Ala Glu Arg Leu Glu Gln Ser Leu Arg Asn
145          150          155          160
Glu Pro Gly Pro Ser Ser Ala Pro Asp Leu Ala Thr Ser Arg Arg Val
165          170          175
His Asp Ala Ile Asp Ala Ser Ile Asp Ala Pro Phe Phe Pro Glu Asp
180          185          190
Ala Leu Arg Tyr Ile Ser Ser Pro Ser Val Ser Ser Ser Asp Glu Ser
195          200          205
Trp Gln Glu Phe Pro Gln Ala Asp Glu Gln Asn Asp Ile Leu Ile
210          215          220
Asp Pro Val Ile Leu Thr Asn Asn Gly Pro Trp Glu Thr Glu Asp Glu
225          230          235          240
Cys Gln His Ile His Ala Asp Gly Asp Ala Val Asn Ser Glu Thr Ile
245          250          255

```

17704

Cys Gln Tyr Pro Asp Pro Pro Leu Leu Leu Arg Asp Thr Arg Ala Glu  
 260 265 270  
 Asn Arg Asn Ser Asn Ala Tyr Pro Glu Ala Gln Glu Gly Asn Ser Arg  
 275 280 285  
 Leu Asp Ser Leu Leu His Ser Gln Ser His Ala Gln Val Ser Thr Asp  
 290 295 300  
 Asn Lys Pro Glu Ala His Ile Arg Ala Ser Ser Asn Pro Leu Glu Val  
 305 310 315 320  
 Pro Asn Ser Gly Gln Gln Ser Lys Thr Arg Lys Arg Lys Leu Gln Lys  
 325 330 335  
 Ser His Gly Gln Pro Gln Leu Cys Lys Trp Val Arg Gly Ser Ser Ala  
 340 345 350  
 Thr Ala Ser Lys Glu Asn Ser Phe Ser Ser Leu Arg Ser His Phe Thr  
 355 360 365  
 Ser Val Ser Val Asp Glu Arg Leu Gln Phe Leu Ser Trp Leu Phe Glu  
 370 375 380  
 Gly Ala Leu Pro Arg Cys Met Ser Glu Ser Asp Leu Gly Val Ser Thr  
 385 390 395 400  
 Arg Ile Ala Gln Pro Thr His Tyr Glu Ser Gln Pro Ala Asp Ser Thr  
 405 410 415  
 Ala Leu Pro Glu Thr Ser Arg Lys Gly Met Pro Trp Ser Ser Glu Glu  
 420 425 430  
 Lys Asp Leu Leu Leu Arg Leu Arg Arg Asp Glu Lys Arg Pro Trp Ser  
 435 440 445  
 Asp Val Val Arg Leu Phe Ser Asp Gln Phe Pro Gly Arg Ser Pro Gly  
 450 455 460  
 Ser Ile Gln Val Phe Trp Ser Thr Thr Leu Lys Asn Arg Ala His  
 465 470 475

<210> 40480

<211> 131

<212> PRT

<213> A.fumigatus

<400> 40480

Val His Leu Arg Pro Leu Phe Ser Ser Ala Ile Leu Ser Pro Ser Gly  
 1 5 10 15  
 Cys Leu Asp Leu Lys Leu Glu Asn Ile Met Val Ser Phe Glu Asp Pro  
 20 25 30  
 Thr Val Leu Ala Asp Phe Met Asp Pro Gln Leu Ala Arg Pro Thr Pro  
 35 40 45  
 Phe Lys Ile Asp Ser Ala Gly Arg Pro Val Tyr Gln Ser Arg Asn Asp  
 50 55 60  
 Phe Gly Pro Leu Lys Ser Leu Arg Ser Ile Pro Gln Leu Val Asp Phe  
 65 70 75 80  
 Gly Leu Ala Thr Arg Leu Glu Glu Asp Asp Trp Gly Val Trp Pro  
 85 90 95  
 Ile Gln Pro Asp His Tyr Arg Ala Pro Glu Val Ile Leu Gly Asn Gly  
 100 105 110  
 Trp Gln Met Pro Ala Asp Ile Trp Asn Leu Gly Val Leu Val Arg Ser  
 115 120 125  
 Val Val Leu  
 130

<210> 40481

<211> 129

17705

<212> PRT

<213> A.fumigatus

<400> 40481

```
Gln Ile Tyr Arg His Ala Glu Glu Pro Glu Arg Ile Val Ala Leu Lys
1           5           10           15
Ile Ala Asn Asn Asn Ala Ser Ser Ala Gly His Glu Arg Glu Val Glu
20           25           30
Glu His Ile Ser Met Ala Asp Pro Ser His Arg Gly Arg Ser Val Ile
35           40           45
Arg Thr Leu Leu Asp Ser Phe Glu Val Lys Gly Pro Glu Gly Ser Tyr
50           55           60
Pro Cys Leu Val Tyr Pro Pro Met Arg Glu Ser Leu Ser Met Tyr Gln
65           70           75           80
Arg Arg Phe Asn Asp Arg Lys Met Pro Leu Pro Leu Ile Lys Thr Tyr
85           90           95
Ile Arg Ala Leu Leu Thr Gly Leu Asp Tyr Leu His Lys Val Cys Arg
100          105          110
Thr Val His Thr Gly Arg Phe Ile Phe Asp Leu Tyr Ser Arg Arg Gln
115          120          125
Tyr
```

<210> 40482

<211> 103

<212> PRT

<213> A.fumigatus

<400> 40482

```
Ser Ser Ser Thr Thr Thr Asp Ile Thr Phe Ser Arg Arg Leu Thr Gly
1           5           10           15
Ser Asn Ser Val Met Asp Thr Ile Lys Pro Phe Ile Ser Arg Phe Ser
20           25           30
Ala Leu Leu Arg Lys Lys Pro Phe Pro Met Pro Phe Pro Gly Pro Pro
35           40           45
Leu Pro Pro Gly Ile Leu Val Asp Glu Glu Ile Ser Pro Val Tyr Asp
50           55           60
Ser Lys Tyr Phe Tyr Pro Ala Lys Pro Gly Glu Val Leu Ala Asp Arg
65           70           75           80
Tyr Gln Thr Leu Val Lys Val Gly Trp Gly Val Ser Ser Thr Val Trp
85           90           95
Leu Ala Arg Asp Leu Gln Gly
100
```

<210> 40483

<211> 302

<212> PRT

<213> A.fumigatus

<400> 40483

```
Trp Gly Ser Asp Ser Asp Lys Thr Ala Leu Thr Asn Asp Phe Lys Leu
1           5           10           15
Leu Arg Asn Asn Phe Thr Asn Val Pro Ile Ile Leu Gly Glu Tyr Asp
20           25           30
Ala Ser Pro Thr Asn Thr Glu Pro Ala Ala Arg Trp Lys Tyr Thr Asp
35           40           45
```

## 17706

Leu Leu Ala His Ala Ala Ala Gln Tyr Asn Phe Ala Ala Ile Leu Trp  
 50 55 60  
 Asp Asn Gly Leu Asp His Leu Asp Arg Thr Thr Gly Asn Trp Arg Asp  
 65 70 75 80  
 Pro Thr Ser Leu Gln Ile Ile Thr Lys Thr Lys Ser Ser Thr Lys Asn  
 85 90 95  
 Ser Leu Pro Asp Ser Thr Thr Asp Ala Ser Ala Thr Ser Gln Ser Ser  
 100 105 110  
 Ser Ala Tyr Ile Phe His Gln Val Gly Thr Pro Val Thr Ser Gln Thr  
 115 120 125  
 Leu Pro Phe Ile Phe Asn Gly Asn Thr Leu Arg Ser Ile Arg Asp Ser  
 130 135 140  
 Ser Gly Thr Thr Leu Lys Gln Gly Thr Asp Tyr Ser Val Ser Gly Ser  
 145 150 155 160  
 Asn Leu Val Phe Thr Ala Ser Tyr Leu Ser Lys His Phe Ser Ala Ser  
 165 170 175  
 Thr Lys Pro Gly Ile Ile Ala Asp Leu Thr Leu Val Phe Ser Ser Gly  
 180 185 190  
 Ala Ser Pro Val Val Gln Leu Val Gln Trp Gln Thr Pro Thr Leu Gly  
 195 200 205  
 Ser Thr Ser Val Ala Ala Ser Ser Val Ser Gly Asp Leu Ser Ile Pro  
 210 215 220  
 Ile Thr Trp Gly Gly Val Pro Lys Val Ala Ala Val Lys Ala Leu Thr  
 225 230 235 240  
 Thr Ser Gly Lys Tyr Leu Val Asp Asp Trp Thr Gln Val Leu Gly Pro  
 245 250 255  
 Leu Gln Gln Ala Arg Thr Val Arg Asn Phe Phe Phe Arg Ala Gly Thr  
 260 265 270  
 Tyr Leu Thr Ala Asp Ser Leu Leu Cys Pro Asp Leu Gln Gln Pro Val  
 275 280 285  
 Glu Val Arg Gly Leu Glu Cys His Phe Asn Val Trp Gly Tyr  
 290 295 300

&lt;210&gt; 40484

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40484

Pro Leu Thr Leu Phe Cys Val Gln Thr Tyr Ser Asn Gln Trp Lys Phe  
 1 5 10 15  
 Glu Gly Ser Asn Val Ile Leu Thr Ser Gly Ala Ile Asp Ala Val Lys  
 20 25 30  
 Ser Val Gly Gln Thr Thr Val Phe Thr Phe Glu Phe Tyr Pro Arg Val  
 35 40 45  
 Ala Gly Gly Val Asn Thr Val Asn Phe Thr Val Thr Val  
 50 55 60

&lt;210&gt; 40485

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40485

Tyr Gly Lys Asn Gln Ser Thr Val Ala Asp Ile Asp Asn Ser Val Lys  
 1 5 10 15

## 17707

Gln Gly Val Ser Ala Cys Pro Ser Ile Thr Phe Lys Pro Arg Thr Asp  
                   20                  25                  30  
 Asp Leu Phe Ser Phe Gln Ser Ile Leu Glu Leu Ser Asp Pro Lys Ile  
                   35                  40                  45  
 Asp Cys Leu Ser Ser Lys Ala Lys Glu Glu Trp Thr Ser Val Met  
                   50                  55                  60

<210> 40486  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 40486  
 Asn Gln Asn Leu Lys Ala Gln Gly Ser Asn Ser Leu His Ile Ala Arg  
 1                  5                  10                  15  
 Val Gln Pro Ala Thr Arg Thr Ser Gly Pro Tyr Gly Ala Leu Asp Leu  
                   20                  25                  30  
 Ser Phe Leu Ser Phe Cys Met Tyr Gly Thr Gly Phe Pro Val Ala Lys  
                   35                  40                  45  
 Leu Cys Ser Asn Val Asn Leu Arg Val Thr Glu Met Pro Met Val Gly  
                   50                  55                  60  
 His Ala Lys Pro Arg  
 65

<210> 40487  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 40487  
 Cys Met Phe Lys Lys Pro Ala Thr Val Ser Met Glu Glu Trp Tyr Val  
 1                  5                  10                  15  
 Pro Ile Thr Val Leu Ser Gln Val Tyr Phe Ile Pro Met Arg Ile Tyr  
                   20                  25                  30  
 Val Ser Ser Glu Asn Thr Glu Val Tyr Pro Val Arg Ser Ala Gly Ile  
                   35                  40                  45  
 Leu Arg Ser Leu Thr Gly Gly Tyr Val Phe Tyr Glu Ser Gly Thr His  
                   50                  55                  60  
 Leu Met Asn Glu Ile Arg Ser Leu Gln His Ser Val  
 65                  70                  75

<210> 40488  
 <211> 231  
 <212> PRT  
 <213> A.fumigatus

<400> 40488  
 Val Pro Phe Ser Thr Ala Pro His Ala Ser Phe Thr Asp Ala Gly His  
 1                  5                  10                  15  
 Pro Ser Ala Glu Ser Ala Gly Glu Thr Cys Ser Leu Tyr Ser Pro Thr  
                   20                  25                  30  
 Trp Val Ser Ser Val Arg Phe Gly Phe Phe Tyr Arg Ala Phe Asn Pro  
                   35                  40                  45  
 Ser Thr Pro Pro Leu Thr Thr Pro Ser Ser Ser Pro Asn Ile Leu Leu  
                   50                  55                  60  
 His Arg Pro Pro Asp Pro Arg Leu Arg Leu Arg Arg Pro Leu Pro Arg

## 17708

65		70		75		80									
Leu	Ser	Ser	Leu	Pro	Leu	Gln	Leu	Pro	Leu	Arg	Leu	Arg	His	Arg	Asn
			85						90					95	
Arg	His	Lys	Gly	Ala	Cys	Leu	Pro	Ala	Arg	Pro	Pro	Ala	Ser	Ser	Asn
		100						105					110		
Arg	His	Leu	Ser	Arg	Gln	His	Leu	His	Asp	Arg	Pro	Leu	Arg	His	Thr
		115					120					125			
Arg	Arg	His	Arg	Ala	Leu	Asp	His	His	Gly	Pro	Leu	His	Arg	Pro	Tyr
		130				135					140				
Arg	Thr	Ser	Thr	His	Val	Pro	Gln	Arg	Gly	Pro	Ser	Pro	Thr	Leu	His
145					150					155					160
Leu	Pro	Pro	Ala	His	Pro	Arg	His	Arg	Arg	Arg	Ala	Ala	Val	Glu	Arg
				165					170					175	
Arg	Arg	Asp	Ala	Gly	Pro	Pro	Ala	Pro	Ser	Pro	Gln	Pro	Leu	Gly	Gly
		180					185						190		
Ser	Leu	Glu	Met	Val	Pro	Pro	Glu	Pro	Val	Gln	Arg	Leu	Cys	Gly	Ala
		195					200					205			
Ala	Ala	Gln	Ser	Ala	Pro	Gly	Pro	Cys	Arg	Asp	Gln	Ile	Leu	Arg	Arg
		210				215					220				
Gly	Gly	Ala	Glu	Cys	Val	Leu									
225					230										

&lt;210&gt; 40489

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40489

Pro	His	Pro	Pro	Pro	Ala	Leu	Thr	Tyr	Ser	Cys	Ile	Ala	Pro	Leu	Ile
1				5					10					15	
Leu	Gly	Phe	Ala	Phe	Val	Gly	Leu	Tyr	Leu	Val	Tyr	Gln	Ala	Tyr	Arg
		20						25				30			
Tyr	Asn	Phe	Leu	Phe	Val	Tyr	Asp	Ile	Glu	Ile	Asp	Thr	Lys	Gly	Leu
	35					40					45				
Val	Tyr	Pro	Arg	Ala	Leu	Gln	His	Leu	Leu	Thr	Gly	Ile	Tyr	Leu	Ala
	50					55					60				
Asn	Ile	Cys	Met	Ile	Gly	Leu	Phe	Ala	Ile	Arg	Ala	Ala	Ile	Gly	Pro
65				70					75					80	
Leu	Ile	Ile	Met	Ala	Leu	Phe	Thr	Val	Leu	Thr	Val	Leu	Ala	His	Met
			85					90						95	
Ser	Leu	Ser	Glu	Ala	Leu	Ala	Pro	Leu	Tyr	Thr	Phe	Leu	Pro	Arg	Thr
		100						105					110		
Leu	Asp	Thr	Glu	Glu	Glu	Gln	Gln	Ser	Lys	Glu	Asp	Glu	Thr	Gln	Ala
		115					120					125			
Leu	Leu	Arg	His	Pro	Arg	Asn	Arg	Trp	Glu	Ala	Ala	Trp	Lys	Trp	Phe
	130					135						140			
His	Pro	Asn	Leu	Tyr	Arg	Asp	Tyr	Ala	Ala	Leu	Arg	Arg	Lys	Val	Arg
145					150					155					160
Arg	Asp	His	Val	Glu	Ile	Arg	Tyr	Ser	Glu	Glu	Glu	Glu	Arg	Asn	Ala
			165						170					175	
Tyr	Phe	Glu	Pro	Cys	Ile	Arg	Ala	Arg	Thr	Pro	Thr	Leu	Trp	Ile	Pro
		180						185					190		
Arg	Asp	Lys	Trp	Gly	Phe	Ser	His	Gln	Glu	Ile	Ile	Glu	Thr	His	Pro
		195					200					205			
Ser	Ile	Pro	Ile	Thr	Asp	Glu	Gly	Ala	His	Leu	Asp	Glu	Lys	Asn	Lys
	210					215					220				

17709

Phe Val Trp Asp Lys Tyr Asp Pro Ser Leu Pro Leu Trp Glu Leu Lys  
 225 230 235 240  
 Val Leu Tyr

<210> 40490  
 <211> 599  
 <212> PRT  
 <213> A.fumigatus

<400> 40490  
 Gly Asn Cys Ser Glu Arg Ser Pro Gln Leu Pro Arg Gly Phe Ile Asn  
 1 5 10 15  
 Trp Phe Gly Gln Phe Leu Lys Ile Ser Asp Ala His Val Leu His Ser  
 20 25 30  
 Ser Ser Met Asp Gly Tyr Leu Phe Leu Arg Phe Leu Arg Val Leu Cys  
 35 40 45  
 Ser Thr Cys Phe Thr Gly Cys Leu Val Thr Trp Pro Ile Leu Ile Pro  
 50 55 60  
 Ile His Val Thr Gly Gly Ala Gly Asn Thr Gln Leu Asp Ala Leu Ser  
 65 70 75 80  
 Phe Ser Asn Val Lys Asp Pro Thr Arg Tyr Tyr Ala His Ala Ile Met  
 85 90 95  
 Ala Cys Ile Phe Phe Ser Met Cys Phe Trp Gly Leu Phe Gln Ala Lys  
 100 105 110  
 Ser Leu Ile Arg Asp Thr Ala Ala Tyr Val Phe Tyr Val Val Thr Arg  
 115 120 125  
 Glu Ser Leu Phe Tyr Ala Asn Leu Arg Gln Ala Tyr Leu Asn Ser Pro  
 130 135 140  
 Ala Tyr Val Arg Arg Ile Ser Ser Arg Thr Val Leu Phe Met Ser Val  
 145 150 155 160  
 Pro Glu Asp Tyr Lys Asn Glu Gln Lys Leu Arg Gln Val Phe Gly Asp  
 165 170 175  
 Ser Ile Arg Arg Ile Trp Ile Thr Ser Asp Cys Lys Glu Leu Met Lys  
 180 185 190  
 Lys Val Arg Glu Arg Asp Ser Leu Ala Tyr Arg Leu Glu Lys Ala Glu  
 195 200 205  
 Thr Asn Leu Ile Arg Thr Ala Asn Ser Ala Arg Leu Cys Ala Phe Lys  
 210 215 220  
 Lys Gly Val Ile Thr Ser Asp Thr Cys Leu Asp Cys Glu Ser Gly Thr  
 225 230 235 240  
 His Ser Trp Arg Lys Lys Ile Arg Arg Pro Ser His Arg Val Lys Leu  
 245 250 255  
 Phe Gly Pro Lys Val Asp Ser Ile Cys Trp Leu Arg Asp Glu Leu Val  
 260 265 270  
 Lys Val Ser Lys Glu Val Glu Tyr Leu Gln Glu Gln His Lys Asn Gly  
 275 280 285  
 Lys Met Lys Asn Leu Ser Ala Leu Phe Ile Glu Phe Asn Ser Gln Ser  
 290 295 300  
 Asp Ala Gln Ile Ala Leu Gln Thr Leu Ser His His Gln Pro Leu His  
 305 310 315 320  
 Met Thr Pro Arg Phe Ile Gly Ile Ser Pro Lys Glu Val Val Trp Ser  
 325 330 335  
 Ser Leu Asn Leu Ser Trp Trp Gln Arg Ile Val Arg Lys Phe Ala Val  
 340 345 350  
 Gln Gly Gly Ile Ala Ala Leu Val Ile Phe Trp Ser Ile Pro Ser Ala

355 360 365  
 Ala Val Gly Ala Ile Ser Asn Ile Thr Tyr Leu Thr Ser Leu Leu Pro  
 370 375 380  
 Phe Leu Gly Phe Ile Asp Lys Leu Pro Ser Ser Leu Lys Gly Val Ile  
 385 390 395 400  
 Ala Gly Leu Leu Pro Ser Ala Ala Leu Val Leu Leu Met Ser Phe Val  
 405 410 415  
 Pro Ile Ile Cys Arg Cys Met Ser Pro Arg Leu Lys Ser Asn Arg Asn  
 420 425 430  
 Lys Arg Thr Leu Leu Thr Leu Val Asp Ser Val Leu Ala Arg Arg Ala  
 435 440 445  
 Gly Ala Pro Ser Thr Ala His Val Glu Leu Phe Thr Gln Ser Ala His  
 450 455 460  
 Phe Cys Phe Gln Val Val Gln Val Phe Leu Val Thr Thr Leu Thr Ser  
 465 470 475 480  
 Ala Ala Ser Ala Ala Thr Ala Gln Ile Ile Lys Asn Pro Leu Ser Ala  
 485 490 495  
 Lys Asp Leu Leu Ala Gln Asn Leu Pro Lys Ala Thr Asn Phe Tyr Ile  
 500 505 510  
 Ser Tyr Phe Leu Leu Gln Gly Leu Thr Met Ser Ser Met Ala Val Val  
 515 520 525  
 Gln Val Ala Gly Val Leu Val Phe Lys Phe Leu Ser Thr Phe Phe Asp  
 530 535 540  
 Arg Ser Pro Arg Leu Leu Tyr Arg Arg Trp Ala Ser Leu Ser Gly Ile  
 545 550 555 560  
 Gly Trp Gly Asn Val Phe Pro Val Phe Thr Asn Met Gly Val Ile Gly  
 565 570 575  
 Thr Phe Arg Ile Leu Leu Pro Arg Ile Gln Pro Leu Asn Pro Thr Thr  
 580 585 590  
 Asn His Thr Leu Leu Gln Pro  
 595

&lt;210&gt; 40491

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40491

Pro His Ser Thr Pro Ser Ser Arg Ala Pro Ser Thr Gln Lys Lys Ser  
 1 5 10 15  
 Ser Ser Arg Lys Lys Thr Arg Arg Arg Pro Ser Cys Ala Ile Pro Ala  
 20 25 30  
 Thr Ala Gly Arg Gln Pro Gly Asn Gly Ser Thr Arg Thr Cys Thr Glu  
 35 40 45  
 Ile Met Arg Arg Cys Gly Ala Lys Cys Ala Gly Thr Met Ser Arg Ser  
 50 55 60  
 Asp Thr Pro Lys Arg Arg Ser Gly Met Arg Thr Leu Ser Arg Val Phe  
 65 70 75 80  
 Gly Arg Ala Arg Arg Cys Gly Phe Pro Gly Thr Asn Gly Gly Leu  
 85 90 95  
 Val Thr Arg Arg Leu Ser Arg Arg Thr Pro Pro Ser Arg Leu Arg Met  
 100 105 110  
 Arg Gly Arg Ile Trp Met Lys Arg Ile Ser Leu Ser Gly Ile Ser Met  
 115 120 125  
 Ile Arg Ala Phe Arg Phe Gly Ser  
 130 135



17711

<210> 40492  
 <211> 102  
 <212> PRT  
 <213> A.fumigatus

<400> 40492  
 Val Asn Asn Ala Arg Asp Leu Arg Leu Leu Glu Gly Ser Gln Cys Asn  
 1 5 10 15  
 Ser Val Leu Thr Thr Asp Ile Thr Tyr Ile Gly Leu Ser Asp Tyr Pro  
 20 25 30  
 His Ala Thr Thr Arg Ile His Ala Asn Tyr Asn Asn Gly Asn Ala His  
 35 40 45  
 Lys Thr Val Phe Gln Ser Glu Lys Ser Ser Thr Ser Ile Ile Lys Leu  
 50 55 60  
 Ile Ile Ser Ile Thr Ile Thr Ala Ile Arg Leu Ile Thr Thr Ile His  
 65 70 75 80  
 Val Phe Leu Asn Phe Ser Arg Arg Leu Glu Cys Leu Asn Leu Leu His  
 85 90 95  
 His His Gln Ser Met Thr  
 100

<210> 40493  
 <211> 168  
 <212> PRT  
 <213> A.fumigatus

<400> 40493  
 Ile Arg Asp Thr Asn Ile Asn Ala Tyr Pro Leu Lys Leu Gly Ala Asp  
 1 5 10 15  
 Pro Thr Ser Cys Phe Pro Pro Phe Val Met Ser Ala Gln Asp Glu Phe  
 20 25 30  
 Asn Ser Leu Val Ala Asn Asn Gln Glu Lys Phe Ser Thr His Pro Glu  
 35 40 45  
 Asp Arg Asp Asn Ser Asp Arg Asp Ser Glu Pro Ala Ser Asp Asn Asn  
 50 55 60  
 Thr Asn His Asp Asp His Ala His Phe Ser Asp Ser Glu Asp Phe Asp  
 65 70 75 80  
 Asp Thr Ala Met Gly Ser Arg Thr Thr Thr Tyr Gln Val Pro Arg Thr  
 85 90 95  
 Lys Phe Asp Ala Asn Thr Gly Pro Lys Gly Val Ile Ala Asp Ala Gln  
 100 105 110  
 Ala Phe Glu Arg Ala Arg Lys Arg Ser Phe Arg Lys Thr Leu Leu Gly  
 115 120 125  
 Ala Ala Gly Met Asp Tyr Lys His His Arg Ser Asn Ser Lys Ser Ile  
 130 135 140  
 Thr Asp Asp Ala Asn Leu Leu Gln Asn Ser Ser Thr Thr Gly Val  
 145 150 155 160  
 Glu Gly Ser Ala Leu Ser Val Lys  
 165

<210> 40494  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

17712

<400> 40494

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Arg Leu Gln Val Trp Asp Val Leu Arg Gly Asp Lys Val Gly Ser Leu
1          5          10          15
Ser Gly His Glu Asn Arg Val Ser Cys Leu Gly Val Ser Asn Asp Gly
          20          25          30
Ile Ser Leu Cys Thr Gly Ser Trp Asp Ser Leu Val Ser Ala Leu Lys
          35          40          45
Ala Ile Lys Tyr Ser Pro Leu Leu Phe Arg Phe Ile Val Phe Leu Val
          50          55          60
Phe Ile Ser Gln Ser Leu Ile Phe Leu Phe Val Val Lys Leu Lys Val
65          70          75          80
Trp Ala Trp

```

<210> 40495

<211> 151

<212> PRT

<213> A.fumigatus

<400> 40495

```

Leu Ser Leu His Thr Asn Gln Pro Pro Arg Pro Ala Ala Pro Ser Leu
1          5          10          15
Ser Thr Leu Pro Phe Cys Leu Phe Leu Ser Tyr Cys Arg Leu Pro Ala
          20          25          30
Ser Ser Pro Gly His Pro Asn Pro Ile Pro Trp Asp Ser Gln Arg Arg
          35          40          45
Leu Leu Arg His Arg Phe Thr Ser Ser Pro Ala Tyr Ser His Leu Pro
          50          55          60
Asn Leu Pro Ile Pro Gly Thr Ser Phe Leu Val Glu Met Ala Ala Asp
65          70          75          80
Met Ser Gly Glu Gln Met Gln Ala Lys Ile Thr Ala Ala Arg Arg Glu
          85          90          95
Ala Glu Gly Leu Lys Asp Lys Ile Lys Arg Arg Lys Asp Glu Leu Ala
          100          105          110
Asp Thr Thr Arg Thr Asn Pro Leu Ser His Tyr Leu Leu Gln Ser Phe
          115          120          125
Asn Ser Trp Asn Cys Ser Gly Leu Phe Thr Ala Ile Ala Leu Gln Met
          130          135          140
Ser Met Phe His Phe Gly Tyr
145          150

```

<210> 40496

<211> 199

<212> PRT

<213> A.fumigatus

<400> 40496

```

Thr Val Arg Gln Val Ala Gln Asn Gln Thr Asp Ala Leu Pro Arg Ile
1          5          10          15
Gly Met Lys Pro Arg Arg Thr Leu Lys Gly His Leu Ala Lys Ile Tyr
          20          25          30
Ala Met His Trp Ser Thr Asp Arg Arg His Leu Val Ser Ala Ser Gln
          35          40          45
Asp Gly Lys Leu Ile Ile Trp Asp Ala Tyr Thr Thr Asn Lys Val His
          50          55          60
Ala Ile Pro Leu Arg Ser Ser Trp Val Met Thr Cys Ala Tyr Ala Pro

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## 17713

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65          70          75          80
Ser Gly Asn Tyr Val Ala Cys Gly Gly Leu Asp Asn Ile Cys Ser Ile
      85          90          95
Tyr Asn Leu Ser Ser Arg Glu Gly Pro Thr Arg Val Ala Arg Glu Leu
      100         105         110
Ser Gly His Ser Gly Tyr Leu Ser Cys Cys Arg Phe Ile Asn Asp Arg
      115         120         125
Arg Ile Ile Thr Ser Ser Gly Asp Met Thr Cys Met Leu Trp Asp Ile
      130         135         140
Glu Ser Arg Ser Lys Val Thr Glu Phe Ala Asp His Leu Gly Asp Val
145          150          155          160
Met Ser Ile Ser Ile Asn Pro Thr Asn Gln Asn Ile Phe Val Ser Gly
      165          170          175
Ala Cys Asp Ala Phe Ala Lys Leu Trp Asp Ile Arg Thr Gly Lys Ala
      180          185          190
Val His Thr Phe Ala Gly His
      195

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<210> 40497
<211> 153
<212> PRT
<213> A.fumigatus

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<400> 40497
Pro Glu Lys Ser Leu Pro Gly Val Leu Val Leu Tyr Ala Gln Ser Thr
1      5      10      15
Gly Val Gly Arg Gly Ser Ile Arg Asp Leu Val Tyr Ser Ser Leu Thr
      20      25      30
Leu Ala Ile Asn Cys Gly Trp Leu Val Leu Pro Gln Trp Val Leu Leu
      35      40      45
Ser Pro Pro Thr Ser Ile Ser Ser Leu Leu Phe Asp Arg Cys Pro Tyr
      50      55      60
Gly Gly Arg Leu His Ala Thr Ala Leu Leu Met Val Leu Asp Asn Leu
65          70          75          80
Thr Leu Phe Ser Gly Asp Phe Glu Leu Lys Tyr Met Val Lys Thr Asn
      85          90          95
Phe Leu Gly Gly Ala Ser Leu Ser Lys Pro Arg Ile Thr Ser Tyr Gly
      100         105         110
Val Arg Glu Tyr Gln Ile Leu Arg Trp Ala Thr Phe Ser Ser Pro Ile
      115         120         125
Arg Leu Thr Cys Arg Leu Gln Pro Glu Met Thr Ser Ile Ala Tyr Ser
      130         135         140
Ser Thr Asp Ser Leu Leu Val Leu
145          150

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<210> 40498
<211> 70
<212> PRT
<213> A.fumigatus

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```

<400> 40498
Lys Trp Leu Ala Ala Ser Gly Thr His Pro Pro Leu Pro Val Glu Glu
1      5      10      15
Asn Phe Pro Pro Leu Asn Leu Asn Gln Leu Lys Val Phe Phe Ile His
      20      25      30
Gly Asn Leu Arg Val Ser Arg Val Lys Pro Pro Val Ser Ile Ser His

```

17714

35	40	45
Ile Ala His Leu Thr Val	Ile Thr Lys Thr Gly	Gly Ser Tyr Val Gly
50	55	60
Met Glu Thr Ser Leu Gln		
65	70	

<210> 40499  
 <211> 582  
 <212> PRT  
 <213> A.fumigatus

<400> 40499

Leu	Glu	Gln	Val	Glu	Asp	Leu	Phe	Tyr	Asn	Val	Pro	Thr	Arg	Arg	Arg
1			5						10					15	
Ala	Phe	Arg	Ser	Ala	Ser	Glu	Glu	Tyr	Ala	Lys	Ile	Leu	Asp	Val	Val
		20						25					30		
Gly	Arg	Tyr	Ala	Val	His	Cys	Ser	Gly	Ile	Ala	Phe	Ser	Cys	Arg	Lys
		35					40					45			
His	Gly	Glu	Ser	Gly	Ala	Gly	Ile	Ser	Thr	Pro	Thr	Ala	Ala	Ser	Thr
	50					55					60				
Val	Glu	Arg	Ile	Arg	Gln	Ile	His	Gly	Ser	Ala	Val	Ala	Asn	Glu	Leu
65					70					75				80	
Val	Glu	Phe	Gln	Val	Glu	Asp	Ser	Lys	Leu	Gly	Phe	Arg	Ser	Ser	Gly
			85					90						95	
Leu	Val	Thr	Asn	Ala	Asn	Tyr	His	Val	Lys	Arg	Thr	Thr	Ile	Leu	Leu
			100					105					110		
Phe	Ile	Asn	His	Arg	Ser	Val	Glu	Ser	Thr	Ala	Ile	Lys	Arg	Ala	Val
		115					120					125			
Glu	Gln	Thr	Tyr	Ser	Ser	Phe	Leu	Pro	Lys	Gly	Gly	His	Pro	Phe	Val
	130					135				140					
Tyr	Ile	Asp	Leu	Glu	Ile	Glu	Pro	Gln	Arg	Val	Asp	Val	Asn	Val	His
145					150					155					160
Pro	Thr	Lys	Arg	Glu	Val	Asn	Phe	Leu	Asn	Glu	Asp	Glu	Ile	Ile	Glu
				165					170					175	
Cys	Ile	Cys	Asp	Ala	Ile	Lys	Ser	Lys	Leu	Ala	Gln	Val	Asp	Ser	Ser
			180					185					190		
Arg	Thr	Phe	Leu	Thr	Gln	Thr	Leu	Leu	Pro	Gly	Val	Thr	Thr	Ile	Glu
		195					200					205			
Pro	Leu	Asn	Arg	Asn	Asn	Pro	Ala	Thr	Gly	Leu	Ser	Val	Glu	Ser	Asp
	210					215					220				
Ser	Gln	Val	Pro	Arg	Thr	Pro	Ala	Pro	Thr	Lys	Lys	Pro	Tyr	Glu	His
225					230					235					240
Ser	Leu	Val	Arg	Thr	Asp	Ser	Arg	Val	Arg	Lys	Ile	Thr	Ser	Met	Leu
				245					250					255	
Pro	Pro	Ala	Ile	Gln	Arg	Thr	Pro	Ser	Gly	Pro	Glu	Ala	Ala	Glu	Ser
			260					265					270		
Asp	Pro	Ser	Gln	Val	Val	Glu	Glu	Gly	Leu	Gln	Tyr	Glu	Thr	Thr	Asp
	275						280					285			
Arg	Glu	Pro	Leu	Arg	Ile	Ala	Leu	Thr	Ser	Val	Lys	Asn	Leu	Arg	Ala
	290					295					300				
Ala	Val	Arg	Ser	Thr	Met	His	Asn	Asn	Leu	Thr	Glu	Met	Ile	Ala	Ser
305					310					315					320
His	Thr	Tyr	Val	Gly	Leu	Val	Asp	Glu	Arg	Arg	Arg	Ile	Ala	Ala	Ile
				325					330				335		
Gln	Ser	Gly	Val	Lys	Leu	Tyr	Leu	Val	Asp	Tyr	Gly	Met	Ile	Cys	Ser
			340					345					350		

17715

Glu Phe Phe Tyr Gln Ile Gly Leu Thr Asp Phe Gly Asn Phe Gly Ile  
 355 360 365  
 Ile Lys Leu Asp Pro Ala Pro Lys Leu Val Asp Leu Leu Arg Ile Gly  
 370 375 380  
 Ala Asp Ala Glu Arg Glu Ala His Ile Ala Ser Gly Gly Pro Val Ser  
 385 390 395 400  
 Ser Gln Glu Thr Thr Gln Pro Glu Gln Thr Gly Thr Ala Glu Glu Ser  
 405 410 415  
 Glu Ile Phe Ala Asn Ala Pro Asn Ile Val Ala Lys Thr Leu Ile Asp  
 420 425 430  
 Arg Arg Glu Met Leu Asn Glu Tyr Phe Ser Leu Gln Ile Ser Ala Glu  
 435 440 445  
 Gly Asp Leu Leu Thr Ile Pro Leu Leu Leu Lys Gly Tyr Leu Pro Ser  
 450 455 460  
 Leu Gly Lys Leu Pro Arg Phe Leu Leu Arg Leu Gly Pro Tyr Val Asp  
 465 470 475 480  
 Trp Thr Ser Glu Glu Cys Phe Arg Thr Phe Leu Arg Glu Leu Ala  
 485 490 495  
 Ala Phe Tyr Thr Pro Glu Gln Leu Pro Pro Pro Pro Glu Gly Ser  
 500 505 510  
 Asn Ala Ser Asp His Lys Glu Ile Pro Glu Ser Pro Glu Glu Gln Pro  
 515 520 525  
 Glu Asp Ala Val Leu Arg His Arg Arg Leu Gln Ile Ala Arg Met Leu  
 530 535 540  
 Glu His Val Val Phe Pro Ala Leu Arg Ala Arg Leu Val Ala Thr Thr  
 545 550 555 560  
 Arg Phe Leu Arg Gly Val Val Glu Val Ala Asp Leu Lys Gly Leu Tyr  
 565 570 575  
 Arg Val Phe Glu Arg Cys  
 580

<210> 40500  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 40500  
 Val Lys Arg Met Pro His Leu Arg Val Gly Ile Thr Cys Met Leu Phe  
 1 5 10 15  
 Cys Ile Tyr Leu Glu Tyr Gly Leu Phe Ile Asn Ala Ile Ser Leu Ala  
 20 25 30  
 Ile Glu Ala His Ser Ser Ser Leu Leu Met Val Leu Leu Arg Leu Cys  
 35 40 45  
 Ser Ser Cys Ser Ser His Leu Arg Ser Ser Tyr Leu Arg Asn Pro Val  
 50 55 60  
 Ser Gln  
 65

<210> 40501  
 <211> 285  
 <212> PRT  
 <213> A.fumigatus

<400> 40501  
 Ser Leu Ala Thr Val Arg Leu Cys Ile Asn Ser Pro Asp Arg Asn Ile  
 1 5 10 15

## 17716

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Leu Trp Thr Arg Ile Tyr Thr Arg Thr Ala Gln Leu Ser Leu Asn Met
      20                      25                      30
Ala Thr Val Leu Val Gln Gln Gln Thr Leu Arg His Ala Thr Pro Pro
      35                      40                      45
Pro Ala Gly Ile Ser Ser Ser Leu Asn Leu Thr Arg Thr Pro Ser Pro
      50                      55                      60
Val Pro Asn Lys His Leu Pro Val Cys Pro Pro Gly Thr Ser Thr Ala
      65                      70                      75                      80
Ala Leu Arg Thr Ala Val Gln Ser Thr Lys Glu Asp Lys Lys Val Thr
      85                      90                      95
Ser Leu Leu Tyr Pro Pro Asp Thr Phe Leu Arg Val Asn Lys Ser Pro
      100                     105                     110
Ser Ile Tyr Ser Ile Asp Ile Val Thr Leu Ala Ala Ala Leu Asp Tyr
      115                     120                     125
Trp Ala Ser Gln Pro Leu Pro Asp Pro Ser Gln Val Phe Pro Trp Leu
      130                     135                     140
His Gly Leu His Pro Glu Asn His Leu Gln Leu Gly Phe Phe Thr Asn
      145                     150                     155                     160
Arg Arg Arg Ser Leu Arg Arg Ile Pro Gln Cys Trp Arg Gly Ile Thr
      165                     170                     175
Ile Val Lys Val Gly Gly Asp Leu Ser Thr Ser Arg Leu Lys Gly Ala
      180                     185                     190
Val Ser Pro Ser Glu Ile Leu Ala Pro Ser Gly Trp Asp Phe Ile Pro
      195                     200                     205
Ser Asp Pro Lys Glu Gly Phe Ser Val Arg Asn Phe Gln Ile Gln Thr
      210                     215                     220
Pro Lys Leu Ala Thr Leu Ser Asp Ile Val Val Tyr Gly Gln Asp Gly
      225                     230                     235                     240
Val His Lys Lys Gln Leu Leu Glu Val Ala Glu Lys Ile Ala Thr Ala
      245                     250                     255
Gln Tyr Arg Trp Arg Asn Lys Asn Asp Pro Asp Gly Leu Leu Pro Thr
      260                     265                     270
Tyr His Thr Phe Ile Leu Ser Ser Gln Ser Phe Ser Ala
      275                     280                     285

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&lt;210&gt; 40502

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40502

```

Ser Glu His Thr Leu Asp Ser Tyr Ile His Ser Asn Cys Thr Ala Val
1          5          10          15
Ile Glu Tyr Gly Tyr Gly Val Gly Thr Ala Ala Asn Ala Ala Thr Cys
      20          25          30
His Pro Ser Ala Ser Gly Asn Leu Leu Val Pro Glu Ser His Gln Asn
      35          40          45
Pro Val Ala Gly Ala Lys Gln Thr Phe Thr Cys Val Ser Ala Gly Asp
      50          55          60
Phe Asp Ser Ser Phe Ala Asp Cys Cys Thr Ile Asn
      65          70          75

```

&lt;210&gt; 40503

&lt;211&gt; 317

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40503

Phe Phe Phe Gly Trp Glu Asp Arg Ser Asn Thr Ser Pro Val His Trp  
 1 5 10 15  
 Glu Arg Leu Glu Met Cys Glu Met Thr Lys Ala Ser Glu Ile Ser Lys  
 20 25 30  
 Asn Val Trp Gln Gly Pro Thr Pro Asp Tyr Ile Leu Gln Cys Gly Ser  
 35 40 45  
 Gly Asp Ser Val His Val Glu Asp Phe Asp Leu Leu Ile Glu Thr Ser  
 50 55 60  
 Asp Leu Ala Ser Ile Pro Gly Pro Arg Tyr Leu Ala Lys Leu Asn Arg  
 65 70 75 80  
 Gln Leu Asp Asp Asp Asp Gly Pro Leu Arg Leu Glu Phe Pro Ser Ser  
 85 90 95  
 Gly Ser Leu Val Val Pro Ser Ala Glu Thr Arg Glu Ile Asp Asp Leu  
 100 105 110  
 Val Ser Thr Val Arg Trp Ile Tyr Tyr Leu Ala Asn Pro Asp Glu Pro  
 115 120 125  
 Glu Ser Pro Thr Asp Val Gly Gly Asp Ile Ala Met Thr Leu Leu Gln  
 130 135 140  
 Arg Lys Pro Arg Arg Ile Leu Ile His Cys Pro Asp Gly Tyr Thr Glu  
 145 150 155 160  
 Ser Ser Leu Leu Val Ile Ala Tyr Leu Met Phe Ala Glu Gly Ile Pro  
 165 170 175  
 Ala His Glu Ala Trp Leu Arg Leu His Cys Asp Arg Lys Arg Asn Phe  
 180 185 190  
 Phe Ala Tyr Pro Ser Asp Val Thr Phe Leu Ser Thr Ile Gln Thr Arg  
 195 200 205  
 Leu Leu His Glu Ser Pro Ala Thr His Ser Glu Ser Leu Ser Ser Val  
 210 215 220  
 Pro Asp Pro Pro Trp Phe Arg Tyr Cys Asp Gly Ser Leu Pro Ser Arg  
 225 230 235 240  
 Ile Leu Pro Tyr Met Tyr Leu Gly Asn Leu Gly His Ala Asn Asn Pro  
 245 250 255  
 Glu Met Leu Trp Ala Leu Gly Ile Arg Arg Ile Leu Ser Ile Gly Glu  
 260 265 270  
 Ser Val Ser Trp Arg Asp Phe Asp Val Ala Arg Met Gly Pro Asp Asn  
 275 280 285  
 Val Met His Ile Thr Gln Val Gln Asp Asn Gly Ile Asp Pro Leu Thr  
 290 295 300  
 Gln Glu Phe Asp Arg Cys Leu Glu Phe Ile Ser Glu Phe  
 305 310 315

&lt;210&gt; 40504

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40504

Gly Met Asp Val Leu Glu Ala Arg Ser Lys Ala Pro Ile Ala Gly Leu  
 1 5 10 15  
 Val Ala Ser Pro Ser Thr Pro Leu Pro Thr Pro Leu Met Lys Pro Trp  
 20 25 30  
 Arg Pro Ser Phe Ser Ala Pro Cys Ser Gly Trp Arg Ala Ser Pro Pro  
 35 40 45  
 Met Pro Leu Ala Lys Leu Phe Ala Asn Ala Phe Pro Pro Ala Val Arg

17718

50	55	60
Pro Tyr Asn Ala Cys Phe Gly Arg Phe Arg Asp Phe Asp Ile Arg Arg		
65	70	75 80

<210> 40505

<211> 451

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (412)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40505

Pro	Leu	Glu	Gly	Asp	Ala	Asp	Ser	Val	Val	Arg	Val	Lys	Met	Lys	Ser
1			5					10					15		
Ile	Glu	Val	Ile	Tyr	Asn	Pro	Ser	Phe	Leu	Val	Glu	Ile	Val	Lys	Phe
		20					25					30			
Phe	Glu	Pro	Pro	Glu	Arg	His	Met	Glu	Ser	Ile	Gly	Ala	Phe	Leu	Asp
		35					40					45			
Ser	Ala	Gly	Ala	Thr	Val	Glu	Glu	Ile	Arg	Gln	Gln	Thr	Arg	Ala	Gly
	50					55				60					
Leu	Glu	Phe	Ala	Leu	Glu	Glu	His	Lys	Lys	Val	Asp	Ala	His	Phe	Asp
65					70					75					80
Ile	His	Ala	Pro	Leu	Ile	Ile	Val	Pro	Glu	Ser	Ile	Thr	Gln	Glu	Ser
			85						90					95	
Ser	Leu	Cys	Leu	Ile	Leu	Asp	Ala	Gly	His	Ile	Ser	Val	Asn	Ser	Glu
			100					105					110		
Leu	Val	Asp	Arg	Gln	Thr	Met	Arg	Asp	Leu	Gln	Ala	Lys	Gln	Lys	Arg
		115					120					125			
Gln	Tyr	Val	Glu	Asn	Asp	Tyr	Lys	Glu	Leu	Glu	His	Leu	Leu	Tyr	Asp
	130					135					140				
Arg	Phe	Leu	Leu	Lys	Leu	Asp	Ser	Thr	Gln	Val	Leu	Ile	Gly	Pro	Gly
145					150					155					160
Val	Glu	Ser	Thr	Lys	Ser	Gln	Leu	Thr	Ser	Glu	Val	Lys	Asn	Arg	Asn
				165					170					175	
Phe	His	Ile	Ile	Asp	Arg	Ile	Asn	Val	Asp	Phe	Val	Leu	Glu	Leu	Cys
			180					185					190		
Ile	Ile	Pro	Lys	Ser	Thr	Glu	Leu	Thr	Arg	Thr	Arg	Ile	Ser	Gly	His
		195					200						205		
Leu	Pro	Glu	Leu	His	Ala	Ser	Met	Ser	Asp	Thr	Lys	Tyr	Lys	Gly	Leu
	210					215					220				
Met	Lys	Leu	Ile	Asp	Ile	Ala	Ile	Pro	Arg	Phe	Asp	Glu	Gly	Gly	Val
225					230					235					240
Ser	Asp	Cys	Pro	Pro	Ala	Lys	Ser	Ser	Ser	Glu	Ser	Thr	Thr	Thr	Ser
			245					250						255	
Asn	Arg	Ala	Arg	Ser	Ala	Ser	Phe	Gln	Pro	Ser	Val	Pro	Arg	Glu	Leu
		260						265					270		
Pro	Val	Val	Asp	Glu	Asp	Ser	Asp	Ser	Glu	Thr	Asp	His	Glu	Gln	Thr
		275					280					285			
Lys	Lys	Ser	Val	Asp	Arg	Leu	Leu	Asn	Ile	His	Arg	Lys	Glu	Phe	Glu
	290					295					300				
Phe	Lys	Phe	Thr	Val	Gly	Cys	Leu	Arg	Gly	Ser	Leu	Phe	Arg	Ser	Asp
305					310					315					320
Pro	Asp	Asp	Gln	Phe	Arg	Asp	Gln	Leu	Leu	Val	Glu	Leu	Val	Ala	Glu



17719

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          325          330          335
Gly Phe Glu Leu Asp Tyr Tyr Thr Arg Pro Phe Asp Met Val Ala Glu
          340          345          350
Ile Val Leu Gln Ser Leu Ser Val Asp Asp Tyr Ile Glu Glu Asn Pro
          355          360          365
Ile Pro Asp Phe Lys Arg Ile Ile Ser Ser Lys Gly Phe Asp Ala Asp
          370          375          380
Glu Asp Lys Asp Leu Phe His Leu Lys Phe Val Arg Val Lys Pro Asp
385          390          395          400
Ser Pro Glu Phe Ser Ser Thr Tyr Glu Gly Ile Xaa Met Asn Leu Asp
          405          410          415
Met Ser Ile Ser Thr Ile Asn Leu Val Val Thr Arg Lys Thr Leu Leu
          420          425          430
Thr Leu Leu Asp Phe Val Leu Leu Thr Phe Thr Ser Pro Glu Gln Pro
          435          440          445
Arg Asn Pro
          450

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<210> 40506

<211> 1489

<212> PRT

<213> A.fumigatus

<400> 40506

```

Thr Leu Trp Ser Leu Gly Arg His Phe Ser Pro Cys Trp Ile Leu Phe
1          5          10          15
Ser Ser Pro Ser Gln Ala Gln Ser Ser Pro Glu Thr His Lys Pro Ser
          20          25          30
Ser Asp Glu Thr Val Gln Asn Thr Thr Val Leu Thr Gln Asp Thr Glu
          35          40          45
Gln Pro Gly Lys Ile Arg Ile Lys Ala Asp Leu Lys Ser Ile Ala Leu
          50          55          60
Ile Leu Asn Asn Asp Gly Val Arg Leu Ala Thr Leu Ser Leu Asn Thr
65          70          75          80
Ala Asp Val Gly Leu Asn Ile Val Gly Arg Ser Met Leu Ile Gln Ser
          85          90          95
Arg Ile Gly Ser Leu Thr Leu Ile Asp Asp Val Asn Thr Gly Ala Ser
          100          105          110
Ala Thr Ser Asp Leu Arg Arg Leu Leu Thr Ile Glu Gly Asp Asn Phe
          115          120          125
Ala Asp Phe Lys Tyr Glu Thr Phe Asp Pro Glu Ser Thr Asn Tyr Pro
          130          135          140
Gly Tyr Asp Ser Glu Val Tyr Leu Arg Ser Gly Ser Ile Lys Ile Asn
145          150          155          160
Phe Leu Glu Glu Pro Tyr Arg Lys Ile Ile Asn Phe Leu Val Lys Phe
          165          170          175
Gly Lys Met Gln Ala Ile Phe Asn Ala Ala Arg Gln Ala Ala Ser
          180          185          190
Gln Ala Asn Gln Leu Gln Glu Asn Ala Ser Lys Met Arg Phe Asp Val
          195          200          205
Val Val Lys Thr Pro Ile Leu Val Phe Pro Gly Ala Val Arg Pro Asp
          210          215          220
Arg Pro Arg Asp Thr Val Thr Ala His Leu Gly Glu Ile Tyr Ala Lys
225          230          235          240
Asn Thr Phe Val Pro Leu Asp Glu Asp Ala Glu Ser Pro Ala Val Asn
          245          250          255

```

Leu Ile Ser Ser Gly Ile Arg Asn Ile Arg Leu Thr Ser Lys Phe His  
 260 265 270  
 Phe Glu Glu Asp Val Val Glu Glu Leu Glu Met Ile Gln Lys Val Asn  
 275 280 285  
 Leu Glu Phe Ser Ile Cys Tyr Leu Glu His Gln Asn Asp Asn Pro Arg  
 290 295 300  
 Pro Asp Met Glu Ile Glu Gly Ser Met Ser Pro Ile Asn Leu Arg Val  
 305 310 315 320  
 Ser Gln Lys Gln Leu Lys Phe Leu Leu Glu Leu Ser Lys Thr Val Pro  
 325 330 335  
 Gly Ala Phe Ser Thr Asp Tyr Glu Gln Gln Glu Leu Glu Ala Phe Glu  
 340 345 350  
 Asp Leu Pro Thr Ser Val Thr Asp Thr Ser Lys Gly Ala Asp Trp Lys  
 355 360 365  
 Leu Ala Gln Thr Pro Gln Glu His Glu Arg Ile Ala Glu Gly Ser Gly  
 370 375 380  
 Ser Asp Asp Glu Thr Trp Ala Lys Leu Asp Met Leu Phe Lys Val Asp  
 385 390 395 400  
 Ser Val Gly Leu Glu Ile Leu Ala Lys Asp Asp Glu Pro Val Gly  
 405 410 415  
 Asp Leu Glu Gly Ser Ser Leu Ser Lys Phe Ser Leu Asn Asp Thr Gln  
 420 425 430  
 Val Lys Leu Arg Met Leu Thr Asp Gly Ser Leu Glu Ser Glu Leu Leu  
 435 440 445  
 Ile His Ser Leu Ser Val Arg Asp Ser Arg Asn Gln Asp Thr Asn Lys  
 450 455 460  
 Phe Arg Lys Ile Met Ser Leu Ile Asn Asn Asp Val Gln Gln Gln Phe  
 465 470 475 480  
 Met Ala Ser Leu Ser Met Ser Pro Gly Pro Glu Lys His Leu Ile Ala  
 485 490 495  
 Met Leu Thr Ile Asp Ser Pro Arg Ile Ile Leu Ala Leu Asp Tyr Leu  
 500 505 510  
 Ser Ala Leu Gln Ser Phe Met Asn Ser Val Phe Thr Ala Glu Glu Pro  
 515 520 525  
 Ile Ala Val Glu Glu Ile Glu Glu Ala Asp Glu Thr Ser Glu Pro Arg  
 530 535 540  
 Ser Ser Ser Thr Glu Ser Pro Asp Gln Thr Ala Thr Ala Thr Pro Gly  
 545 550 555 560  
 Glu Asp Ser Thr Ser Ser Ala Ala Lys Thr Thr Ile Ser Phe Arg Val  
 565 570 575  
 Asn Leu Val Asp Ala Gln Ile Ile Met Ile Ala Asn Pro Ala Ile Ala  
 580 585 590  
 His Thr Glu Ala Ile Val Leu Gly Thr Lys Gln Val Leu Phe Ser Gln  
 595 600 605  
 Gln Asn Val Ser Thr Leu Gln Ile Asn Lys Val Gly Met Phe Leu Cys  
 610 615 620  
 Arg Met Asp Lys Phe Glu Thr Ser Arg Leu Arg Ile Leu Asp Asp Phe  
 625 630 635 640  
 Thr Leu Glu Leu Ser Met Asp Ser Arg Pro Gln Glu Lys Gly Pro Ser  
 645 650 655  
 Leu Thr Ser Ile Asp Val His Ile Glu Pro Leu Val Leu Arg Leu Ser  
 660 665 670  
 Leu Arg Asp Ile Leu Met Ala Leu Gln Ile Val Asn Lys Ala Ser Glu  
 675 680 685  
 Met Arg Ala Asn Arg Ser Gln Glu Ile Glu Ser Gly Asp Val Lys Arg  
 690 695 700

## 17721

Val Ser Asp Gly Arg Gln Pro Ser Ala Lys Ser Thr Arg Arg Arg Ser  
 705 710 715 720  
 Ser Ala Ala Arg Ser Ser His Ala Pro Ala Leu Lys Ser Arg Arg Ala  
 725 730 735  
 Ser Gly Ala Ser Gly Lys Pro Ala Ser Gln Arg Ala Ala Ser Glu Arg  
 740 745 750  
 Ser Ala Ile Leu Lys Arg Glu Glu Leu Ser Ala Gln Ile Asp Gly Val  
 755 760 765  
 Arg Val Ile Leu Ile Gly Asp Leu His Asp Leu Pro Leu Leu Asp Trp  
 770 775 780  
 Ser Val Lys Lys Phe Thr Val Asp Val Arg Asp Trp Ser Ser Ala Leu  
 785 790 795 800  
 Asn Ala Asp Thr Ser Phe Asp Thr Phe Ile Asn Val Tyr Asn Phe Ser  
 805 810 815  
 Lys Ser Ala Trp Glu Pro Leu Ile Glu Pro Trp Gln Leu Gly Phe His  
 820 825 830  
 Val Ala Lys Glu Val Asp Pro Glu Val Phe Ser Ile Asp Ala Tyr Ser  
 835 840 845  
 His Lys Asn Met Glu Leu Thr Val Thr Ser Ala Thr Ile Ala Leu Ala  
 850 855 860  
 Ser Lys Ser Phe Gln Phe Leu Ser Thr Asp Gln Asp Val Leu Ser Lys  
 865 870 875 880  
 Pro Arg Gly Ala Asp Ala Pro Tyr Arg Ile Arg Asn His Thr Gly Phe  
 885 890 895  
 Asp Leu Arg Val Trp Ala Asp Val Ser Thr Gly Glu Glu Gly Pro Ala  
 900 905 910  
 Ala Lys Leu Ser Asp Gly Glu Glu Tyr Pro Trp Arg Phe Glu Asp Ser  
 915 920 925  
 Thr Ala Val Arg Glu Thr Leu Ala Pro Glu Gly Gln Gly Gly Val Val  
 930 935 940  
 Gly Val Lys Leu Glu Gly Ser Gly Phe Glu Ser Ile Asn Arg Ile Pro  
 945 950 955 960  
 Val Ala Arg Glu Gly Glu Phe Leu Tyr Ser Leu Lys Pro Lys Ala Asp  
 965 970 975  
 Gly Val Leu His Arg Leu Leu Val Glu Val Lys Leu Gly Thr Asp Asn  
 980 985 990  
 Val Lys Tyr Ile Thr Phe Arg Ser Pro Leu Val Phe Glu Asn Asn Thr  
 995 1000 1005  
 Gln Ile Pro Val Glu Leu Gly Ile Leu Asn His Lys Glu Gly His Leu  
 1010 1015 1020  
 Leu Lys Ile Glu Lys Ile Leu Pro Gly Asp Ala Arg Arg Ala Pro Val  
 1025 1030 1035 1040  
 Gly Ala Ala Tyr Leu His Ser Val Leu Ile Arg Pro Asp Gln Gly Phe  
 1045 1050 1055  
 Gly Tyr Glu Trp Ser Thr Glu Pro Leu His Trp Lys Asp Leu Leu Arg  
 1060 1065 1070  
 Arg Pro Thr Arg Thr Ile Lys Cys Ile Ser Glu Ser Gly Gln Gln Ala  
 1075 1080 1085  
 Pro Pro Phe Tyr Phe Gln Met Asn Ala Thr Tyr Asn Ser Lys Asp Ser  
 1090 1095 1100  
 Leu Thr Asn Val Tyr Pro Tyr Met Arg Ile Arg Ile Phe Ala Pro Val  
 1105 1110 1115 1120  
 Glu Ile Glu Asn Leu Leu Pro Tyr Asp Phe Lys Tyr Arg Ile Tyr Asp  
 1125 1130 1135  
 Lys Asn Thr Arg Lys Asp Trp Thr Asn Phe Leu Arg Lys Gly Gly Val  
 1140 1145 1150

## 17722

Ser Pro Val His Val Val Glu Leu Ser His Leu Leu Leu Leu Ser Ile  
 1155 1160 1165  
 Asp Leu Glu Asp Thr Val Phe Arg Gln Ser Glu Phe Ala Ile Ile Asn  
 1170 1175 1180  
 Gly Asn Ala Gln Asp Tyr Arg Arg Glu His Met Leu Ser Leu Lys Asp  
 1185 1190 1195 1200  
 Glu Gln Gly Ile Pro Leu Arg Leu Lys Leu His Tyr Phe Asn Val Pro  
 1205 1210 1215  
 Asp Ser Gly Gly Ala Phe Lys Val Ser Ile Tyr Ser Pro Tyr Leu Ile  
 1220 1225 1230  
 Leu Asn Lys Thr Gly Met Pro Met Glu Ile Gln Ser Lys Ala Phe Leu  
 1235 1240 1245  
 Gln Ser Ala Arg Ser Ala Ala Gly Glu Gly Leu Asn Pro Asp Pro Arg  
 1250 1255 1260  
 His Gly Gly Arg Ala Leu Pro Tyr Met Tyr Ala Tyr Gln Ser Asp Asp  
 1265 1270 1275 1280  
 Pro Lys Asn Arg Ser Ile Leu Lys Ile Gly Asp Ser Ala Trp Ser Lys  
 1285 1290 1295  
 Pro Gln Ser Phe Glu Ala Leu Gly Ser Asn Phe Glu Val Val Leu Ser  
 1300 1305 1310  
 Asp Arg Gln Gly Lys Ser Glu Phe His Ala Gly Val Ser Val Thr Glu  
 1315 1320 1325  
 Gly Glu Gly Lys Tyr Lys Met Thr Lys Val Val Thr Ile Ser Pro Arg  
 1330 1335 1340  
 Phe Ile Leu Lys Asn Lys Leu Ser Glu Glu Ile Leu Val Arg Glu Pro  
 1345 1350 1355 1360  
 Gly Ser Ser Ser Val Leu Thr Ile Lys Ser Gly Asn Leu Val Pro Leu  
 1365 1370 1375  
 His Phe Leu Arg Gln Ile Ala Glu Lys Gln Leu Cys Leu Cys Phe Pro  
 1380 1385 1390  
 Gly Val Asn Asn Gln Trp Ser Ser Pro Phe Asn Ile Ala Asp Val Gly  
 1395 1400 1405  
 Thr Val His Val Lys Leu Ala Lys Ala Asn Gln Arg Gln Arg Leu Ile  
 1410 1415 1420  
 Lys Val Asp Ile Ile Met Glu Gly Ala Thr Leu Phe Ile His Leu Ser  
 1425 1430 1435 1440  
 Leu Glu Thr Arg Asn Trp Pro Phe Ser Met Arg Asn Glu Ser Asp Ser  
 1445 1450 1455  
 Glu Phe Ile Phe Tyr Gln Ala Val Ser Ile Ser Ala Arg Tyr Met Thr  
 1460 1465 1470  
 Arg Ile His Ala Asn Thr Gln Thr Val Phe Ile Glu Ser Ile Arg Gly  
 1475 1480 1485  
 Gly

&lt;210&gt; 40507

&lt;211&gt; 709

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40507

Asn Pro Tyr Val Glu Asp Asp Glu Asp Asp Arg Thr Ser Gly Trp Arg  
 1 5 10 15  
 Pro Ile Arg Tyr Arg Leu Pro Pro Arg Ser Ile Met Pro Tyr Ala Trp  
 20 25 30  
 Asp Tyr Pro Ala Thr Lys Asn Lys Ser Leu Val Leu Thr Cys Asn Gly

35	40	45
Lys Glu Arg His Ile Arg Leu Thr Glu Ile Gly Asn Leu Ile Pro Met		
50	55	60
Arg Ile Pro Pro Ser Arg Pro Gly Glu Pro Gln Lys Ile Val Asp Ile		
65	70	75
Asn Ile Val Ala Asp Gly Pro Thr Gln Thr Leu Val Leu Ser Asn Phe		
85	90	95
Lys Gln Ser Arg Ser Leu Tyr Lys Gln Gln Lys Ala Gln Thr Ser Gln		
100	105	110
Thr Ser Val Ser Thr Gly Phe Glu Val Lys Glu Leu Asp Ser Asp Val		
115	120	125
Asn Phe Lys Ala Gln Leu Arg Leu Ala Gly Ile Gly Val Ser Leu Ile		
130	135	140
Asn Lys Asn Leu Lys Glu Leu Leu Tyr Leu Thr Phe Arg Glu Ile Glu		
145	150	155
Ile Lys Phe Arg Glu Ser Arg Val Tyr Gln Thr Leu Asn Thr Thr Ile		
165	170	175
Lys Trp Ile Gln Ile Asp Asn Gln Leu Tyr Gly Gly Ile Phe Pro Ile		
180	185	190
Leu Leu Tyr Pro Ser Val Val Pro Lys Thr Gly Lys Glu Met Glu Ala		
195	200	205
His Pro Ile Phe His Ala Met Val Thr Arg Val Lys Asp Asp Ser Tyr		
210	215	220
Gly Val Leu Tyr Ile Lys Tyr Ala Thr Val Leu Leu Gln Gln Ile Thr		
225	230	235
Leu Glu Leu Asp Glu Asp Phe Ile Phe Ala Met Leu Asp Phe Ala Lys		
245	250	255
Val Pro Gly Ala Ser Trp Ser Glu Glu Gln Glu Gly Lys Leu Cys Asp		
260	265	270
Glu Asp Leu Lys Ile Pro Glu Pro Gln Asn Glu Ser Ala Ser Gln Asp		
275	280	285
Val Tyr Phe Glu Leu Leu His Leu Gln Pro Met Gln Leu Asp Ile Ser		
290	295	300
Phe Met Arg Thr Glu Arg Val Asn Ala Glu Asn Asn Met Gln Pro Ser		
305	310	315
Asn Pro Leu Met Phe Phe Val Asn Val Ile Ser Met Ser Met Gly Asn		
325	330	335
Ile Asn Asp Ala Pro Val Arg Leu Asn Ala Leu Met Leu Glu Asn Ala		
340	345	350
Arg Val Ser Phe Gly Ile Leu Leu Asn Asn Ile Gln Ser His Tyr Thr		
355	360	365
Gln Glu Phe Leu Arg Gln Val His Val Ile Leu Gly Ser Ala Asp Phe		
370	375	380
Leu Gly Asn Pro Val Gly Leu Phe Asn Asn Val Ser Ser Gly Val Ala		
385	390	395
Ala Ile Phe Tyr Glu Pro Tyr Gln Gly Leu Val Met Thr Asp Arg Pro		
405	410	415
Gln Glu Leu Gly Met Gly Ile Ala Lys Gly Ala Thr Ser Phe Val Lys		
420	425	430
Lys Ser Val Phe Gly Phe Ser Asp Ser Met Ala Lys Phe Thr Gly Ser		
435	440	445
Met Ser Lys Gly Leu Ala Val Ala Thr Leu Asp Lys Glu Phe Gln Asp		
450	455	460
Gln Arg Arg Met Ser Lys Ser Arg Asn Arg Pro Lys His Ala Leu Tyr		
465	470	475
Gly Leu Thr Ala Gly Gly Asn Ala Phe Ala Asn Ser Leu Ala Ser Gly		

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<210> 40508
<211> 165
<212> PRT
<213> A.fumigatus
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Arg	His	Leu	Phe	Thr	Ile	Thr	Gly	Pro	Ala	Gly	Leu	Ala	Ala	Ala	Ile
1				5					10					15	
Arg	Leu	Lys	Gln	Leu	Ala	Asn	Glu	Ala	Gly	Asn	Glu	Glu	Phe	Arg	Val
			20					25					30		
Ile	Leu	Leu	Glu	Lys	Ala	Gly	Glu	Leu	Gly	Ala	His	Ile	Leu	Ser	Gly
		35					40					45			
Asn	Val	Leu	Gln	Pro	Thr	Ala	Met	Asn	Glu	Leu	Leu	Pro	Asp	Trp	Leu
	50					55					60				
Ser	Glu	Glu	Asn	Pro	Ser	Arg	Phe	Glu	Gly	Ala	Thr	Pro	Ala	Arg	Glu
65					70					75					80
Asp	Lys	Met	Arg	Phe	Leu	Thr	Lys	Asn	Leu	Ser	Phe	Pro	Ile	Pro	Ala
				85					90					95	
Pro	Pro	Gln	Met	Asn	Asn	His	Gly	Asn	Tyr	Ile	Val	Ser	Leu	Asn	Glu
			100					105					110		
Leu	Thr	Lys	Trp	Leu	Gly	Glu	Arg	Ala	Glu	Glu	Leu	Gly	Val	Glu	Ile
		115					120					125			
Tyr	Pro	Gly	Phe	Ala	Ala	Ser	Arg	Val	Ser	Leu	Gln	Phe	Gly	Trp	Leu
	130					135					140				
Arg	Pro	Arg	Arg	Cys	Asp	Glu	Arg	Pro	Trp	Cys	Trp	Thr	Gly	Arg	Gln
145					150					155					160

Gly Gln Gly Gln Phe  
165

<210> 40509  
<211> 116  
<212> PRT  
<213> A.fumigatus

<400> 40509  
Ala Glu Arg Glu Arg Thr Thr Arg Arg Thr Ser Leu Ser Ile Cys Arg  
1 5 10 15  
Ser Leu Ile Gly Thr Ser Ile Arg Thr Ser Leu Gly Pro Ser Thr Gly  
20 25 30  
Ala Leu Lys Thr Asp Phe Val Leu Glu Ser Met Ser Thr Ser Arg  
35 40 45  
Ile Gln Ala Ser Ser Thr Ala Phe Ala Ser Lys Leu Met Pro Lys Ser  
50 55 60  
Lys Ser Trp Phe Leu Arg Ala Phe Phe Phe Leu Met Gln Met Leu  
65 70 75 80  
Thr Thr His Ser Cys Ile His Cys Lys Thr Cys Asp Ile Lys Val Pro  
85 90 95  
Thr Gln Asp Ile Asn Trp Gln Thr Pro Gln Gly Gly Glu Gly Pro Lys  
100 105 110  
Tyr Phe Lys Thr  
115

<210> 40510  
<211> 117  
<212> PRT  
<213> A.fumigatus

<400> 40510  
Gly Phe Leu His Pro Thr Leu Ser Arg Glu Ser Ser Pro Gln Trp Tyr  
1 5 10 15  
Ala Gly Leu His His Gln Ile Tyr Pro Phe Leu Gly Asp Ile Pro Val  
20 25 30  
Cys Phe Asn Leu Asp Ser Val Tyr Arg Gln Leu Ala Pro Ser Lys Thr  
35 40 45  
Thr Arg Arg Asp Pro Phe Trp Thr Thr Trp Ser Ser His Asn Ser His  
50 55 60  
Glu Ser Gln Asp Cys Phe Leu Gly Ser Ser Phe Val Leu Gly His Gly  
65 70 75 80  
Asp Val Arg Ala Asn Lys His Ile Pro His Pro Lys Ser Pro Tyr Phe  
85 90 95  
Pro Ala Cys Ser Thr Pro Thr Thr Thr Asp Ile Ala Phe Phe Gly Ser  
100 105 110  
Leu Thr Leu Cys Phe  
115

<210> 40511  
<211> 175  
<212> PRT  
<213> A.fumigatus

<400> 40511  
Arg Ser Gly Trp Val Ser Glu Leu Arg Ser Trp Val Ser Arg Phe Thr

## 17726

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1           5           10           15
Leu Asp Leu Leu Leu Ala Glu Leu Val Tyr Asn Ser Asp Gly Ser Val
           20           25           30
Leu Gly Val Ala Thr Asn Asp Leu Gly Val Gly Arg Asp Gly Lys Ala
           35           40           45
Lys Asp Asn Phe Glu Arg Gly Met Glu Phe His Ala Arg Val Thr Leu
           50           55           60
Leu Ala Glu Gly Cys His Gly Ser Leu Thr Lys His Val Ile Lys Lys
65           70           75           80
Tyr Asp Leu Arg Arg Asp Ser Gln Pro Gln Thr Tyr Gly Ile Gly Leu
           85           90           95
Lys Glu Val Trp Glu Ile Gln Pro Glu Lys Phe Lys Ser Gly Glu Ile
           100          105          110
Val His Ser Met Gly Tyr Pro Leu Ser Ser Asp Thr Tyr Gly Gly Ala
           115          120          125
Trp Met Tyr His Phe Gly Glu Asn Leu Val Ser Ile Trp Leu Val Val
           130          135          140
Gly Leu Asp Phe Ser Gln Pro Val Ala Phe Thr Leu Arg Arg Val Pro
145          150          155          160
Glu Ala Gln Thr Pro Ser Pro Val Gln Gly Gly Leu Gly Gly Arg
           165          170          175

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<210> 40512  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

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<400> 40512
Leu Leu Pro Met Ala Pro Val Leu Ala Ser Leu Leu Leu Phe Phe Ser
1           5           10           15
Val Thr Lys Gln Asp Ile Glu Glu His Phe Ser Ser His Gly Ser Gly
           20           25           30
Lys Ile Thr Glu Ile Lys Leu Met Asn Gly Phe Gly Phe Ile Glu Tyr
           35           40           45
Glu Asp Ala Met Asp Ala Arg Asp Val Val Pro Gly Lys Ile Ser Leu
           50           55           60
Gly Ser Pro Ala Leu Thr Ser Asp Arg Ile Ile Trp Leu Thr Ile Thr
65           70           75           80
Ile

```

<210> 40513  
 <211> 133  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40513
Leu Phe Ala Ser Arg Phe Asn Leu Met Thr Thr Ala Phe Ser Val Ile
1           5           10           15
His Ile Gly Pro Ala His Pro Ala Ala Val Ile Leu Leu Ser Met Ser
           20           25           30
Met Thr Gly Asp Phe Pro Arg Phe Ala Val Thr Ala Pro Ala Pro Ile
           35           40           45
Thr Gly Asn Ala Arg Leu Phe Arg Ser Ala Ala Thr Ile Met Asn Val
           50           55           60
Met Ala Thr Ala Val Ala Pro Phe Phe Asp Leu Gly Leu Lys Thr Ile

```



## 17727

65                      70                      75                      80  
 Pro Leu Val Val Leu Thr Met Thr Pro Met Met Pro Gly Leu His His  
                                  85                      90                      95  
 Leu Leu Ala Thr Met Met Thr His Thr Trp His Arg Asp Pro Thr Asp  
                                  100                      105                      110  
 Val Leu Gly His Pro Gln Glu Ala Thr Ile His Leu Met Thr Ala Val  
                                  115                      120                      125  
 Asp Thr Gly Arg Ile  
                                  130

&lt;210&gt; 40514

&lt;211&gt; 305

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40514

Arg Arg Cys Gly Arg Phe Asn Arg Lys Ser Ser Ser Arg Glu Arg Ser  
 1                      5                      10                      15  
 Cys Ile Leu Trp Asp Thr His Phe Leu Arg Thr Pro Thr Val Val Pro  
                                  20                      25                      30  
 Gly Cys Thr Ile Leu Glu Arg Ile Trp Ser Ala Phe Gly Trp Ser Ser  
                                  35                      40                      45  
 Ala Trp Thr Phe Pro Asn Pro Trp Leu Ser Pro Tyr Gly Glu Phe Gln  
                                  50                      55                      60  
 Lys Leu Lys His His Pro Leu Phe Arg Glu Val Leu Glu Gly Gly Lys  
 65                      70                      75                      80  
 Cys Ile Ser Tyr Gly Ala Arg Ala Leu Asn Glu Gly Gly Phe Gln Ser  
                                  85                      90                      95  
 Ile Pro Lys Cys Ala Phe Pro Gly Gly Ala Leu Ile Gly Asp Thr Ala  
                                  100                      105                      110  
 Gly Phe Leu Asn Val Pro Lys Ile Lys Gly Thr His Ser Ala Met Lys  
                                  115                      120                      125  
 Ser Gly Met Leu Ala Ala Glu Ala Thr Phe Asn Ala Leu Gln Asn Asp  
                                  130                      135                      140  
 Asn Asn Gly Thr Val Phe Leu Phe Asp Tyr Glu Asp Ala Leu Arg Lys  
 145                      150                      155                      160  
 Ser Ser Ile Trp Lys Glu Leu Tyr Glu Val Arg Asn Met Arg Pro Ser  
                                  165                      170                      175  
 Phe Lys Ser Pro Leu Gly Leu Tyr Gly Gly Ile Leu Tyr Ser Gly Leu  
                                  180                      185                      190  
 Glu Ala Phe Leu Phe Arg Gly Lys Thr Pro Trp Thr Leu Lys His His  
                                  195                      200                      205  
 Gly Thr Asp Ala Ala Ser Thr Lys Pro Ala Ser Glu Cys Glu Lys Ile  
                                  210                      215                      220  
 Glu Tyr Pro Lys Pro Asp Gly Val Ile Ser Phe Asp Ile Leu Thr Ser  
 225                      230                      235                      240  
 Val Ser Arg Thr Gly Thr Asn His Glu Glu Asp Gln Pro Val His Leu  
                                  245                      250                      255  
 Gln Val Ala Asp Trp Asp Lys His Thr Asp Val Ala Trp Pro Lys Tyr  
                                  260                      265                      270  
 Arg Gly Ile Glu Asn Arg Phe Cys Pro Ala Gly Val Tyr Glu Tyr Val  
                                  275                      280                      285  
 Glu Asp Pro Ser Lys Gln His Gly Val Arg Phe Gln Ile Asn Ala Gln  
                                  290                      295                      300  
 Lys  
 305

<210> 40515  
 <211> 167  
 <212> PRT  
 <213> A.fumigatus

<400> 40515  
 Ala Tyr Val Leu Lys Tyr Leu Gly Pro Ser Pro Pro Trp Gly Val Cys  
 1 5 10 15  
 Gln Leu Ile Ser Cys Val Gly Thr Leu Ile Ser His Val Leu Gln Trp  
 20 25 30  
 Ile Gln Leu Cys Val Val Ser Ile Cys Met Arg Lys Lys Lys Asn Ala  
 35 40 45  
 Arg Lys Asn Gln Asp Leu Leu Gly Ile Asn Leu Glu Ala Asn Ala  
 50 55 60  
 Val Leu Leu Ala Trp Ile Leu Asp Val Leu Ile Asp Ser Ser Arg Thr  
 65 70 75 80  
 Lys Ser Val Phe Asn Ala Pro Val Leu Gly Pro Ser Asp Val Arg Met  
 85 90 95  
 Leu Val Pro Ile Ser Asp Leu Gln Met Asp Arg Leu Val Leu Leu Val  
 100 105 110  
 Val Arg Ser Arg Ser Ala His Thr Gly Gln Asp Ile Glu Ala Asp His  
 115 120 125  
 Ala Val Arg Phe Gly Val Phe Asp Leu Phe Thr Phe Arg Cys Arg Phe  
 130 135 140  
 Gly Gly Cys Cys Ile Cys Thr Val Val Leu Glu Cys Pro Gly Cys Phe  
 145 150 155 160  
 Ala Ala Glu Gln Glu Gly Phe  
 165

<210> 40516  
 <211> 133  
 <212> PRT  
 <213> A.fumigatus

<400> 40516  
 Ala Arg Val Glu Asp Thr Ala Val Lys Ser Glu Arg Gly Phe Glu Arg  
 1 5 10 15  
 Gly Pro His Ile Ala His Phe Val Gln Leu Leu Pro Asp Arg Gly Leu  
 20 25 30  
 Ser Lys Ser Ile Leu Val Val Glu Lys Glu Asp Ser Thr Ile Val Val  
 35 40 45  
 Ile Leu Gln Ser Ile Glu Ser Ser Leu Arg Ser Gln His Ala Arg Phe  
 50 55 60  
 His Ser Arg Met Ser Ala Leu Asp Phe Gly Asn Ile Gln Glu Ala Ser  
 65 70 75 80  
 Ser Val Thr Asp Glu Ser Ala Ser Trp Lys Ser Thr Phe Arg Asn Arg  
 85 90 95  
 Leu Glu Ala Thr Leu Val Glu Gly Pro Ser Thr Ile Gly Asp Thr Phe  
 100 105 110  
 Thr Ala Leu Gln Asp Leu Pro Glu Gln Gly Met Val Phe Glu Leu Leu  
 115 120 125  
 Glu Leu Ser Val Arg  
 130

<210> 40517

<211> 165  
 <212> PRT  
 <213> A.fumigatus

<400> 40517

Arg	Thr	Ala	Ser	Ser	Ser	Arg	His	Leu	Ser	Arg	Ile	Gly	Gly	Pro	Ala
1				5					10					15	
Ala	Val	Ser	Lys	Leu	Ala	Arg	Cys	Ala	Leu	Thr	Phe	Arg	Ala	Gly	Pro
		20					25					30			
Gln	Ala	Met	Asp	Thr	Val	Pro	Ala	Thr	Ala	Val	Ala	Pro	Ala	Ser	Ala
		35					40				45				
Arg	Arg	Ser	Asn	Asn	Glu	Ser	Arg	Ser	Val	Tyr	Ala	Trp	Gly	Pro	Ser
		50			55					60					
Ile	Arg	Ser	Arg	Thr	Tyr	Ser	Gln	Pro	Gln	Arg	Gln	Asn	Gln	Leu	Arg
65				70					75					80	
Ala	Val	Asp	Ser	Ala	Arg	Pro	Ser	Gly	Arg	Ser	Thr	Ala	Gln	Thr	Pro
			85					90					95		
Ala	Ser	Pro	Ser	Thr	Ser	Pro	Tyr	Thr	Ser	Tyr	Ser	Pro	Arg	Arg	Asp
			100					105					110		
His	Val	Arg	Pro	Phe	Leu	Pro	Gln	Gly	Pro	Arg	Arg	Ala	Thr	Pro	Gln
		115					120					125			
Val	Pro	Gly	Ser	His	Pro	Pro	Ser	Thr	Thr	Arg	Arg	Thr	Asp	Thr	Pro
		130				135					140				
Phe	Tyr	Glu	Cys	Arg	Leu	Gly	Gly	Ser	Glu	Lys	Ala	Ser	Arg	Leu	Gln
145					150					155					160
Thr	Pro	Arg	Pro	Phe											
				165											

<210> 40518  
 <211> 309  
 <212> PRT  
 <213> A.fumigatus

<400> 40518

Tyr	Pro	His	Leu	Met	His	Ala	Ile	Leu	Ala	Leu	Gly	Ala	Thr	His	Tyr
1				5					10					15	
Ser	Leu	Val	Ser	Pro	Asn	Gly	Ser	Glu	Tyr	Ser	Ser	Thr	Ala	Leu	Val
		20						25				30			
His	Arg	Gly	Lys	Ala	Leu	Lys	Glu	Leu	Ser	Ala	Ala	Ile	Gly	Lys	Gly
		35					40					45			
Pro	Glu	Cys	Thr	Thr	Thr	Asp	Met	Asp	Val	Ile	Leu	Ala	Thr	Cys	Tyr
		50				55					60				
Ala	Leu	Val	Phe	Gln	Ala	Tyr	His	Met	His	Asp	Gly	Leu	Val	Asp	Phe
65				70					75					80	
Ala	Val	Met	Val	Arg	Gly	Cys	Gly	Val	Ile	Thr	Asn	Cys	Ile	Val	Asp
			85					90					95		
Lys	Tyr	Gln	Thr	Ser	Gln	Leu	Phe	His	Leu	Gln	Thr	Glu	Glu	Glu	Ala
			100					105					110		
Ala	Glu	Val	Ala	Leu	Ser	Leu	Ala	Asp	Glu	Pro	Val	Ser	Ser	Pro	Leu
		115					120						125		
Leu	Val	Asp	Ser	Leu	Leu	Ala	Ala	Ile	Asp	Arg	Leu	Gln	Pro	Leu	Phe
		130				135					140				
Gln	Ser	Ala	Ile	His	His	Arg	Phe	Phe	Arg	Ala	Leu	Arg	Glu	Thr	Leu
145					150					155					160
Ala	Gly	Leu	Ala	Ile	Ser	Gln	Arg	Ala	Ala	Phe	Val	Arg	Leu	Thr	Arg
				165					170					175	

## 17730

Ile Tyr Ala Val Trp Tyr Lys Ala Asp Asn Arg Glu Phe Leu Thr Phe  
 180 185 190  
 Ile Ala Pro Ala Asn His Val Ser Arg Ala Leu Phe Met Tyr Phe Leu  
 195 200 205  
 Val Ile Glu Leu Val Met Leu Pro Val Tyr Ile Arg Leu Arg Glu Leu  
 210 215 220  
 Ser Gly Thr Thr Leu Ile Thr Thr Asp Leu Thr Val Arg Gln Trp Ala  
 225 230 235 240  
 Asp Ala Ile Tyr Arg Glu Leu Pro Ser Ser Ile Arg Glu Leu Val Glu  
 245 250 255  
 Leu Pro Met Glu Ile Ile Ala Ala Asp Glu Asn Thr Ala Arg Ser Thr  
 260 265 270  
 Arg Gly Thr Arg Ser Asp Ser Val Phe Pro Asn Leu His Ala Gln Phe  
 275 280 285  
 Phe Asp Met Glu Thr Ala Ala Trp Leu Gly Cys Ala Lys Pro Gly Gly  
 290 295 300  
 Val Gly Val Leu Glu  
 305

&lt;210&gt; 40519

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40519

Ile Ala Tyr Pro Arg Lys Arg Gly Leu Arg Met Ser Pro Val Val Pro  
 1 5 10 15  
 Ser Leu Leu Ser Ser Gln Tyr Ser His Leu Leu Val Arg His Arg Thr  
 20 25 30  
 Pro Asn Gln Pro Gly Asp Asn Pro Thr Lys Leu Ile Ser Gln Arg Pro  
 35 40 45  
 Ser Pro Thr Ile Thr Met Gln Phe Arg Phe Lys Glu Arg Leu Ser Tyr  
 50 55 60  
 Gln Gly Asn Pro Gln Glu Leu Glu Thr Phe Met Lys Arg Lys Leu Glu  
 65 70 75 80  
 Arg Ser Thr Ser Ala Gln Glu Ser Pro Lys Pro Glu Asp Pro Glu Lys  
 85 90 95  
 Gln Thr Arg Gln Glu Arg Thr Ala Leu His Asp Ala Ala Glu Phe Gly  
 100 105 110  
 Tyr Pro Asn Phe Ala Leu Thr Phe Ile Glu Gln Gly Asn Asp Ile Asn  
 115 120 125  
 Ala Val Asp Ala Lys Gly Arg Ala Pro Leu His Val Ala Val Gln Ala  
 130 135 140  
 Gly Gln Glu Glu Val Ala Asn Leu Leu Ile Lys Lys Gly Ala Asp Val  
 145 150 155 160  
 Asn Val His Asp Asn Asp Gly Leu Thr Pro Leu His Phe Ala Val Val  
 165 170 175  
 Leu Arg Ser Val Ala Leu Ala Arg Leu Leu Val Gln Ala Gly Ala Thr  
 180 185 190  
 Pro Arg Ala Glu Asn Ala His Gly Asn Thr Pro Phe Leu Phe Ala Tyr  
 195 200 205  
 Leu Phe Glu Glu Asp Glu Ile Leu Glu Cys Phe Ala Glu Thr Ser Arg  
 210 215 220  
 Pro Lys Ala Glu Ala Val Pro Ser Ser Thr Leu Arg Gly Tyr Leu Val  
 225 230 235 240  
 Asn Met Arg Ser Trp Ala Lys Met Arg Ser Met Leu

## 17731

245

250

<210> 40520  
 <211> 205  
 <212> PRT  
 <213> A.fumigatus

<400> 40520  
 Ala Thr Asn Ala Phe Cys His Glu Cys His Met Leu Thr Leu Ala Asp  
 1 5 10 15  
 Phe Leu Asp Lys Ala Ser Thr Ala Asn Lys Ser Val Glu Thr Leu Ala  
 20 25 30  
 Pro Leu Cys Asn Asn Leu Pro Tyr Ala Asp Ala Gln Phe Asp Cys Val  
 35 40 45  
 Ile Ala Ala Leu Val Leu Asp Ser Val Asp Asp Leu Arg Gly Val Leu  
 50 55 60  
 Leu Glu Val Val Arg Val Val Asp Lys Ser Ser Asn Ala Arg Val  
 65 70 75 80  
 Ile Leu Val Gln Gly Ala Pro Tyr Asn Glu Val Gln Lys Leu Val Asn  
 85 90 95  
 Ala Val Cys Thr Pro Leu Ser Ser Lys Ser Ile Gly Pro Ala His Gln  
 100 105 110  
 Gly Leu Leu Leu His Ser Ala Met Lys Ile Leu Ala Asp Ile Gly Phe  
 115 120 125  
 Gly Met Thr Ser Leu His Pro Leu Ser Thr Ser Tyr Ser Phe Asp Asp  
 130 135 140  
 Lys Ser Ser Ser Asp Arg Ser Asn Asp Leu Ala Glu Met Leu Gly Asn  
 145 150 155 160  
 Val Trp Phe Pro Gly Glu Glu Lys Leu Ala Gln Met Lys Gln Gln Leu  
 165 170 175  
 Ile Ser Pro Ile Glu Asn Leu Leu His Asp His Pro Gly Phe Leu Gln  
 180 185 190  
 Asn Glu Leu Val Ile Leu Glu Ala Val Leu His Ala His  
 195 200 205

<210> 40521  
 <211> 305  
 <212> PRT  
 <213> A.fumigatus

<400> 40521  
 Arg Ser Tyr Tyr Glu Pro His Asn Arg Asn Pro Ala Met Glu Val Asp  
 1 5 10 15  
 Ala Ala Ile Leu Phe Asn Glu Leu Gly Thr Arg Tyr Glu Asp Ala Tyr  
 20 25 30  
 Ala Asp Ser Pro Gly Leu Leu Glu Val Thr Glu Tyr Val Val Gly Lys  
 35 40 45  
 Leu Pro Arg Ser Ser His Val Leu Asp Val Gly Cys Gly Thr Gly Lys  
 50 55 60  
 Pro Val Ala Ala Ala Leu Ala Ser Ala Gly His Thr Val Tyr Gly Ile  
 65 70 75 80  
 Asp Val Ala Glu Asn Met Val Ser Ile Ala Ala Ser Gln Val Lys Gly  
 85 90 95  
 Thr Phe Ser Arg Ala Asp Met Arg Thr Tyr Thr Pro Pro Val Lys Met  
 100 105 110  
 Asp Ala Val Phe Ala Ile Tyr Ser Leu Phe Gln Ile His Pro Ser Asp

```

      115              120              125
Thr His Lys Met Val Tyr Arg Phe Ala Glu Trp Leu Lys Ala Asp Gly
    130              135              140
Ile Leu Val Leu Gly Val Ser Pro Ser Ser Gly Leu Val Gly Gly Thr
145              150              155              160
Asp Val His Asp Leu Val Trp Asp Cys Met Arg Cys Lys Ala Thr Trp
      165              170              175
Met Glu Arg Pro Val Ser Glu Leu Tyr Phe Ser Gln Thr Ala Trp Leu
      180              185              190
Asn Leu Leu Arg Glu Ala Gly Phe Ala Val Glu Val Glu Asn Met Phe
      195              200              205
Asp Tyr Val Ser Lys Asp Pro Lys His Thr Arg Thr Glu Thr His Tyr
      210              215              220
Leu Ile Val Gly Arg Lys Leu Glu Pro Gln Pro Leu Leu Gly Pro Tyr
225              230              235              240
Pro Trp Pro Glu Gly Leu Pro Gly Lys Ser Met Arg Asn Glu Pro Ala
      245              250              255
Trp Arg Arg Leu Gln Gly His Leu Phe Leu Thr Asp Asp Glu Arg Met
      260              265              270
Lys Leu Ser Ser Met Leu Glu Gly His Gln Arg Ile Leu Asp Ile Gly
      275              280              285
Gly Gly Leu Glu Gly Glu Pro Gln Thr His Ser Ala Met Asn Ala Thr
      290              295              300
Cys
305

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&lt;210&gt; 40522

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40522

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Cys Pro Arg Cys Ser Glu Leu Ala Lys Ala His Val Trp Gln Gln His
1              5              10              15
Thr Phe Ile Ile Gly Thr Lys Arg Phe Val Thr Asp Phe Arg Gly Lys
      20              25              30
Arg His Tyr Asp Arg Gly Leu Ser Tyr Arg Ala Arg Ser Ser Asn Ile
      35              40              45
Ala Asn Lys Pro Gln Phe Asn Arg Met Val Thr Cys Thr
      50              55              60

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&lt;210&gt; 40523

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (237)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40523

```

Leu Gln Phe Pro Glu Ala Ile Trp Gly Ala Asp Pro Leu Glu Phe Tyr
1              5              10              15
Gly Gly Phe His Asn Leu Ser Phe Asp Ala Asn Ala Ser Phe Asn Ser
      20              25              30

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17733

Ala Leu Ala Val Asn Gly Ser Val Lys Trp Lys Thr Ala Arg Ala Leu  
 35 40 45  
 Ser His Asn Phe Ala Pro Gly Lys Thr Arg Thr Glu Leu His Val Ser  
 50 55 60  
 Phe Pro Glu Ile Asp Trp Lys Phe Thr Gln Ala Val Tyr Gly Trp Ser  
 65 70 75 80  
 Ala Leu Gln Tyr Gln Ala Trp Ala Arg Gly Ser Leu Asn Thr Gly His  
 85 90 95  
 Trp Ala Pro Gln Ser Val Ala Ile Phe Thr Ser Gly Leu Leu Glu Ile  
 100 105 110  
 Val Ile Asp Gly Lys Arg His Phe Gly Gly Asp Phe Tyr Asn Tyr Gly  
 115 120 125  
 Thr Val Pro Ile Ile Ile Asp Leu Ser Thr Gly Asp His Ala Val Glu  
 130 135 140  
 Leu Arg Leu Val Arg Asp Val Arg Ala Ser Gly Ala Ile Gly Glu Pro  
 145 150 155 160  
 Thr Ile Val Val Ser Leu Ala Ala Glu Ile Arg Asn Glu Pro Leu Ser  
 165 170 175  
 Ala Asp Asn Glu Ser Met Leu Leu Pro Asp Met Cys Leu Gly Lys Leu  
 180 185 190  
 Gly Thr Pro Trp Ala Ser Ile Asn Leu His Asn Asn Ile Ala Asp Arg  
 195 200 205  
 Ile Thr Ile Leu Ala Ile Ser Ser Ile Gly Val Ser Ala Asn Ser Leu  
 210 215 220  
 Pro Leu Cys Arg Tyr Glu Arg Arg Val Thr Arg Leu Xaa  
 225 230 235

<210> 40524

<211> 471

<212> PRT

<213> A.fumigatus

<400> 40524

Ser Pro Arg His Gln Cys Arg Ala Thr His Pro Leu Arg Val Cys Arg  
 1 5 10 15  
 Glu His Gln Phe Pro Trp Leu Arg Val Leu Ile Gln Val Glu Tyr Val  
 20 25 30  
 Pro Tyr Asn Leu Trp Gln Asp Phe Glu Pro Leu Leu Ser Phe Val Leu  
 35 40 45  
 Ser Arg Ser Arg Ser Ser Tyr Lys His Glu Leu Leu Leu Ser Asn Val  
 50 55 60  
 Ala Gly Ile Pro Ile Leu Gln Gln His Gly Ser Ile Asp Asp Asn Val  
 65 70 75 80  
 Pro Val Phe His Ser Arg Leu Met His Glu Leu Leu Gly Gln Thr Gln  
 85 90 95  
 Trp Arg Ser Gln Tyr Asp Glu Leu Gln Gly Gln Asn His Trp Phe Asp  
 100 105 110  
 Gly Val Leu Thr Thr Pro Ser Leu Leu Ala Phe Tyr Asn Gln Ser Ala  
 115 120 125  
 Thr Phe Pro Arg Arg Pro Arg Leu Pro Leu Ala Phe Thr Ile Thr Val  
 130 135 140  
 Pro Ser Ser Ala Asn Ile Ala Lys Gly Gly Ile Tyr Val Asp Gln Leu  
 145 150 155 160  
 Arg Ser Pro Asp Arg Asn Gly Val Val Gln Val Ile Arg Asp Ala Arg  
 165 170 175  
 Ser Gly Ile Trp Tyr Val Asn Thr Thr Asn Ile His Arg Phe His Leu

17734

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          180          185          190
Ser Pro Arg Val Leu Asn Phe Thr Met Pro Ser Ala Leu Val Leu Asp
          195          200          205
Gly Arg Asp Cys Phe Glu Met Gly Tyr Ile Arg Pro Glu Arg Met Trp
          210          215          220
Phe Leu Arg Asp Ser Arg Gly Arg Trp Thr Val Ser Glu Arg Glu Asp
225          230          235          240
Trp Arg Gln Leu Asn Glu Arg Tyr Gly Arg Gln Leu Gly Thr Val Asp
          245          250          255
Ala Ile Leu Arg Thr Lys Gly Pro Phe Asn Ile Asn Ile Cys Ser Ala
          260          265          270
Gly Leu Glu His Ile Ala Val Gln Ile Ser Arg Asn Phe Leu Gln Tyr
          275          280          285
Phe Ala Ala Asp Ser Gln Leu Ser Arg Gln Cys Gly Ser Leu Ile Tyr
          290          295          300
Pro Asp Asn Asn Gln Asn Arg Val Val Asp Ser Gly Asn Val Val Thr
305          310          315          320
Leu Ala Leu Gly Asn Glu Leu Pro Ser Ser Lys Leu Lys Leu Phe Pro
          325          330          335
Ile Arg Ile Gln Gly Gln Gly Leu Ser Leu Phe Gln Gly Cys Cys Trp
          340          345          350
Pro Arg Ala Asp Thr Glu Ala Ser Pro Gln Ser Ser Leu Asn Arg Glu
          355          360          365
Cys Asn Glu Tyr Glu Phe Pro Phe Glu Arg Gly Met Gly Ala Leu Phe
          370          375          380
Leu Arg Pro Leu Glu Asn Glu Arg Leu Glu Leu Val Val Trp Gly Ala
385          390          395          400
Asp Leu Ser Gly Leu Glu Gln Ala Ala Arg Phe Val Pro Thr Leu Thr
          405          410          415
Gly Val Gly Gln Pro Asp Phe Leu Ile Leu Gly Asp Ser Cys Arg Trp
          420          425          430
Gln Gly His Ala Gly Ala Tyr Ala Ala Gly Phe Phe Asp Arg Ser Trp
          435          440          445
Gln Ile Ser Ser Gly Ser Tyr Ile Arg Ile Asp Ala Ser Val Asn Glu
          450          455          460
Gln Arg Leu Arg Asn Gly Ala
465          470

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<210> 40525

<211> 103

<212> PRT

<213> A.fumigatus

<400> 40525

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Tyr Ser Thr Val Ala Gly Asp Gln Tyr Gly Asn Tyr Leu Ile Gln Trp
1          5          10          15
Ile Leu Met Asn Ala Ala Pro His Gln Arg Glu Leu Val Ala Ser His
          20          25          30
Ile Arg Tyr Cys Leu Ala Ser Leu Tyr Leu Tyr Gln Tyr Asn Asp Ala
          35          40          45
His Ala Met Ile Ile Gly Ser Thr Trp Phe Leu Cys Glu Ala Pro Asn
          50          55          60
Leu Val His Ala Trp Gln Cys Phe Ala Ala Thr His Pro Ile Pro Pro
65          70          75          80
Val Pro Asp Pro Gly Arg Ala Cys Arg Ser Ala Val Ser Ala Ile Ser
          85          90          95

```



Thr Met Thr Gly Ile Ile Trp  
100

<210> 40526  
<211> 218  
<212> PRT  
<213> A.fumigatus

<400> 40526  
Val Gly Ala Asn Thr Leu Gln Thr Tyr Ile Ser Pro Leu Glu Pro Leu  
1 5 10 15  
Asn Tyr Arg Arg Leu Leu Asp Lys Asn Val Ser Cys Asp Trp Lys Tyr  
20 25 30  
Ile Val Asp Lys Ile Ile Cys Asn Asn Asp Gln Gln Ala Ser Ile Phe  
35 40 45  
Leu Gln Gln Lys Leu Lys Val Gly Thr Ala Glu Gln Lys Tyr Asp Ile  
50 55 60  
Ile Glu Ala Ile Thr His Gln Ala Tyr Pro Leu Met Val Asn Arg Phe  
65 70 75 80  
Gly Asn Phe Leu Val Gln Arg Cys Phe Glu His Gly Thr Thr Glu Gln  
85 90 95  
Val Val Ala Ile Ala Asn Ala Ile Lys Gly Asn Thr Leu Ser Leu Ser  
100 105 110  
Met Asp Pro Phe Gly Cys His Val Val Gln Lys Ala Phe Asp Ser Val  
115 120 125  
Pro Glu Glu His Lys Ala Val Met Val His Glu Leu Leu Cys Arg Ile  
130 135 140  
Pro Glu Thr Val Ile His Arg Tyr Ala Cys His Val Trp Gln Lys Leu  
145 150 155 160  
Phe Glu Leu Arg Trp Ser Gly Glu Pro Pro Gln Ile Met Ala Lys Val  
165 170 175  
Asn Glu Ala Leu Gln Gly Met Trp His Glu Val Ala Leu Gly Glu Thr  
180 185 190  
Gly Ser Leu Val Val Gln Asn Ile Phe Glu Asn Cys Val Glu Asp Glu  
195 200 205  
Lys Val Thr Val Ala Pro Val Pro Arg Ser  
210 215

<210> 40527  
<211> 106  
<212> PRT  
<213> A.fumigatus

<400> 40527  
Arg Pro Ala Ile Glu Glu Val Ile Ala Lys Ile Asp Val Leu Ala His  
1 5 10 15  
Gly Gln Phe Gly Asn Trp Cys Ile Gln His Ile Cys Glu His Gly Ala  
20 25 30  
Pro Gln Asp Lys Thr Arg Ala Ile Glu His Val Leu Leu Trp Ser Val  
35 40 45  
Asp Tyr Ser Met Asp Gln Phe Ala Ser Lys Ile Val Glu Lys Cys Leu  
50 55 60  
Lys Ile Gly Gly Ser Glu Phe Leu Asp Arg Tyr Leu Ser Arg Val Cys  
65 70 75 80  
Thr Gly Arg Thr Glu Arg Pro Arg Met Pro Leu Ile Asp Ser Glu Phe  
85 90 95

## 17736

Leu Gln Thr Val Gln Pro Tyr Thr Thr Asp  
100 105

<210> 40528  
<211> 292  
<212> PRT  
<213> A.fumigatus

<400> 40528  
Gln Asp Tyr Pro Ala Leu Trp Leu Cys His Asp Cys Asn Arg Cys Cys  
1 5 10 15  
Asn Leu Trp Trp His His Gly Thr Arg Phe Leu Tyr Leu Pro Val Ser  
20 25 30  
Pro Met Tyr Asp Cys Ala Asn Arg Val His Leu Gln Arg Gly Ser Glu  
35 40 45  
Val Phe Asn Gly Leu Ala His Phe Ile Lys Gly Gly Ile Phe Phe Trp  
50 55 60  
Tyr Gly Leu Leu Thr Leu Gly Arg Trp Met Gly Cys Trp Ala Asp Phe  
65 70 75 80  
Gly Trp Ala Trp Asn Ile Lys Pro Ser Ser Ser Ile Val Gly Lys Trp  
85 90 95  
Lys Ala Lys Ile Pro Ser Gly Glu Phe Thr Glu Ser Leu Val Ile Phe  
100 105 110  
Leu Tyr Gly Ala Ser Asn Val Phe Leu Glu His Leu Ala Gly Trp Gly  
115 120 125  
Gly Ala Trp Thr Ala Thr Asp Leu Glu His Val Ser Ile Ser Ile Met  
130 135 140  
Phe Phe Gly Gly Gly Leu Cys Gly Met Leu Phe Glu Ser Lys Arg Ile  
145 150 155 160  
Arg Gly Trp Leu Asn Ser Thr Val Leu Pro Ser Pro Ala His Ala Ser  
165 170 175  
Val His Gly Ser Ala Asp Pro Ala Trp Gln Thr Pro Asp Thr Gln Gly  
180 185 190  
Val Ser Leu Asn Pro Met Pro Ala Leu Val Ile Leu Leu Gly Met  
195 200 205  
Met Met Gly Ser His His Gln Thr Ser Met Met Ser Thr Met Val His  
210 215 220  
Lys Gln Trp Gly Asn Leu Leu Val Gly Phe Ser Leu Ala Arg Gly Met  
225 230 235 240  
Thr Tyr Val Leu Leu Tyr Leu Lys Pro Pro Thr Ser Tyr Leu Pro Ser  
245 250 255  
Arg Pro Pro Thr Glu Ile Val Ala Ser Phe Cys Leu Ile Ala Gly Gly  
260 265 270  
Leu Ile Phe Met Leu Ser Val Ser Val Leu Cys Pro Ser Leu Ser Leu  
275 280 285  
Lys Asn Cys Tyr  
290

<210> 40529  
<211> 78  
<212> PRT  
<213> A.fumigatus

<400> 40529  
Phe Thr Trp Phe Phe Gly Leu Ser Ala Ala Phe Met Thr Thr Val Phe  
1 5 10 15

17737

Leu Phe Leu Arg Ser Ala Trp Ile Ser Lys Ser Thr His Met Asn Lys  
 20 25 30  
 Arg Arg Thr Thr Ser Leu Thr Trp Thr Thr Ala Asn Asp Cys Asn Gly  
 35 40 45  
 Thr Tyr Thr Ala Glu Ser Ser Tyr Ile Lys Gln Leu Thr Tyr Phe Leu  
 50 55 60  
 Gly Phe Ala Thr Ala Tyr Pro Glu Pro Met Arg Met Gly Gly  
 65 70 75

<210> 40530  
 <211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 40530  
 Arg Glu Trp Lys Gly Lys Lys Glu Lys Tyr Lys Arg Lys Ile Gly Leu  
 1 5 10 15  
 Gly Ser Tyr Leu Leu Ile Tyr Ser Arg Leu Pro Trp Leu Ser Tyr Tyr  
 20 25 30  
 Ile Leu Leu Pro Phe Ser Phe Pro Ser Thr Ile Ser Ser Tyr Thr Ser  
 35 40 45  
 Phe Ser Pro Thr Asn Ile Pro Asn Val Ile Ile Ile Ala Arg His Pro  
 50 55 60  
 Gly Ser Thr Ser Glu Pro His Leu Val Gln Leu Arg Phe Arg Ala Ile  
 65 70 75 80  
 Arg Lys Ser His Arg Pro Leu Lys  
 85

<210> 40531  
 <211> 455  
 <212> PRT  
 <213> A.fumigatus

<400> 40531  
 Ile Val Ala Asn Leu Thr Arg Leu Leu Thr Thr Gly Leu Arg Arg Tyr  
 1 5 10 15  
 Ala Leu Ser Thr Leu Val Asn Lys Leu Leu Gly Asn Asp Lys Pro Ile  
 20 25 30  
 Pro Phe Glu Phe Leu Ile Asn Gly Thr Phe Leu Arg Thr Ser Ile Asp  
 35 40 45  
 Glu Tyr Leu Thr Ala Asn Gly Ile Ser Ala Glu Thr Thr Leu Glu Ile  
 50 55 60  
 Glu Tyr Val Arg Ala Leu Ile Pro Pro Leu His Ile Ala Ser Phe Gln  
 65 70 75 80  
 His Asp Asp Trp Val Ser Ser Thr Asp Val Leu Ser Ala Thr Ser Pro  
 85 90 95  
 Ala Ala Thr Trp Ala Ser Ala Thr Ile Ser Gln Gly Gln Glu Lys Ile  
 100 105 110  
 Leu Ser Gly Ser Tyr Asp Gly Leu Leu Arg Val Trp Asn Met Ser Ser  
 115 120 125  
 Gln Ile Val Ala Thr Ser Pro Ala Ala Ala Asp Gly Gly His Thr Ala  
 130 135 140  
 Ser Ile Lys Ala Ala Lys Phe Val Thr Pro Asn Gln Ile Val Ser Ala  
 145 150 155 160  
 Gly Leu Asp Arg Thr Val Arg Leu Trp Lys Tyr Ala Glu Ser Asp Glu  
 165 170 175

Gly Phe Ser Gly Thr Ile Ala Pro Gln Leu Glu Leu Tyr Gly His Lys  
 180 185 190  
 Ser Gly Ile Asn Ser Leu Ala Val His Ala Leu Ser Asn Arg Ile Leu  
 195 200 205  
 Ser Ala Ser Ser Asp Asn Ser Val Gly Phe Trp Ser Thr Lys Lys Ser  
 210 215 220  
 Asp Ala Pro Ala Ala Pro Asp Asp Leu Leu Pro Ser Ala Ala Ser Arg  
 225 230 235 240  
 Ser Ser Lys Arg Arg Lys Leu Asn Ser Ser Val Thr Val Pro Gln Arg  
 245 250 255  
 Gly Pro Leu Ala Leu Leu Ser Ser His Thr Ala Pro Val Ser Ala Ala  
 260 265 270  
 Ile Phe Asp Ala Lys Asp Ser Thr Val Gly Tyr Ser Ala Ser Trp Asp  
 275 280 285  
 His Ser Met Arg Thr Trp Asp Leu Val Thr Ser Ala Leu Val Asp Thr  
 290 295 300  
 Arg Thr Thr Ser His Ser Leu Leu Ser Leu Glu His Leu Pro Glu Leu  
 305 310 315 320  
 Asn Leu Leu Ala Ala Gly Thr Ser Ala Arg His Ile Thr Leu Ile Asp  
 325 330 335  
 Pro Arg Ala Ser Ala Thr Thr Ile Ser Ala Met Thr Leu Arg Gly His  
 340 345 350  
 Thr Asn Ala Val Val Ser Leu Ala Arg Asp Pro His Ser Thr Tyr Gly  
 355 360 365  
 Leu Ile Ser Gly Ser His Asp Gly Thr Cys Arg Ile Trp Asp Ile Arg  
 370 375 380  
 Ala Thr Lys Thr Asp Lys Asp Gly Ala Val Gly Glu Ser Val Tyr Ser  
 385 390 395 400  
 Ile Ser Arg Lys Ser Leu Glu Glu Gln Gly Arg Ser Asp Thr Lys Arg  
 405 410 415  
 Val Gly Gly Glu Gly Val Lys Val Phe Ser Val Cys Trp Asp Lys Thr  
 420 425 430  
 Val Gly Ile Val Ser Ala Gly Glu Asp Lys Arg Ile Gln Ile Asn Arg  
 435 440 445  
 Gly Glu Gly Val Leu Ser Ala  
 450 455

&lt;210&gt; 40532

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40532

Asp Ala Phe Ser Pro Ser Arg Arg Val Arg Leu Val Ala Gln His Glu  
 1 5 10 15  
 Asn Thr Arg Pro Leu Gln Leu Lys Val Glu Asp Ala Ser Ala Lys Val  
 20 25 30  
 Arg Leu Ile Gln Thr Glu Ile Ala Phe Asn Gln Ala Val Thr Arg Thr  
 35 40 45  
 Leu Glu Glu Val Arg Glu Leu Cys Gln Arg Leu Asp Ala Gly Arg Arg  
 50 55 60  
 Asn Leu Glu Asp Gly Arg Ile Met Ala Ala Ile Asp Thr Val Asp Ala  
 65 70 75 80  
 Val Glu His Ser Val Gln Lys Asp Ser Leu Phe Ala Asn Thr Asn Val  
 85 90 95  
 Lys His Ile Leu Val Gln Asn Val Ala Glu Leu Arg Asn Gln Ile Ala

100 105 110  
 Glu Asp Leu Arg Ala Arg Trp Asn Asn Leu Leu Lys Val Asp Lys Gln  
 115 120 125  
 Ala Gly Ser Phe Glu Val Ala Lys Asn Asp Ser Lys  
 130 135 140

<210> 40533  
 <211> 342  
 <212> PRT  
 <213> A.fumigatus

<400> 40533  
 Arg Arg Ile Gly Ala Leu Leu Asp Asp Thr Ile Ala Ala Thr Ala Arg  
 1 5 10 15  
 Leu Asp Leu Leu Val Pro Ala Ser Gln Lys Leu Gln Lys Asp Leu Leu  
 20 25 30  
 Leu Ala Ile Val Glu Pro Ile Leu Leu Pro Asn Gln Asp Gly Tyr Ser  
 35 40 45  
 Arg Pro Ile His Val Ala Glu Gly Ser Ile His Val Gln Pro Glu Pro  
 50 55 60  
 Ala Ile Thr Thr Val Pro Gln Leu Leu His Arg Val Ser Thr Ala Leu  
 65 70 75 80  
 Gly Phe Leu Arg Gln Cys Leu Pro Ser Ser Ile Ser Asp Ser Phe Ser  
 85 90 95  
 Asp Thr Phe Val Pro Thr Leu Ala Ser Lys Ile Ile Ser Ser Trp Leu  
 100 105 110  
 Ser Ser Ala Ile Pro Thr Asp Leu Ala Gly Leu Ala Asp Phe Glu Ala  
 115 120 125  
 Ile Leu Asp Ser Val Leu Lys Phe Ala Gln Thr Ile Glu Thr Leu Gly  
 130 135 140  
 Trp His Gly Gln Glu Glu Leu Val Ser Trp Val Asn Gln Ala Pro Arg  
 145 150 155 160  
 Leu Trp Leu Thr Arg Arg Arg Ala Asp Ser Leu Asp Gln Val Arg Lys  
 165 170 175  
 Val Leu Ala Gly Ser His Gly Met Thr Lys Gln Val Glu Arg Val Glu  
 180 185 190  
 Lys Glu Glu Val Ser Arg Ala Asp Glu Val Leu Leu Glu Asn Ala Thr  
 195 200 205  
 Ser Asp Asp Trp Asp Ala Ser Trp Asp Asp Asp Ser Gly Asp Glu Ser  
 210 215 220  
 Lys Glu Ile Pro Ser Gly Thr Gln Glu Gly Glu Asp Asp Val Ala Ala  
 225 230 235 240  
 Trp Gly Leu Asp Asp Asp Gly Thr Glu Glu Val Val Glu Thr Lys Val  
 245 250 255  
 Gly Ile Ser Glu Ser Ala Asp Asp Asp Ala Asp Ala Trp Gly Trp  
 260 265 270  
 Gly Asp Asp Glu Asp Gly Asp Glu Arg Val Glu Asn Gln Pro Ala Gln  
 275 280 285  
 Glu Thr His Lys Ala Thr Pro Val Ile Gly Arg Asp Ile Gly His Arg  
 290 295 300  
 Ala Pro Arg Glu Val Thr Leu Arg Glu His Tyr Thr Val Thr Asp Ile  
 305 310 315 320  
 Pro Asp Ser Ile Met Ala Ile Val Arg Gln Gln Val Thr Asp Val Glu  
 325 330 335  
 Ala Ile Ser Gln Pro Gly  
 340

<210> 40534  
 <211> 317  
 <212> PRT  
 <213> A.fumigatus

<400> 40534  
 Glu Ser Thr Thr Leu Ser Arg Ile Phe Arg Thr Pro Leu Trp Arg Ser  
 1 5 10 15  
 Ser Asp Ser Arg Ser Gln Met Trp Lys Pro Tyr His Ser Leu Gly Lys  
 20 25 30  
 Leu Ala Ser Ile Tyr Asp Leu Tyr Met Arg Leu Gln Gln Leu Ser His  
 35 40 45  
 Asp His Thr Arg Ile Ile Ser Ser Pro Ala Gly Leu Leu Ala Leu Pro  
 50 55 60  
 Thr Leu Ile Leu Ala Met Phe Lys Ala Thr Ala Pro Ser Phe Tyr Ser  
 65 70 75 80  
 Leu Lys Phe Asn Ala Gly Gln Met Tyr Leu Tyr Asn Asp Ser Leu Tyr  
 85 90 95  
 Leu Val Glu Gln Leu Arg Thr Met Val Glu Glu His Lys Leu Ser Arg  
 100 105 110  
 Leu Ser Ser Asp Leu Asp Ala Leu Glu Lys Phe Gly Lys Leu Ala Tyr  
 115 120 125  
 Ser Lys Glu Met Gln Thr Gln Arg Thr Ile Val Thr Asp Leu Leu Asp  
 130 135 140  
 Gly Ala Gln Gly Phe Ser Gln Cys Ser Glu Gln Pro Phe Leu Gly Glu  
 145 150 155 160  
 Cys Glu Asn Ala Ile Cys Ala Thr Val Asp Arg Ile Arg Asp Val Tyr  
 165 170 175  
 Lys Glu Trp Gln Pro Ile Leu Ser His Ser Ala Leu Leu Gln Ser Ile  
 180 185 190  
 Gly Ser Leu Val Ala Ser Val Ile Asn Lys Ile Ile Ile Asp Ile Glu  
 195 200 205  
 Asp Leu Gly Asp Ile Ser Glu Ala Gln Ser Gln Arg Leu Val Ser Phe  
 210 215 220  
 Cys Asn Gln Val Ser Gln Leu Glu Asp Leu Phe Met Pro Pro Ser Ala  
 225 230 235 240  
 Glu Ala Glu Arg Val Pro Ile Thr Ala Val Tyr Val Arg Asn Trp Leu  
 245 250 255  
 Lys Phe Gln Tyr Leu Ile Asn Ile Leu Glu Ser Ser Leu Ala Asp Ile  
 260 265 270  
 Lys Phe Leu Trp Thr Glu Gly Glu Leu Arg Leu Glu Phe Ser Ala Asp  
 275 280 285  
 Glu Val Val Asp Leu Ile Glu Ala Leu Phe Ala Glu Ser Asp Tyr Arg  
 290 295 300  
 Arg Lys Ala Ile Ala Asp Ile Arg Arg Gln Ser Arg Gly  
 305 310 315

<210> 40535  
 <211> 143  
 <212> PRT  
 <213> A.fumigatus

<400> 40535  
 Leu Cys Ser Val Ser Phe Lys Leu Ala Asp Trp Val Thr Ala Lys Leu  
 1 5 10 15

17741

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Arg Ala Leu Arg Lys Trp Pro His Arg Pro Pro Tyr Phe Phe Pro Phe
      20                      25                      30
Pro Leu Arg Leu Thr Glu Gln Val Ser Gly Ile Asp Glu Asn Phe Gln
      35                      40                      45
Thr Arg Phe Phe Trp Asp Ser Tyr Cys Pro Glu Phe Asn Met Asn Asp
      50                      55                      60
Gly Ser Asn Ser Asp Ala Thr Ala Thr Ser Ser Ala Ala Gln Arg Gln
      65                      70                      75                      80
Val Arg Val Gln Leu Thr Ser Lys Gln Glu Asp Ile Ala Leu Pro Asp
      85                      90                      95
Asn Thr Gly Pro Ile Leu Val Pro Thr Ser Arg Ser Phe Pro Ser Gly
      100                     105                     110
Ile Ile Arg Leu Asn Cys Arg Lys Ser Asp Ala Ser Ala Tyr Tyr Arg
      115                     120                     125
Ser Ala Thr Ile Cys Ala Phe Asp Thr Gly Glu Gln Thr Pro Trp
      130                     135                     140

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<210> 40536

<211> 74

<212> PRT

<213> A.fumigatus

<400> 40536

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Gln Asn His Ala Cys Ile Leu Glu Arg Asp Lys Asn Asn Ser Asn Phe
1      5      10      15
Ser Tyr Ser Thr Lys Lys Pro Lys Glu Tyr Val Arg Tyr Ile Leu Cys
      20      25      30
Gly Gln Tyr Ala Phe Ala Pro Val Asp Leu Asn Ser Leu Ile Leu Ser
      35      40      45
Arg Thr Asn Asp Ala Asn Cys Leu Val Pro Ala Asn Thr Glu Asp Leu
      50      55      60
Asp Thr Phe Ala Ser Asn Ala Leu Ser Ile
      65      70

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<210> 40537

<211> 384

<212> PRT

<213> A.fumigatus

<400> 40537

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Leu Ser Ala Cys Gln Pro Leu Ile Val Ile Leu Leu Leu Thr Leu Leu
1      5      10      15
Arg Arg Leu Gln Tyr Val Thr Ser Ile Leu Gln Asn Val Tyr Tyr Gly
      20      25      30
Ile Thr Ile Arg Ala Gly Glu Pro Arg Pro Gln Pro Pro Ser Pro Arg
      35      40      45
Tyr Ala Arg His Arg Arg Arg Ile Phe Ile Leu Val Val Thr Ser Tyr
      50      55      60
Leu Leu Tyr Thr Leu Tyr Glu Thr Phe His Gln Val Gln Val Thr Gly
      65      70      75      80
Asp Phe Tyr Arg Ala Leu Gly Val Ser Pro Leu Ala Asp Glu Arg Thr
      85      90      95
Ile Lys Ser Arg Phe Arg Arg Leu Ala Ala Gln His His Pro Asp Lys
      100     105     110
Arg Gly Tyr Gly Asp Gly Asp Pro Ser Asp Asp Tyr Phe Val Tyr Leu
      115     120     125

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Lys Leu Ala His Asp Thr Leu Leu Asp Pro Ala Lys Arg Phe Ala Tyr  
 130 135 140  
 Asp Arg Phe Gly Pro Tyr Ile Leu Ser Trp Gly Asp Arg Lys Thr Met  
 145 150 155 160  
 Gln Asp Phe Leu Phe Ala Gly Leu His Arg Ser Val Pro Gln Tyr Val  
 165 170 175  
 Val Gly Leu Val Thr Ile Ile Ile Leu Asn Phe Thr Tyr Trp Ser Asn  
 180 185 190  
 Trp Gly Arg Tyr Val Ser His Gln Pro Arg Ser Phe Leu Lys Gln Trp  
 195 200 205  
 Asp Gln Ser Thr Asn Leu Asn Gln Trp Arg Phe Phe Thr Phe Ala Ala  
 210 215 220  
 Leu Ile Thr Leu Glu Ala Ala Leu Ile Thr Arg Pro Lys Ala Leu Phe  
 225 230 235 240  
 Met Pro Gly Phe Tyr Ile Pro Pro Ala Ile Arg Ser Leu Leu Gly Ile  
 245 250 255  
 Ser Pro Thr Phe Tyr Leu Leu Pro Phe Gln Ile Leu Thr Leu Ala Gln  
 260 265 270  
 Arg Ala Ser Val Thr Leu His Ile Phe Ile Ser Gln Leu Thr Pro Pro  
 275 280 285  
 Glu Val Ser Lys Gly Ser Ser Ser Ala Pro Gly Glu Arg Ile His Pro  
 290 295 300  
 Gln Thr Met Gln Arg Leu Ala Gln Leu Ala Gln Leu Ser Arg Ala Thr  
 305 310 315 320  
 Asp Gly Glu Ala Thr Arg Leu Leu Gln Leu Gly Leu Ala Pro Phe Arg  
 325 330 335  
 Gly Asp Arg Glu Gly Ile Ala Thr Leu Arg Lys Gly Met Lys Glu Gly  
 340 345 350  
 Leu Val Leu Ser Ser Val Arg Ala Ser Pro Glu Val Gln Gln Ala Ile  
 355 360 365  
 Ala Gln Val Met Glu Arg Lys Lys Pro Glu Lys Asn Ser Lys Ala Asp  
 370 375 380

&lt;210&gt; 40538

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40538

Thr Ser Glu Glu Glu Lys His Thr His Lys Pro Thr Asn Asn Glu Thr  
 1 5 10 15  
 Thr Thr Gln Arg Leu Asp Ile Pro Ile Pro Phe Phe His Pro Pro Ser  
 20 25 30  
 Ile Leu Pro Tyr Tyr Ser Ser Leu Thr Leu Leu Phe Leu Ser Phe Ser  
 35 40 45  
 Thr Ser Pro Asn Ile Ile Thr Thr Thr Thr Thr Thr Ala Ser Ser  
 50 55 60  
 Asp Tyr Val Thr Ser Ala Ser Pro Leu Leu Pro Thr Ser Ala Leu Pro  
 65 70 75 80  
 Asp Phe Cys Leu Ala Leu Thr Lys Cys Arg Pro Pro Leu Ser Asn Val  
 85 90 95  
 Leu Glu Pro Thr Ser Ser Ala Gln Pro Thr Gln Phe Val His Leu Thr  
 100 105 110  
 Leu Thr Ser Arg Ser His Leu His Pro Asn His Pro Ala Ser His Ile  
 115 120 125



<210> 40539  
 <211> 162  
 <212> PRT  
 <213> A.fumigatus

<400> 40539

Thr	Lys	Gly	Lys	Ala	Trp	Pro	Glu	Glu	Glu	Ala	Gln	Thr	Val	Arg	Pro
1				5					10					15	
Cys	Ser	Leu	Ala	Val	Pro	Leu	Ser	Phe	Thr	Thr	Leu	Leu	Thr	Leu	Ala
			20					25					30		
Phe	Tyr	Ser	Asp	Asp	Gly	Thr	Gly	Asp	Ser	Val	Lys	Val	Thr	Ser	Ser
		35					40					45			
Arg	Leu	Gly	Pro	Lys	Ala	Asn	Met	Gly	Ala	Ile	Asn	Ala	Gly	Leu	Arg
	50					55					60				
Ala	Leu	Asp	Arg	Ser	Gly	Thr	Pro	Cys	Arg	Lys	Trp	Glu	Arg	Lys	Ala
65					70					75				80	
Leu	Gln	Leu	Lys	Ser	Phe	Thr	Gly	Val	Gln	Trp	Gln	Leu	Pro	Ser	Trp
			85						90					95	
Arg	Ala	Pro	Arg	Pro	Gln	Lys	Ile	Glu	Thr	Asn	Asp	Glu	Val	Lys	Glu
		100						105					110		
Ala	Thr	Leu	Asp	Thr	Gly	Asp	Ser	Asp	Ser	Lys	Ala	Asn	Gln	Ser	Ala
		115					120					125			
Ser	Gly	Ala	Pro	Ser	Glu	Lys	Ser	Asn	Ser	Gly	Asp	Thr	Glu	Leu	Thr
	130					135					140				
Pro	Val	Pro	Pro	Asn	Ile	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Ile	Val	Met
145					150					155					160
Thr	Ala														

<210> 40540  
 <211> 182  
 <212> PRT  
 <213> A.fumigatus

<400> 40540

Pro	Gln	Pro	Leu	Ser	Arg	Val	Lys	Val	Lys	Glu	Lys	Lys	Asn	His	Cys
1				5					10					15	
Phe	Thr	Ser	Gln	Glu	Lys	Gly	Lys	His	Leu	Ser	Ile	Gln	Met	Lys	Ser
			20					25					30		
Met	Ala	Ala	Ala	Thr	Ser	Thr	Thr	Asn	Gly	Arg	Ser	Asn	Arg	Ser	Ala
		35					40					45			
Ala	Pro	Lys	Ala	Ile	Val	Ile	Leu	Arg	Leu	Ser	Pro	Glu	Leu	Leu	Ser
	50					55					60				
Arg	Phe	Ala	Ser	Pro	Asp	Val	Lys	Glu	Lys	Ala	Thr	Lys	Lys	Asn	Ser
65					70					75				80	
Thr	Ser	Ala	Ser	Pro	Pro	Val	Lys	Glu	Lys	Glu	Pro	Ser	Ser	Pro	Ala
			85					90						95	
Ser	Ser	Ser	Ala	Asp	Leu	Pro	Val	Pro	Ser	Ser	Val	Asp	Asn	Ala	
			100					105				110			
Ser	Asp	Ala	Ala	Ser	Thr	Pro	Ala	Pro	Gly	Thr	Ser	Ala	Ala	Asp	Thr
	115						120					125			
Pro	Arg	Arg	Asn	Gly	Leu	Pro	Ala	Pro	Lys	Ser	Gly	Thr	Lys	Arg	Ser
	130					135					140				
Ala	Gly	Gln	Ala	Thr	Glu	Ser	Phe	Ser	Arg	Pro	Arg	Gly	Lys	Pro	Gly
145					150					155					160
Pro	Lys	Lys	Lys	Pro	Arg	Leu	Tyr	Val	Leu	Val	Pro	Ser	Pro	Ser	Leu

## 17744

165  
Cys Leu Leu Pro Pro Cys  
180

170

175

<210> 40541  
<211> 323  
<212> PRT  
<213> A.fumigatus

<400> 40541  
Lys Ser Glu Lys Lys Val Leu Asp Leu Arg Gln Val Asp Leu Gln His  
1 5 10 15  
Ser Asp Arg Leu Asp Leu Gly Arg Ser His Cys Thr Met Thr Val Asp  
20 25 30  
Ala Met Asp Val Asp Ser Ser Pro Ala Pro Ala Ala Val Ala Glu Pro  
35 40 45  
Glu Arg Lys Arg Lys His Lys His Lys Asp His Ser Ser Lys Lys Lys  
50 55 60  
Arg Lys His Asp Ser Asn Leu Ile Ala Glu Thr Thr Val His Glu Thr  
65 70 75 80  
Thr Ser Lys Lys Ser Ser Lys Ser Lys Glu Lys Ser Lys Gln Lys Ser  
85 90 95  
Ser Gly Asn Ala Pro Leu Pro Ser Gly Ser Pro Tyr Val Leu Thr Thr  
100 105 110  
Ala Thr Leu Tyr Leu Pro Leu Ser Pro Ile Ser Ile Ser Pro Thr His  
115 120 125  
Ala Leu Ala Ser Leu Leu Ala Glu His Leu Ser Pro Leu Leu Leu Thr  
130 135 140  
Tyr Tyr Ser Pro Leu Gln Gly Val Ile Leu Ala Tyr Ser Asn Ala Ser  
145 150 155 160  
Ile Ser Ser Glu Pro Pro Ser Ala Ser Ser Pro Ser Ser Asp Pro Gln  
165 170 175  
Asp Asn Pro Gln Pro Leu Thr Leu Ala Lys Ser Ala Asp Glu Tyr Gly  
180 185 190  
Val Leu Tyr Val Tyr Leu Thr Ala Thr Phe Leu Val Phe Arg Pro Gln  
195 200 205  
Arg Gly Gln Ile Leu Glu Gly Trp Val Asn Val Gln Ser Glu Gly Phe  
210 215 220  
Leu Gly Ala Val Val Leu Asn Leu Phe Ser Val Gly Ile Glu Arg Lys  
225 230 235 240  
Arg Leu Pro Ser Asp Trp Lys Trp Val Pro Pro Gly Glu Glu Glu Glu  
245 250 255  
Gly Asn Gly Phe Asn Ser Ser Gly Lys Pro Lys Lys Lys Val Phe Ser  
260 265 270  
Ser Thr Glu Asp Glu Asp Asp Ser Glu Pro Ser Ser His Phe Asp Pro  
275 280 285  
Glu Lys Glu His Phe Lys Pro Ile Ser Leu Ala Ser Asp Ala Asn Pro  
290 295 300  
Phe Ser Glu Thr Met Asp Pro Asn Asn Gly Pro Ala Ala Asp Asp Asp  
305 310 315 320  
Asp Asp Asp

<210> 40542  
<211> 345  
<212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40542

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Arg Ile Val Phe Ser Arg Arg Ile Gly Phe Thr Ala Asp Val Phe Gly
1           5           10           15
Lys Trp Ile Gln Ser Thr Ile Leu Ser Pro Trp Lys Thr Leu Pro Leu
          20           25           30
Leu Leu Leu Ala Gln Tyr Thr Ala Lys Gly Arg Gln Leu Ala Ala Glu
          35           40           45
Arg Ser Arg Ser Phe Gln Val Leu Gln Leu Leu Thr Leu Leu Ala Val
          50           55           60
Leu Arg His Val Asn Ala Trp Leu Asn Thr Arg Thr Leu Asn Asn Gly
65           70           75           80
Val Ser Asp Arg Tyr Asp Trp Asp Arg Glu Val Val Val Leu Thr Gly
          85           90           95
Gly Ser Asn Gly Ile Gly Arg Arg Ile Ala Gln Leu Leu Gly Asp Arg
          100          105          110
Gly Ile Lys Val Ala Ile Leu Asp Ile His Ser Pro Gln Glu Asp Gln
          115          120          125
Gly His Leu Pro Pro Thr Val Arg Phe His Lys Cys Asp Ile Thr Ser
          130          135          140
Pro Ser Ala Ile Ala Ala Ala Ala Ala Asp Ile Arg Ala Thr Leu Gly
145           150           155           160
Glu Pro Thr Val Leu Ile Asn Asn Ala Gly Val Cys Ser Gly Lys Thr
          165          170          175
Ile Leu Gly Gly Thr Glu Ala Asp Thr Arg Ile Gln Phe Glu Val Asn
          180          185          190
Thr Leu Ser His Tyr Trp Leu Ala Arg Glu Phe Leu Pro His Met Val
          195          200          205
Lys Arg Asp His Gly Met Val Ala Thr Val Ala Ser Leu Ala Gly Tyr
210           215           220
Thr Thr Thr Pro Asn Met Val Asp Tyr Ser Ala Thr Lys Ala Ala Ala
225           230           235           240
Ile Ser Phe His Glu Gly Leu Ala Ala Glu Leu Val Thr Arg Phe His
          245          250          255
Ala Pro Arg Val Arg Thr Val Leu Leu Thr Gln Gly Phe Thr Gln Thr
          260          265          270
Ala Leu Ile Gly Gln Leu Thr Pro Glu Asp Thr Trp Phe Asn Pro Leu
          275          280          285
Leu Gln Pro Glu Thr Val Ala Glu Gln Leu Val Arg Gln Ile Leu Thr
          290          295          300
Gly Asn Ser Gly His Val Val Val Pro Gly Ser Ser Gly Trp Leu Ser
305           310           315           320
Arg Asn Leu Arg Ser Phe Pro Pro Trp Phe Gln His Ser Met Arg Ser
          325          330          335
Trp Leu Glu Arg Leu Met Arg Ala Asp
          340          345

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&lt;210&gt; 40543

&lt;211&gt; 756

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40543

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Cys Asp Ile Thr Thr Pro Val Val Pro Ser His Ser Arg Gln Ser Pro
1           5           10           15

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Ser His Gln Leu Arg Leu Gln Thr Val Ala Lys Phe Ser Gly Ser Thr  
 20 25 30  
 Phe Gln Phe Pro Tyr Gly Cys Leu Ser Arg Thr Glu His His Leu Asp  
 35 40 45  
 Arg Ser Leu Gln Pro Thr Met Phe Arg Ala Leu Met Gly Gly Gly Arg  
 50 55 60  
 Ser Ser Asp Ser Arg Ser Thr Thr Ser Ser Ser Lys Ser Ser Ser Arg  
 65 70 75 80  
 Arg Arg Thr Asn Ser Lys Ala Ser Ser Thr Val Ser Arg Lys Ser Ser  
 85 90 95  
 Arg Gly Asp Asp Arg Asp Arg Gly Leu Gly Asp Leu Ser Ala Tyr Ser  
 100 105 110  
 Ser Ser Gly Ser Arg Ser Lys Arg Tyr Ala Pro Ser Ala Ala Gly Asp  
 115 120 125  
 Ser Val Ala Ser Ser Tyr Ala Thr Ala Glu Pro Gly Ile Ala Val Glu  
 130 135 140  
 His Asp Arg Ile Ile Ile Glu Arg Thr Leu Lys Arg Arg Asp Thr Asp  
 145 150 155 160  
 Glu Glu Ser Gly Arg Asp Arg Tyr Ser Glu Ile Arg Asp Arg Asp Gly  
 165 170 175  
 Arg Ser Ser Arg Arg Arg Asp Arg Asp Arg Ser Gln Ser Arg Glu Arg  
 180 185 190  
 Glu Arg Pro Arg Ser Glu Arg Ile Glu Arg Ala Gln Leu Glu Asp Asp  
 195 200 205  
 Ala Val Glu Ser Arg Asp Arg Arg Arg Glu Arg Ser Arg Thr Gln Pro  
 210 215 220  
 Gly Asp Thr Tyr Leu Pro Pro Val Ser Pro Ser Met Pro Ile Gln Pro  
 225 230 235 240  
 Asn Ser Pro Leu Val Tyr Asp Pro His Val Gln Gln Gln Phe Pro Gly  
 245 250 255  
 Gln Phe Pro Ala Tyr Val Ala Glu Pro Tyr Arg Pro Pro Asn Pro Ala  
 260 265 270  
 Gly Glu Ala Asp Tyr Tyr Gly Asp Gln Gly Gln Ser Val Ala Asp  
 275 280 285  
 Gln Pro Gly Val Arg Pro Lys Pro Pro Pro Ile Ile Pro Ser Ser Gln  
 290 295 300  
 Ala His Leu Met Thr Ala Ser Pro Val Ala Asn Pro Pro Pro Glu Pro  
 305 310 315 320  
 Ser Ser Met Gly Gln Val Gly Ala Ala Ala Ala Tyr Phe Ala Asp Asp  
 325 330 335  
 Ala Glu Leu Glu Val Asp Pro Ala Pro Gly Arg Pro Asp Arg Pro Thr  
 340 345 350  
 Ala Gly Thr Thr Ser Glu Pro Pro Lys Pro Ser Asn Thr Thr Phe Gly  
 355 360 365  
 Ile Ser Gly Ile Ala Ala Gly Ala Ala Ala Tyr Gly Ala Gly Gly Ser  
 370 375 380  
 Leu Pro Leu Pro Ala Ser Pro Thr Ser Pro Pro Glu Pro Val Pro Met  
 385 390 395 400  
 Thr Ala Pro Tyr Ala Pro Pro Val Thr Ser Ser Thr Thr Lys Pro Pro  
 405 410 415  
 His Thr His Gly Ile Gly Ala Ser Val Gly Ala Ala Ala Ala Gly Ala  
 420 425 430  
 Ala Ala Gly Tyr Met Leu Gly His His Gln His His Ser Met Ser Ser  
 435 440 445  
 Ala Asp His Leu Ser Gln Tyr Thr Met Gln Asn Tyr Asp Glu Ser Ser  
 450 455 460

Gln Tyr Gly Leu Gly Ile Pro Gly Pro Thr Val Tyr Asn Ala Pro Ala  
 465 470 475 480  
 Asn Ala Glu Trp His Ala Ala Gly Thr Gly Thr Ala Val Pro Tyr Ala  
 485 490 495  
 Ala Ser Pro Leu His Pro His His Ala Ala Val His His Gly Ala Pro  
 500 505 510  
 Phe Pro Ser Gly Ser Leu Ala Phe Gln Gln Arg Gln Arg Gly Pro Leu  
 515 520 525  
 Asp Lys Phe Ile Asp Phe Trp Arg Asp Pro Glu Gly Val Gly Met Phe  
 530 535 540  
 Glu Glu Tyr Thr Glu Ala Ile Gly Val Cys Lys Tyr Cys Phe Glu Pro  
 545 550 555 560  
 Gly Thr Ser Ser Arg Asp Ala Pro Arg Lys His His Tyr Arg Gln Arg  
 565 570 575  
 Arg Ser Ser Gly Glu Arg Tyr Ala Ser Gly Ser Arg Val Gly Lys Ala  
 580 585 590  
 Ser Arg Tyr Thr Ser Ser Glu Asp Glu Gly Arg Arg Arg Lys Lys Ser  
 595 600 605  
 Ser Arg Asn Ser Trp Leu Leu Pro Gly Leu Leu Gly Gly Ile Ala Ala  
 610 615 620  
 Lys Ala Leu Phe Asn Thr Lys Asp Phe Glu Asp Thr Tyr Ser Val Arg  
 625 630 635 640  
 Ser Gly Arg Val Met Thr Val Lys Asp Thr Glu Ser Val Ser Thr Ala  
 645 650 655  
 Arg Arg Ser Gln Thr Ser Arg Gly Val Tyr Arg Arg Arg Ser Gln Ser  
 660 665 670  
 Arg Asp Arg Glu Ser Arg Ile Ile Tyr Ser Asp Ser Lys Ser Gln Tyr  
 675 680 685  
 Glu Asp Lys Arg His Arg Ser Arg Ser Arg Ser His Ser Ser Ser Arg  
 690 695 700  
 Asn Arg Arg His Ser Ala Leu Arg Asp Ala Ala Val Gly Ala Ala Val  
 705 710 715 720  
 Gly Ser Gly Ala Ile Ala Leu Ala Lys Ser Arg Asp Arg Ser Arg Ser  
 725 730 735  
 Arg Ser Arg Ser Arg Ser Arg Phe Pro Lys Lys Val Gln Gly Glu Lys  
 740 745 750  
 Val Val Asp Leu  
 755

&lt;210&gt; 40544

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40544

Leu Trp Pro Ser Leu Ala Ile Glu Ala Ala Val Ala Ala Ala Ala Ala  
 1 5 10 15  
 Val Val Ser Gln Arg Lys Ser Lys Gly Arg Lys Ser Ser Thr Ser Asp  
 20 25 30  
 Ser Ser Ser Phe Leu Asp Ile Ser Gln Pro Ala Arg Lys Ser Val Gly  
 35 40 45  
 Gly Gly Ile Ala Ser Phe Phe Thr Ala Ser Ser Glu Asn Arg Gly Lys  
 50 55 60  
 Arg Arg Val Lys Lys Arg Arg Ser Ile Phe Ser Phe Asn Asn Ser Ser  
 65 70 75 80  
 Phe Phe Ser Leu Asp Ala Asp Leu Ala Phe Val Pro Gly Phe Ala Arg

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<210> 40545
<211> 382
<212> PRT
<213> A.fumigatus
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Leu	Ile	Phe	Leu	His	Phe	Gly	Arg	Thr	Arg	Leu	Gln	Glu	Leu	Asp	Leu
1				5					10					15	
Ser	His	Asn	Arg	Leu	Val	Ser	Val	Arg	His	Leu	Asp	Ser	Leu	Pro	Ser
			20					25					30		
Leu	Ser	Lys	Leu	Asp	Leu	Ser	Phe	Asn	Gln	Leu	Lys	His	Ile	Asp	Val
		35					40					45			
Ser	Ser	Pro	Leu	Arg	Met	Leu	Arg	Ser	Leu	Lys	Leu	Ala	Asn	Asn	Gln
		50				55					60				
Leu	Gln	Thr	Leu	Asp	Val	Ser	Met	Phe	Ser	Ser	Leu	Asn	Leu	Leu	Tyr
65					70					75					80
Ile	Asp	Gln	Asn	Phe	Leu	Ser	Thr	Val	Ser	Gly	Leu	Glu	Arg	Cys	Arg
				85					90					95	
Ala	Leu	Glu	Ile	Leu	Ser	Val	Arg	Asp	Gln	Arg	Ser	Gly	Asn	Glu	Lys
			100					105					110		

Asn Thr Tyr Leu Asp Ile Asp Leu Gly Lys Val Lys Asp Ile Arg Lys  
 115 120 125  
 Val Tyr Leu Ser Ser Asn Lys Leu Ser Thr Arg Ala Leu Ser Pro Ser  
 130 135 140  
 Ala Pro Leu Leu Gly Leu Gln Leu Leu Asp Ala Ala Ser Cys Asn Leu  
 145 150 155 160  
 Gln Ser Leu Pro Val Asp Phe Ser Ser Asn Phe Pro Asn Leu Lys Val  
 165 170 175  
 Leu Asn Leu Asn Phe Asn Ser Leu Ser Gly Val Thr Glu Leu Val Gly  
 180 185 190  
 Leu Asn Cys Leu Ser Arg Leu Ala Ile Ala Gly Asn Ser Ile Val Arg  
 195 200 205  
 Met Arg Arg Leu Cys Gln Val Leu Ser Arg Met Gly Arg Thr Arg Gln  
 210 215 220  
 Gly Gln Ser Cys Ser Leu His Gln Val Asp Leu Arg Gly Asn Pro Leu  
 225 230 235 240  
 Thr Leu Arg Phe Tyr Pro Pro Ala Leu Thr Gly Asn Gly Lys Glu Val  
 245 250 255  
 Asp Gln Arg Arg Ile Arg Ala Ile Pro Glu Glu Arg Lys Lys Arg Ala  
 260 265 270  
 Ala Gly Gly Leu Asp Leu Ala Ser Ala Leu Ala Asp Ala Gly Ser His  
 275 280 285  
 Glu Arg Asp Met Arg Pro Thr Leu Trp Ala Thr Thr Ala Glu Thr Glu  
 290 295 300  
 Arg Glu Ile Asp Asp Pro Tyr Thr Leu Pro Thr Ala Asp Ala Gln Ala  
 305 310 315 320  
 Asp Gln Lys Tyr Leu Ser His Leu Asp Asp Ala Thr Arg Leu Arg Arg  
 325 330 335  
 Lys Ile Phe Glu Leu Met Leu Tyr Ala Gly Thr Gly Gly Ser Ile Lys  
 340 345 350  
 Phe Leu Asp Gly Leu Glu Phe Arg Pro Val Leu Thr Glu Gly Ser Asp  
 355 360 365  
 Met Asp His Ala Trp Ser Lys Leu Glu Ala Thr Pro Gly Cys  
 370 375 380

&lt;210&gt; 40546

&lt;211&gt; 1275

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40546

Leu Leu Lys Arg Gly Ser Val Gln Pro Arg Gly Glu Asp Asp Trp Glu  
 1 5 10 15  
 Ser Val Phe Lys Pro Pro Thr Pro Gly Ser Asp Thr Lys Gln Lys Asp  
 20 25 30  
 Ala Phe Ala Lys Met Lys Pro Ala Asp Asp Met Trp Asp Phe Thr Lys  
 35 40 45  
 Ser Ser Ser Ala Arg Arg His Thr Arg Lys Pro Ser Lys Leu Ser Ile  
 50 55 60  
 Glu Thr Ser Gly Ala Asn Ser Glu Asp Ser Leu Asp Gln Asp Ser Glu  
 65 70 75 80  
 Arg Ser Asp Gly Ala Ala Thr Val Gln Arg Asp Asn Gln Gly Pro Thr  
 85 90 95  
 Gly Ser Ser Thr Pro Ser Ser Thr Gly Thr Leu Asp Ile Lys Lys Gly  
 100 105 110  
 Pro Asp Asn Asn Ala His Asp His Asn Lys Ser Ser His Gly Ala Ser

## 17750

115	120	125
Arg Asn Glu Ser Gln Ile	Arg Thr Ala Ser Gly Leu	Glu Asp Leu Arg
130	135	140
Asn Glu Gly Ile Thr Pro	Ile Val Phe Ser Arg Val	Asn Thr Val Glu
145	150	155
Gly Gln Ala Thr Ser Glu	Val Ile Lys Ser Ala Leu	Lys Gln Val Thr
165	170	175
Asn Lys Leu Glu Arg Leu	Ser Val Gly Ala Arg Glu	Arg Pro Asp Ser
180	185	190
Arg Ala Ser Asp Ser Ala	Leu Leu His Gln Gln Ser	Glu Leu Leu Asp
195	200	205
Ser Leu Pro Glu Glu Asp	Leu Leu Asp Thr Thr Ser	His Ser Leu Pro
210	215	220
Gln Asp Leu Ser Thr Gly	Thr Leu Asp Tyr Gln Gly	Arg Gly Ala Phe
225	230	235
Ala Asn Val Arg Gly Glu	Gln Tyr Leu Asn Asp Ala	Leu Leu Pro Gln
245	250	255
Arg Arg Phe Ser Pro Ser	Ser Phe Leu Ser Gln Arg	Leu Ser Pro Tyr
260	265	270
Leu Pro Ser Asn Ser Arg	Ile Arg Ser Ser Pro Pro	Phe Tyr Asn Lys
275	280	285
Ile Ser Arg Ala Thr Glu	Pro Pro Thr Leu Pro Arg	Pro Ser Ser Ala
290	295	300
Tyr Ala Arg Pro Pro Ser	Gly Glu Gly Asn Pro Ile	Ala Met Pro Ser
305	310	315
Ser Gly Ser Pro Leu Lys	Leu Phe Gly Asn His Asp	Thr Phe Thr Asn
325	330	335
Asn Arg Leu Leu Arg Arg	Met Ser Gln Phe Glu Glu	Thr Phe Gly Asp
340	345	350
Leu Ser Glu Glu Asp Glu	Pro Val Ser Pro Ser Glu	Glu Ala Arg Arg
355	360	365
Lys Gly Gln Ser Arg Asn	Phe Leu His Val Arg Gln	Glu Thr Pro Gly
370	375	380
Asp Arg Ser Met Arg Arg	Gln Glu Arg Pro Arg Ser	Arg Asn Met Met
385	390	395
Lys Pro Arg Ile Ser Arg	Phe Gly Asp Gly Glu Leu	Asp His Phe Asp
405	410	415
Phe Ser Asp Thr Ser Pro	Tyr Glu Pro Lys Phe Leu	Asn Asn Asp Val
420	425	430
Glu Glu Ser Asn Phe Arg	Pro Ser Ser Arg Arg Lys	Pro Ser Gly Arg
435	440	445
Arg Gln His Pro Arg Arg	Ser Ala Phe Gly Asn Pro	Ser Arg Asp Thr
450	455	460
Glu Ile His Arg Pro Ser	Ser Ser Arg Glu Ser Arg	Arg Pro Gln Pro
465	470	475
Ser Val Gly Gln Met Asp	Asn Pro Asn Asp Gln Glu	Asn Gln Trp Ile
485	490	495
Arg Asp Thr Pro Ala Lys	Asp Pro Asn Pro Lys Arg	Arg Arg Thr Ile
500	505	510
Leu Ser Leu Asp Met Thr	Gly Gly Glu Ser Cys Gly	Ala Gly Glu Ala
515	520	525
Thr Gly Gln Pro Thr Asp	Asn Leu Ser Leu Leu Gln	Arg Ser Leu Ile
530	535	540
Gln His Gly Leu Asp His	Gly Asn Glu Glu Ser Leu	Leu Pro Gln Glu
545	550	555
Ser Thr Pro Arg Pro Arg	Thr Pro Thr Pro Ser Gln	Thr Arg Ser Ser





## 17752

1010 1015 1020  
 Thr Leu Leu Gln His Leu Leu Ser Lys Thr Glu Asn Lys Ser Glu Ile  
 1025 1030 1035 1040  
 Val Asp Asn Asp Pro Ser Ile Leu Arg Arg Glu Ser Gly Asn Ile Glu  
 1045 1050 1055  
 Ser Thr Pro Asp Lys Asp His Pro Glu Asn Ser Met Met Tyr Leu Thr  
 1060 1065 1070  
 Gln Thr Gly Ser Asp Thr Thr Tyr Ser Phe His Leu Ser Pro Leu Pro  
 1075 1080 1085  
 Asp Phe Thr Val Asp Gly Ile Asp Gln Pro Leu His Leu Glu Leu Ser  
 1090 1095 1100  
 Tyr Val Ala Gln Arg Thr Arg Ser Thr Ser Leu Arg Gln Ile His Gly  
 1105 1110 1115 1120  
 Thr Phe Ala Leu Ala Thr Glu Asp Leu Val Lys His Leu Thr Glu Ala  
 1125 1130 1135  
 Glu Pro Phe Glu Pro Tyr Trp Asp His Val Arg Arg Leu Val Leu Arg  
 1140 1145 1150  
 Asp Lys Gly Leu Ile Thr Leu His Lys Leu Ser Glu Phe Cys Pro Arg  
 1155 1160 1165  
 Leu Glu Asp Leu Asp Val Ser Asp Asn Glu Ile Gly Gln Leu Gly Gly  
 1170 1175 1180  
 Val Pro Ala Ser Leu Arg Thr Leu Arg Ile Pro Arg Asn Cys Leu Ser  
 1185 1190 1195 1200  
 Asn Leu Thr Ala Trp Gly His Leu Val Asn Leu Gln Tyr Leu Asp Val  
 1205 1210 1215  
 Ser Asn Asn Glu Leu Asp Ser Leu Asp Gly Phe Gly Ser Leu Ile His  
 1220 1225 1230  
 Leu Arg Glu Leu Lys Ala Asp Gly Asn Asn Ile Arg Asn Ile Asp Gly  
 1235 1240 1245  
 Ile Leu Asp Leu Asn Gly Leu Leu Thr Leu Lys Leu Ser Asn Asn Ser  
 1250 1255 1260  
 Leu Ala Thr Ile Asp Phe Ala Thr Gly Glu Met  
 1265 1270 1275

&lt;210&gt; 40547

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40547

Thr Ile Ile Gly Ile Phe Leu Thr Ser Cys His Leu Arg Ser Thr Pro  
 1 5 10 15  
 Tyr Ser Ser Pro Gln Ser Ser Leu Glu Ala Ala Ser Asn Gln Tyr Ser  
 20 25 30  
 Leu Leu Val Arg Phe Leu Trp Ser Cys Ile Tyr Ser Val Ile Arg Cys  
 35 40 45  
 Leu Val Pro Thr Asn Asn Tyr Asn Thr Lys Pro Thr Cys Asn Leu Leu  
 50 55 60  
 Ala Pro Ile Pro Ser Phe Pro Tyr Leu Lys Ala Tyr Thr Asn Ser Thr  
 65 70 75 80  
 Pro Phe Cys Asn Arg Leu Trp Leu Arg Leu Pro Leu Ser Ala Pro Thr  
 85 90 95  
 Pro Arg Gln Ser Met Asp Cys Cys His His  
 100 105

&lt;210&gt; 40548

&lt;211&gt; 556

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (521)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40548

Phe	Thr	Ala	Gly	Ile	Glu	Leu	Glu	Phe	Lys	Pro	Leu	Arg	Asn	Asp	Pro
1				5					10					15	
Thr	Asn	Val	Thr	Pro	Arg	Pro	Gly	Ala	Ser	Gln	Thr	Val	Thr	His	Lys
		20						25					30		
Thr	Gly	Ile	Pro	Ile	Ala	Ala	Leu	Asp	Ile	Ser	Pro	Gln	Arg	Thr	His
		35					40						45		
Ala	Val	Ile	Gly	Gly	Lys	Glu	Ile	Leu	Lys	Thr	Ile	Arg	Val	Ser	Pro
		50				55					60				
Asp	Arg	Leu	Ser	Glu	Glu	Phe	Asn	Leu	Arg	Asn	Ala	Ile	Ile	Ser	Tyr
65				70					75						80
Ser	Ser	Thr	His	His	Gly	Gly	Ser	Gly	Leu	Ser	Ala	Arg	His	Lys	Asp
			85					90						95	
Gln	Leu	Thr	Val	Arg	Asp	Val	Lys	Trp	Ser	His	Gly	Asn	Tyr	Asp	Arg
		100					105						110		
Thr	Ile	Ala	Thr	Ala	Val	Ala	Asn	Gly	Arg	Ile	Val	Val	Tyr	Asp	Leu
		115					120						125		
Asn	Arg	Thr	Gly	Leu	Glu	Phe	Cys	Arg	Phe	Gln	Gly	His	Ser	Arg	Gln
		130				135					140				
Val	His	Arg	Leu	Ala	Phe	Asn	Pro	Tyr	Ala	Pro	Ala	Leu	Leu	Leu	Ser
145				150					155						160
Gly	Ser	Gln	Asp	Ser	Thr	Ile	Arg	Met	Trp	Asp	Leu	Arg	Thr	Ala	Ser
			165					170						175	
Ala	Glu	Arg	Gly	Val	Ser	Met	Cys	Gly	Ser	Lys	Glu	Gln	Tyr	Val	Gly
		180					185						190		
Asn	Ser	Asp	Ala	Val	Arg	Asp	Ile	Arg	Trp	Ser	Pro	Ser	Asp	Arg	Phe
		195				200						205			
Val	Phe	Ala	Thr	Ala	Thr	Asp	Ser	Gly	Ala	Ile	Gln	Leu	Trp	Asp	Ser
		210				215					220				
Arg	Lys	Asn	Cys	Ala	Pro	Leu	Met	Arg	Ile	Thr	Ala	His	Asp	Arg	Pro
225				230						235					240
Cys	Phe	Ser	Val	Asp	Trp	His	Pro	Asp	Gly	Gln	His	Val	Val	Ser	Gly
			245					250						255	
Gly	Thr	Asp	Arg	Gln	Val	Lys	Val	Trp	Asp	Phe	Ser	Ser	Thr	Ala	Glu
		260					265						270		
Arg	Arg	Gln	Lys	Pro	Thr	Phe	Gln	Phe	Arg	Thr	Pro	Gln	Ala	Val	Leu
		275					280					285			
Asn	Val	Arg	Trp	Arg	Pro	Pro	Ser	Thr	Asp	Lys	Glu	Ser	Gly	Asp	Trp
		290			295						300				
Gln	Ser	Cys	Gln	Val	Val	Thr	Ser	Tyr	Asp	Lys	Glu	Asp	Pro	Arg	Val
305				310					315						320
His	Leu	Trp	Asp	Leu	Arg	Arg	Pro	His	Ile	Pro	Phe	Arg	Glu	Phe	Asp
			325					330					335		
Arg	Tyr	Asp	Ala	His	Ala	Ser	Asp	Leu	Leu	Trp	His	Ser	Lys	Asp	Leu
		340					345					350			
Leu	Trp	Thr	Val	Gly	Glu	Thr	Gly	Ala	Phe	Thr	Gln	Thr	Asp	Ile	Arg
		355					360					365			

## 17754

Tyr Ala Pro His Val Ile His Gln Arg Pro Thr Cys Ala Ala Ala Trp  
 370 375 380  
 Ser Pro Thr Gly Glu Val Leu Ala Phe Val Gln Lys Arg Ala Arg Arg  
 385 390 395 400  
 Ser Ile Ser Gly Leu Ser Ala Thr Asp Phe Thr Asp Arg Leu Glu Met  
 405 410 415  
 Glu His Ser Ser Gly Glu Leu Leu Gly Gln Ser Pro Thr Glu Glu Val  
 420 425 430  
 Leu Asp Glu Pro Ser Phe Ile Ser Val Arg Ala Arg Pro Ser Lys Pro  
 435 440 445  
 Ser Ser Thr Arg Pro Pro Lys Ser Leu Ser Ser Thr Pro Pro Gly Pro  
 450 455 460  
 Pro Glu Asn Pro Pro Val Leu Pro Leu Gly Glu Thr Leu Ser Lys Ile  
 465 470 475 480  
 Pro Pro Pro Gly Pro Arg Gln Leu Gly Val Val Gly Ser Val Ser Gly  
 485 490 495  
 Ala Thr Ser Asp Pro Val Val Phe Arg Phe Leu Ala Arg His Tyr Ser  
 500 505 510  
 Pro Leu Leu Glu Ala Pro Glu Asp Xaa Cys Lys His Ala Asp Leu Leu  
 515 520 525  
 Arg Ala Leu Leu Asp Ser Leu Thr Gln Asn Ser Glu Arg Ala Glu Asn  
 530 535 540  
 Val Ser Leu Thr Gln Ala Ser Thr Tyr Leu Gly Arg  
 545 550 555

&lt;210&gt; 40549

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40549

Gly Trp Gln Ser Thr Ile Phe Thr Asn Lys Ala Ala Cys Phe Asp Cys  
 1 5 10 15  
 Ser Ser Asp Pro Phe Ile Ser Arg Ser Lys Gln Ser Lys Phe Ser Thr  
 20 25 30  
 Tyr Gly Ile Leu Lys Ile Tyr Leu Asp Leu Phe His Asn Asp Phe Leu  
 35 40 45  
 Ser Pro Ala Asp Gln Ser Ser Phe Cys Phe Ile Leu Glu Ser Arg Val  
 50 55 60  
 Ser Ser Val Ser Arg Gln Val Gly Leu Arg Ala Leu Leu Ala Ser Leu  
 65 70 75 80  
 Lys Leu Ile Pro Asp Ile Gln Ser Pro Pro Phe Tyr Pro Ile Ile Thr  
 85 90 95  
 Pro Pro His Arg Lys Gly His Ser Ala Pro  
 100 105

&lt;210&gt; 40550

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40550

Gly Gly Tyr Arg Asp Thr Gly Leu Met Cys Asn Arg Leu Arg Cys Pro  
 1 5 10 15  
 Gly Ser Arg Ser Asp Val Ser Trp Ile Val Pro Lys Arg Leu Glu Leu  
 20 25 30

## 17755

Lys Leu Tyr Ala Gly Cys Lys Leu Ile Gly Gly Gly Val Val Lys Val  
 35 40 45  
 Lys Pro Ser Lys Gly Ser Arg Cys Asp Asn Glu Arg  
 50 55 60

<210> 40551  
 <211> 243  
 <212> PRT  
 <213> A.fumigatus

<400> 40551  
 Leu Arg Lys Cys Gly Pro Ala Ser Pro Val Val Lys Thr Glu Ala Pro  
 1 5 10 15  
 Leu Pro Pro Gln Ser Ala Arg Met Ser Gly Tyr Glu Arg Gly His Ser  
 20 25 30  
 Pro Pro Pro Leu Thr Lys Gln His Asp Ala Ala Gly Ala Gln Thr Ile  
 35 40 45  
 Ser His Arg His Gly Asp Ser Ile Asp Ser Arg Ser Ser Tyr Gly Thr  
 50 55 60  
 Ser Ala Gly Ser Thr Arg Tyr Gly Glu Asn Ser Ser Lys Arg Ser Thr  
 65 70 75 80  
 Ala Met Ser Ser Arg Arg Pro Ser Phe Ala Ser Ile Ala Gln Glu Ser  
 85 90 95  
 His Gln Phe Thr Glu Glu Ala Ser Ser Gly Gly Ala Ile His Leu Glu  
 100 105 110  
 Pro Leu Met Glu His Pro Pro Ser Ala Glu Gln Ser Ala Gly Thr Glu  
 115 120 125  
 Ser Gln Lys His Gly Gly Lys Gly Gly Ser Phe Ser Gly Phe Asp Phe  
 130 135 140  
 Gly Val Ala Thr Thr Glu Lys Pro Phe Pro Asp Pro Leu Arg Val Ser  
 145 150 155 160  
 Ser His Thr Asn Ser Asp Arg Leu Ser Ser Thr Arg Gly Ser Ala Glu  
 165 170 175  
 Leu Phe Phe Arg Ser Pro Ser Gln Ser Ser Phe Gly Ser Pro Ala Asp  
 180 185 190  
 Trp Leu Asp Pro Asp Glu Thr Arg Ser Ser Ser Ala Ser Ser Ala Asn  
 195 200 205  
 Val Ser Tyr Lys Ser Phe Arg Pro Leu Val Ser Asp Met Glu Pro Pro  
 210 215 220  
 Ser Ala Ser Gln Ser Glu Pro Lys Asp Val Pro Arg Glu Arg His Arg  
 225 230 235 240  
 Phe Glu Gln

<210> 40552  
 <211> 487  
 <212> PRT  
 <213> A.fumigatus

<400> 40552  
 Gln Pro Leu Arg Asn His Phe Leu Ile His Cys Gly Ser Arg Pro Ile  
 1 5 10 15  
 Arg Ile Gln Thr Gly Leu Ala Ala His Glu Ala Pro Leu Ser Ser Ser  
 20 25 30  
 Ser Glu Ala His Arg Lys Ala Arg Leu Ala His Pro Leu Ile Gly Trp  
 35 40 45

Ile Leu Met Lys Pro Asp Arg Arg Leu Arg Pro Pro Pro Thr Cys His  
 50 55 60  
 Thr Lys Ala Phe Asp Pro Trp Cys Gln Thr Trp Asn His Pro Val Pro  
 65 70 75 80  
 Arg Asn Leu Ser Gln Arg Met Tyr Arg Gly Lys Gly Thr Asp Ser Ser  
 85 90 95  
 Ser Glu Ser Asn Thr Ser Val Ser Lys Phe Ala Arg Ala Leu Gly Leu  
 100 105 110  
 Asp Phe Pro His His Ala Thr Glu Asn Ser Thr Ser Ser Ser Ser Glu  
 115 120 125  
 Ser Ser Pro Ser Glu Ala Arg Ser Gly Thr Ser Ile Ser Ser Leu Pro  
 130 135 140  
 Ser Glu Ala Ser Leu Ser Arg Arg Lys Pro Ser Glu Thr Ser Arg Leu  
 145 150 155 160  
 Gly Val Val Lys Glu Gln Pro Ala Asn Gly Asn Gln Gln Pro Val Leu  
 165 170 175  
 Pro Glu Thr Glu Gln Thr Glu Ser Pro Ala Asp Leu Glu Pro Pro Arg  
 180 185 190  
 Ile Pro Ala Ser Phe Leu Ser Pro Asp Ser Pro Thr Asp Pro Ala Ile  
 195 200 205  
 Asn Lys Gly Ser Leu Ser Leu Val Val Asp Lys Ala Thr Thr Thr Pro  
 210 215 220  
 Pro Gln Pro Ser Glu Pro Ser Glu Pro Arg Val Pro Leu Val Arg Gln  
 225 230 235 240  
 Glu Ser His Asp Pro Gln Thr Glu Pro Pro Glu Arg Pro Thr Ile Thr  
 245 250 255  
 Arg Ser Ala Thr Glu Ser Pro Val Arg Pro Pro Pro Arg Pro Lys Gly  
 260 265 270  
 Arg Cys Arg Gly Cys Gly Glu Ala Ile Leu Gly Lys Ser Val Ser Ser  
 275 280 285  
 Lys Asp Gly Arg Leu Thr Gly Arg Tyr His Arg Glu Cys Phe Val Cys  
 290 295 300  
 Cys His Cys Arg Ser Pro Phe Glu Thr Ala Asp Phe Tyr Val Leu Asn  
 305 310 315 320  
 Asp Arg Pro Tyr Cys Ala Gln His Tyr His Glu Leu Asn Gly Ser Leu  
 325 330 335  
 Cys Ser Ala Cys Asn Lys Gly Ile Glu Gly His Tyr Leu Glu Thr Asn  
 340 345 350  
 Glu Arg Ser Gly Pro Gly Pro Ala Asp His Lys Lys Phe His Pro Asp  
 355 360 365  
 Cys Leu Thr Cys Arg Thr Cys Gly Ile Pro Val Lys Gly Glu Tyr Tyr  
 370 375 380  
 Glu Trp Asn Gly Gln Val Tyr Cys Glu Arg Asp Ala Arg Arg Ala Ala  
 385 390 395 400  
 Ala Ser Met Ser Pro Asn Arg Met Arg Arg Pro Thr Leu Pro Ser Ser  
 405 410 415  
 Pro Leu Ala Ala Arg Pro Pro Asn Tyr Pro Pro Met Pro Pro Gly Tyr  
 420 425 430  
 Pro Arg Arg Pro Gly Pro Gly Pro Gly Pro Gly Gly Pro Gly Phe Gly  
 435 440 445  
 Pro Gly Pro Gly Pro Gly Ser Arg Arg Pro Ser Gly Met Leu Asp Ile  
 450 455 460  
 Pro Arg Gly Pro Pro Pro Ala Gly Ala Arg Arg Phe Pro Glu Arg Arg  
 465 470 475 480  
 Thr Thr Arg Leu Met Met Thr  
 485

<210> 40553  
 <211> 220  
 <212> PRT  
 <213> A.fumigatus

<400> 40553

Gly	Met	Tyr	His	Leu	Ser	Ser	Leu	Leu	Tyr	Ser	Ala	Leu	Ile	Leu	Phe
1				5					10					15	
Tyr	Pro	Leu	Gly	Ala	Arg	Glu	Asn	Ala	Ile	Ala	Ile	Asp	Asp	Ile	Asn
		20						25					30		
Gly	Asn	Lys	Leu	Gly	Asn	Leu	Pro	Glu	Arg	Ile	Ile	Pro	Leu	Leu	Ala
	35						40					45			
Glu	Ala	Leu	Glu	Ser	Val	Pro	Ser	Ala	Thr	Pro	Trp	Ser	Lys	Arg	Leu
	50					55					60				
Val	Leu	Gly	Cys	Trp	Ser	Ala	Ala	Phe	Phe	Pro	Leu	Cys	Glu	Ser	Tyr
65					70					75					80
Leu	Pro	Gly	Phe	Glu	Thr	Ala	Leu	Ile	Gly	Phe	Asp	Leu	Trp	Tyr	Ala
				85					90					95	
Ala	Arg	Val	Leu	Arg	Gly	Ser	Pro	Ala	Ala	Val	Asn	Val	Asn	Gln	Lys
			100					105					110		
Val	Leu	Met	Gly	Met	Gly	Arg	Gly	Phe	Leu	Glu	Glu	Ala	Arg	Ala	Ala
		115					120					125			
Gly	Arg	Arg	Val	Phe	Val	Trp	Thr	Val	Asn	Glu	Pro	Ser	Leu	Met	Arg
	130					135					140				
Trp	Ser	Ile	Glu	Gln	Gly	Val	Asp	Gly	Ile	Ile	Thr	Asp	Asp	Pro	Gly
145					150					155					160
Arg	Cys	Arg	Ser	Met	Val	Leu	Asp	Ala	Val	Lys	Gly	Ala	Ser	Pro	Gly
				165					170					175	
Thr	Arg	His	Asp	Glu	Arg	Val	Thr	Val	Ser	Gln	Arg	Ala	Gln	Ala	Trp
		180						185					190		
Ala	Val	Ser	Leu	Leu	Val	Val	Met	Phe	Gly	Trp	Leu	Phe	Arg	Arg	Lys
		195					200					205			
Phe	Leu	Tyr	Pro	Leu	Glu	Lys	Arg	Asp	Lys	Ser	Glu				
	210					215					220				

<210> 40554  
 <211> 287  
 <212> PRT  
 <213> A.fumigatus

<400> 40554

Pro	Gly	Arg	Pro	Pro	Leu	Arg	Glu	Ser	Ser	Gly	Ala	Ser	Trp	Gly	Arg
1				5					10					15	
Pro	Ala	Trp	Tyr	Ile	Gln	His	Ser	Gly	Arg	Thr	Thr	Arg	Ala	Arg	Thr
		20						25					30		
Arg	Thr	Arg	Ala	Lys	Ala	Arg	Pro	Ala	Arg	Pro	Arg	Ala	Arg	Ala	Gly
	35						40					45			
Ala	Thr	Gly	Ile	Pro	Arg	Arg	His	Arg	Gly	Val	Val	Arg	Gly	Thr	Ser
	50					55					60				
Gly	Gln	Arg	Arg	Arg	Trp	Gln	Gly	Arg	Pro	Ala	His	Ser	Ile	Gly	Arg
65					70					75					80
His	Gly	Cys	Ser	Gly	Pro	Ala	Ser	Val	Ala	Phe	Ala	Ile	Tyr	Leu	Thr
				85					90					95	
Ile	Pro	Phe	Val	Val	Leu	Ala	Leu	Tyr	Gly	Asn	Pro	Thr	Gly	Ser	Thr
			100					105					110		

## 17758

Gly Gln Thr Val Gly Val Glu Leu Leu Val Ile Arg Arg Pro Arg Ala  
           115                          120                          125  
 Ala Ser Leu Val Arg Phe Glu Ile Val Ala Phe Asp Thr Leu Val Ala  
           130                          135                          140  
 Cys Thr Ala Lys Gly Ser Val Gln Phe Val Ile Val Leu Cys Thr Val  
 145                          150                          155                          160  
 Trp Ala Val Ile Gln His Ile Glu Ile Gly Arg Leu Glu Trp Arg Ser  
                           165                          170                          175  
 Ala Met Ala Ala Asp Glu Ala Phe Ala Val Val Ser Pro Ser Gln Ala  
                           180                          185                          190  
 Ala Ile Leu Gly Arg Asp Arg Leu Pro Gln Asn Arg Leu Thr Ala Ser  
           195                          200                          205  
 Pro Thr Thr Ser Phe Gly Thr Arg Trp Arg Thr Asn Arg Arg Leu Cys  
           210                          215                          220  
 Arg Arg Ser Ser Asp Cys Gly Pro Phe Arg Gly Leu Gly Leu Arg Ile  
 225                          230                          235                          240  
 Val Arg Phe Leu Thr Tyr Glu Arg Asp Ala Arg Leu Ala Arg Leu Ala  
                           245                          250                          255  
 Arg Leu Trp Arg Ser Gly Gly Cys Leu Val Tyr Tyr Gln Gly Gln Thr  
           260                          265                          270  
 Thr Phe Ile Asp Ser Arg Val Arg Arg Gly Val Gly Thr Glu Lys  
           275                          280                          285

&lt;210&gt; 40555

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40555

Tyr Ser Pro His Pro Asn Leu Thr Gln Pro Asn Met Asn Pro Ser Lys  
 1                          5                          10                          15  
 Ser Lys Pro Gln Thr Ile Ala His Arg Gly Arg Ile Lys His Pro Thr  
           20                          25                          30  
 Ala Thr Asn Pro Arg Ser Cys Gln Tyr Pro Glu Asn Thr Leu Glu Ser  
           35                          40                          45  
 Phe Arg Ala Ala Ala Ala Ala Gly Cys Asp Ala Ile Glu Thr Asp Leu  
           50                          55                          60  
 Arg Val Ser Arg Asp Gly Val Ile Val Leu Cys His Asp Arg Ser Leu  
 65                          70                          75                          80  
 Glu Arg Val Tyr Gly Val Lys Arg Leu Val Asp Glu Cys Thr Trp Ala  
           85                          90                          95  
 Glu Leu Gln Ser Leu Lys Thr Thr Gln Ala Pro His Val Arg Met Pro  
           100                          105                          110  
 Arg Leu Val Asp Phe Leu Ala Val Leu Cys Glu Pro Gly Trp Glu Glu  
           115                          120                          125  
 Met Trp Ala Val Leu Asp Ile Lys Val Cys Thr Thr Ser Leu Val Tyr  
           130                          135                          140  
 Ser Thr Leu Leu Leu Phe Tyr Ser Thr Leu Trp Gly Gln Gly Lys Thr  
 145                          150                          155                          160  
 Leu

&lt;210&gt; 40556

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus



&lt;400&gt; 40556

Ser Gln Leu Gln Cys Arg Pro Glu Thr Glu Gln Val Met Gln Glu Ile  
 1 5 10 15  
 Ile Leu Ala Glu Phe Arg His Tyr Thr Ile Ile Ala Val Arg His Arg  
 20 25 30  
 Leu Glu Met Ile Val Asp Phe Asp Arg Val Val Val Met Asp Arg Gly  
 35 40 45  
 Glu Val Val Glu Val Gly Asn Pro Ala Ala Leu Lys Glu Lys Ala Gly  
 50 55 60  
 Ser Pro Phe Gly Gln Leu Gly Ala Ala Ala Ala Tyr Gln Leu Cys  
 65 70 75 80  
 Ala Thr Ser Val Gln Tyr Ser Phe Tyr Pro Tyr Leu Ile Ser Met Glu  
 85 90 95  
 Ile Tyr Leu

&lt;210&gt; 40557

&lt;211&gt; 262

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40557

Glu Thr Ile Ala Asp His Arg Pro Ala Gly Ala Gly Gln Gly Gly Leu  
 1 5 10 15  
 Thr Ala Ala Ala Arg Leu Lys Met Leu Gly Val Asp Ser Leu Ile Ile  
 20 25 30  
 Asp Lys Asn Glu Ser Val Gly Asp Asn Trp Arg Leu Arg Tyr Arg Gln  
 35 40 45  
 Leu Val Leu His Asp Pro Val Trp Tyr Asp His Met Pro Tyr Val Lys  
 50 55 60  
 Phe Pro Ala His Trp Pro Ile Phe Thr Pro Lys Asp Lys Leu Ala Glu  
 65 70 75 80  
 Phe Phe Glu Cys Tyr Val Lys Met Leu Glu Leu Asn Val Trp Asn Arg  
 85 90 95  
 Thr Thr Ile Ser His Cys Glu Trp Asp Glu Gln Thr Thr Thr Trp Thr  
 100 105 110  
 Val Ser Leu Ser Gln Lys Gln Ser Asp Gly Thr Cys Gln Val Arg Thr  
 115 120 125  
 Phe His Pro Arg His Ile Ile Gln Ala Thr Gly His Ser Gly Lys Met  
 130 135 140  
 Lys Met Pro Tyr Ile Pro Gly Met Glu Asn Phe Gln Gly Lys Arg Leu  
 145 150 155 160  
 Cys His Ser Ser Gln Phe Pro Gly Ala Glu Lys Asn Gly Ser Gly Lys  
 165 170 175  
 Lys Ala Ile Val Val Gly Ser Cys Asn Ser Ala His Asp Ile Ala Gln  
 180 185 190  
 Asp Tyr Gln Glu Lys Gly Tyr Asp Ile Thr Met Val Gln Arg Ser Thr  
 195 200 205  
 Thr Cys Val Val Ser Ser Ala Ile Thr Lys Ile Gly Leu Lys Gly  
 210 215 220  
 Leu Tyr Glu Glu Asp Gly Pro Pro Val Glu Asp Ala Asp Leu Leu Leu  
 225 230 235 240  
 His Gly Thr Pro Asn Thr Ser Leu Glu Ser Ala Ser Ser Ser His His  
 245 250 255  
 Phe Lys Arg Ser Arg Ala

260

<210> 40558  
 <211> 270  
 <212> PRT  
 <213> A.fumigatus

<400> 40558  
 Ser Ser Cys Ser Val Leu Ala Pro Arg Asp Glu Asp Glu Thr Ala Leu  
 1 5 10 15  
 Gly Ala Ile Ala Arg Leu Lys Thr Phe Asn Glu Ala Val Met Pro Glu  
 20 25 30  
 Asp Arg Asp Gly Pro Gly Glu Glu Asp Ile Val Pro Asp Thr Asn Trp  
 35 40 45  
 Pro Asp Arg Gly Leu Val Lys Leu Cys Asn Val Ser Ala Arg Tyr Ile  
 50 55 60  
 Ser Thr Thr Val Ser Asn Thr Asp Ser Glu Ser Asp Ser Asn Ser Val  
 65 70 75 80  
 Val His Gly Ala Ala Lys Pro Pro Leu Ala Leu Lys Asn Ile Thr Leu  
 85 90 95  
 Thr Ile His Pro Gly Glu Lys Val Ala Ile Cys Gly Arg Thr Gly Ser  
 100 105 110  
 Gly Lys Ser Ser Phe Leu Ala Leu Leu Leu Lys Leu Leu Asp Pro Leu  
 115 120 125  
 Pro Ser Thr Ser Asn Asn His Asn His Glu Pro Pro Val Leu Ile Asp  
 130 135 140  
 Asn Ile Pro Leu His Arg Ile His Arg Ala Thr Leu Arg Gln Arg Leu  
 145 150 155 160  
 Ile Ala Val Pro Gln Asp Pro Val Phe Leu Pro Asp Gly Thr Ser Phe  
 165 170 175  
 Arg Ala Asn Leu Asp Pro Thr Asn Thr Ala Thr Pro Glu Glu Cys Gln  
 180 185 190  
 Arg Val Leu Glu Ala Val Gln Leu Trp Gly Phe Ile Gln Glu Gln Ala  
 195 200 205  
 Glu Gly Leu His Ala Pro Ile Arg Ala Gly Thr Leu Ser Ala Gly Gln  
 210 215 220  
 Arg Gln Leu Phe Ser Leu Gly Arg Ala Met Leu Arg Val Pro Leu Ser  
 225 230 235 240  
 Ala Cys Val Arg Arg Leu Pro Pro Ile Arg Lys Gly Pro Arg Val Met  
 245 250 255  
 Ile Lys Glu Gly Ser Ser Ser Ser Met Lys Ser Ala Pro Val  
 260 265 270

<210> 40559  
 <211> 202  
 <212> PRT  
 <213> A.fumigatus

<400> 40559  
 Arg Ala Phe Thr Arg Arg Met Val Arg Arg Trp Lys Met Gln Thr Phe  
 1 5 10 15  
 Tyr Cys Thr Val Pro Leu Thr Pro Val Leu Lys Val Leu Gln Ala His  
 20 25 30  
 Ile Thr Ser Lys Glu Val Glu His Asp Arg Glu Leu Leu Asp Gly Leu  
 35 40 45  
 Glu Arg Ala Gly Phe Lys Val Asp His Gly Pro Asp Gly Ser Gly Leu

## 17761

50		55		60
Leu Met Lys Tyr Phe Gln Arg Gly Gly Gly Tyr Tyr Ile Asp Val Gly				
65		70		75
Ala Ser Gln Met Ile Ile Asp Gly Lys Ile Lys Val Lys Gln Gly Gln				80
	85		90	95
Glu Ile Ala Glu Val Leu Pro His Gly Leu Arg Phe Ala Asp Gly Ser				
	100		105	110
Glu Leu Glu Ala Asp Glu Ile Ile Phe Ala Thr Gly Tyr Asp Asn Met				
	115		120	125
Arg Thr Gln Thr Gly Met Leu Leu Gly Asn Lys Val Ala Asp Lys Val				
	130		135	140
Ser Asp Val Trp Gly Tyr Asn Glu Glu Gly Glu Ile Arg Thr Met Trp				
145		150		155
Gln Asp Ser Gly His Gln Gly Phe Tyr Phe His Gly Gly Asn Leu Ala				
	165		170	175
Thr Ala Arg Tyr Tyr Ser Lys Val Leu Ala Leu Gln Ile Lys Ala Leu				
	180		185	190
Glu Glu Gly Ile His Arg Tyr Gly Glu Ile				
	195		200	

<210> 40560  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 40560  
 Arg His Asn Lys Thr Val Leu Val Lys Thr Asn Cys Leu Ser Ser Glu  
 1 5 10 15  
 Thr Ser Thr Thr Thr Thr Gly Ser Ser Ser Ala Thr Thr Ser Ala Pro  
 20 25 30  
 Thr Thr Glu Ala Ala Ser Thr Lys Thr Thr Ser Pro Arg Ser Ser Thr  
 35 40 45  
 Ser Ser Gly Gly Ala Ala Ser Ala Thr Thr Arg Cys Thr Thr Ser Thr  
 50 55 60  
 Ser Gly Ala Ser Ala Thr Thr Ser Ala Thr Gly Gly Leu Leu Arg Phe  
 65 70 75 80  
 Arg Ala

<210> 40561  
 <211> 134  
 <212> PRT  
 <213> A.fumigatus

<400> 40561  
 Trp His Ser Ile Val Ala Ser Arg Arg Thr Trp Thr Arg Ala Val Tyr  
 1 5 10 15  
 Phe Tyr Asn Ile Val Ala Ile Glu Ala Asn Phe Asp Met His Asn  
 20 25 30  
 Lys Ile Ser Arg Lys Lys Lys Phe Leu Gln Glu Leu Pro Phe Ser His  
 35 40 45  
 Asn Ala Ile Ile Arg Gln Tyr Trp Ser Arg Gln Thr Val Tyr Arg Arg  
 50 55 60  
 Lys Pro Pro Leu Pro Pro Arg Gly Pro Pro Leu Pro Pro Pro Leu Leu  
 65 70 75 80  
 Pro Pro Arg Lys Pro Pro Pro Pro Lys Pro Pro Pro Leu Gly Pro Pro

## 17762

	85		90		95
Arg	Pro	Arg	Gly	Ala	Pro
	100		105		110
Pro	Leu	Ala	Pro	Pro	Arg
	115		120		125
Phe	Gly	Pro	Arg	Gln	Ser
	130				

&lt;210&gt; 40562

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (67)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40562

Cys	His	Val	Leu	His	Arg	Leu	Pro	Ser	Pro	His	Arg	Ser	Glu	Leu	Leu
1			5					10					15		
Arg	Leu	Phe	Arg	Ile	Gly	Arg	Arg	Arg	Val	Ile	Val	Leu	Ser	Leu	Pro
		20				25						30			
Pro	Thr	Tyr	Cys	Ala	Arg	Leu	Pro	Asn	Arg	Trp	Ser	Glu	Leu	Ala	Asp
	35					40				45					
Thr	Ala	Met	Ala	Ser	Glu	Glu	Ser	Lys	Glu	Leu	Pro	Val	Arg	Pro	Ala
	50				55					60					
Glu	Gly	Xaa	Asp	Ala	Asn	Ala	Thr	Ala	Pro	Pro	Lys	Ala	Ala	Lys	Ala
65				70				75					80		
Thr	Ala	Ala	Ser	Asn	Asn	Asp	Ser	Leu	Pro	Asp	Phe	Ile	Ile	Glu	Arg
			85					90					95		
Asn	Lys	Leu	Phe	Glu	Glu	Leu	Trp	Gln	Gln	Tyr	Leu	Glu	Glu	Leu	Lys
		100					105					110			
Asn	Lys	Pro	His	Pro	Glu	Ile	Asn	Val	Leu	Leu	Asp	Leu	Gly	Asp	Gly
		115				120					125				
Asn	Pro	Ser	Pro	Val	Pro	Ala	Lys	Ala	Trp	Glu	Thr	Thr	Pro	Gly	Ser
	130				135					140					
Phe	Leu	Arg	Asp	Val	Pro	Lys	Asp	Ile	Ser	Ala	Asn	Val	Val	Leu	Ala
145			150					155						160	
Lys	Ile	Asp	Gly	Lys	Glu	Leu	Trp	Asp	Leu	Asn	Arg	Pro	Leu	Glu	Arg
		165					170						175		
Asp	Cys	Thr	Val	Ser	Tyr	Val	Pro	Phe	Asp	Ser	Pro	Glu	Gly	Arg	Glu
		180				185						190			
Val	Phe	Trp	His	Ser	Ser	Ala	His	Cys	Leu	Gly	Glu	Ala	Cys	Glu	Cys
	195				200					205					
Glu	Tyr	Gly	Cys	Leu	Leu	Ser	His	Gly	Pro	Pro	Thr	Pro	Gln	Gly	Phe
	210				215					220					
Phe	Tyr	Asp	Met	Ala	Met	Pro	Asp	Lys	Ser	Val	Cys	His	Ser	Tyr	Phe
225				230					235						240
Phe	Pro	Thr	Cys	Ala	Leu										
			245												

&lt;210&gt; 40563

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40563

Trp Asn Lys Ser Leu Thr Leu Glu Asn Ser Arg Val Val Arg Glu Ser  
 1 5 10 15  
 Asp Trp Pro Ala Leu Asp Ser Arg Ala Ser Arg Ile Phe Lys Glu Lys  
 20 25 30  
 Gln Ser Phe Asp Arg Leu Glu Val Thr Lys Glu Asn Leu Lys Lys Met  
 35 40 45  
 Phe Ala Tyr Ser Lys Tyr Lys Leu His Tyr Ile Asp Lys Leu Val Thr  
 50 55 60  
 Gly Glu Lys Ser Thr Val Tyr Arg Cys Gly Thr Leu Val Asp Leu Cys  
 65 70 75 80  
 Arg Gly Pro His Ile Gln Asn Thr Gly Lys Ile Lys Thr Phe Lys Ile  
 85 90 95  
 Met Gln Val

&lt;210&gt; 40564

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40564

Asn Ser Ser Ala Tyr Phe Leu Gly Asp Gln Asn Asn Asp Ser Leu Gln  
 1 5 10 15  
 Arg Ile Arg Gly Val Ala Phe Pro Asp Lys Lys Gln Met Gln Glu His  
 20 25 30  
 Leu Lys Phe Leu Glu Glu Ala Glu Lys Arg Asn His Leu Arg Ile Gly  
 35 40 45  
 Lys Asp Gln Glu Leu Phe Phe Phe Asp Glu Val Ser Pro Gly Cys Pro  
 50 55 60  
 Phe Leu Leu Pro Asn Gly Thr Lys Ile Phe Asn Ala Leu Gln Ala Leu  
 65 70 75 80  
 Leu Arg Ala Glu Tyr Arg Lys Arg Gly Tyr Gln Glu Val Gln Thr Pro  
 85 90 95  
 Asn Met Tyr Asp Val Gly Ile Trp Lys Arg Ser Gly His Trp Ala His  
 100 105 110  
 Tyr Lys Asp Asp Met Phe Lys Leu Asp Val Glu Lys Arg Glu Trp Ala  
 115 120 125  
 Leu Lys Pro Met Asn Cys Pro Gly His Phe Val Leu Phe Gly His Arg  
 130 135 140  
 Glu Arg Ser Tyr Arg Glu Leu Pro Leu Arg Ile Ala Asp Phe Gly Val  
 145 150 155 160  
 Leu His Arg Asn Glu Ala Ser Gly Ala Leu Ser Gly Leu Thr Arg Val  
 165 170 175  
 Arg Lys Phe Gln Gln Asp Asp Thr His Ile Phe Cys Thr Gln Asp Gln  
 180 185 190  
 Val Arg Gly Asp Leu Thr Leu Ser Phe Thr Ser Tyr Cys Gln Leu Thr  
 195 200 205  
 Pro Pro Lys Ile Ala Ser Glu Ile Gln Gly Leu Phe Asp Phe Leu Gln  
 210 215 220  
 Ser Ile Leu Arg Ile Val Arg Gly Leu Leu Ser Ser  
 225 230 235

&lt;210&gt; 40565

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40565

Ala	Lys	Phe	Asp	Pro	Thr	Leu	Thr	Arg	Ser	Gln	Thr	Val	Met	Ser	Val
1				5					10				15		
Phe	Ser	Ser	Met	Arg	Tyr	Cys	Leu	Gly	Asp	Pro	His	Asp	His	Gly	Ala
			20					25					30		
Leu	Trp	Ala	Ala	Leu	Gly	Phe	Met	Pro	Phe	Gly	Leu	Phe	Phe	Asp	Phe
			35				40					45			
Met	Asp	Gly	Lys	Ile	Ala	Arg	Trp	Arg	Lys	Lys	Ser	Ser	Leu	Met	Gly
	50					55					60				
Gln	Glu	Leu	Asp	Ser	Leu	Ala	Asp	Leu	Val	Trp	Gln	Leu	Arg	Thr	Pro
65					70					75					80
Glu	Gly	Ser	Arg	Arg	Ser										
					85										

&lt;210&gt; 40566

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40566

Ser	Pro	Ser	Val	Val	Ala	Asn	Phe	Gln	Pro	Asn	Leu	Gln	Ile	Lys	Asp
1				5					10					15	
Lys	Val	Asp	Asp	Leu	Tyr	Ala	Gly	Asn	Thr	Thr	Asn	Leu	Thr	Gln	Lys
			20					25					30		
Val	Gln	Met	Gly	Ala	Arg	Leu	His	Gly	Arg	Gln	Val	Trp	Asp	Ala	Glu
			35				40					45			
Ala	Gly	Ser	Leu	Val	Val	Lys	Gln	Tyr	Ser	Glu	Ala	Thr	Ala	Ala	Tyr
	50					55					60				
Phe	Phe	Pro	Ile	Leu	Ala	Thr	Val								
65					70										

&lt;210&gt; 40567

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40567

Arg	His	Phe	Thr	Val	Ser	Arg	Leu	Pro	Pro	Phe	Glu	Asn	Phe	Ser	Gly
1				5					10					15	
Leu	Arg	Thr	Pro	Asp	Ile	Ser	Ile	Asn	Ser	Asn	Thr	Thr	Ile	Lys	Met
			20					25					30		
Ser	Phe	Arg	Gly	Gly	Gly	Arg	Gly	Gly	Phe	Ala	Ser	Gly	Ala	Asn	Arg
		35				40						45			
Gly	Gly	Asn	Phe	Gly	Gly	Arg	Gly	Gly	Glu	Phe	Glu				
	50					55					60				

&lt;210&gt; 40568

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40568

Thr	Tyr	Pro	Ser	Pro	Leu	Val	Ala	Asn	Arg	Val	Thr	Asp	Pro	Leu	His
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 17765

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1             5             10             15
Gln Thr Pro Ile Gly Lys Val Asp Glu Val Leu Gly Pro Ile Asn Gln
                20                25                30
Val Tyr Phe Thr Ile Lys Pro Gln Glu Gly Ile Val Ala Thr Ser Phe
                35                40                45
Lys Pro Gly Asp Lys Val Tyr Ile Gly Gly Asp Lys Leu Leu Pro Leu
                50                55                60
Glu Lys Tyr Val Leu Gln His Leu
65                70

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&lt;210&gt; 40569

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40569

```

Ile Ser Phe Gly Leu Ala Pro Ala Ala Cys Ala Phe Ala Leu Gly Ala
1             5             10             15
Arg Thr Leu Val Asp His Leu Leu Leu Ala Phe Phe Val Leu Cys Gly
                20                25                30
Leu Thr Arg Leu Ala Arg Phe Asn Val Thr Val Ala Val Leu Pro Lys
                35                40                45
Asp Lys Thr Gly Lys Ser Lys Tyr Phe Glu Gly Thr Pro Ile Pro Thr
                50                55                60
Thr Leu Gly Ile Ala Ser Leu Met Ala Tyr Trp Val Ser Gln Gly Trp
65                70                75                80
Ile Leu Lys Asp Leu Pro Leu Gly Leu Ala Ala Gln Gly Thr Pro Phe
                85                90                95
Glu Phe His Pro Val Val Leu Leu Phe Val Leu His Gly Cys Met Met
                100                105                110
Val Ser Lys Ser Ile Lys Ile Pro Lys Pro
                115                120

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&lt;210&gt; 40570

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40570

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Ala Ser Gln Tyr Pro His Ala Leu Leu Cys Leu Leu Pro Lys Met Trp
1             5             10             15
Leu Asp Arg Ile Ser Gly His Ser Thr Pro Ser Cys Val Pro Leu Asp
                20                25                30
Ser Arg Ser Asn Ser Pro Ala Pro Arg Arg Ser Ser Ser Leu Leu Ser
                35                40                45
Pro Ala Pro Pro Asn Asn Arg Pro Ser Pro Asn Arg Gln Gly Ser Ser
                50                55                60
Leu Ser Val Leu Leu Thr Pro Ser Asp Ser Thr Thr Ser Leu Pro Ala
65                70                75                80
Thr Ala Arg Gly Val Asn Gly Ser Val Leu Lys Gln Gly Ala Ala Arg
                85                90                95
Ser Arg Pro Ser Asp Val Ala Asp Pro Leu Glu Val Leu Lys Asp Ile
                100                105                110
Ile Gly Lys Gln Lys Ala Asp Val Glu Thr Asn Glu Cys Leu Lys Ala
                115                120                125
Ser Ala Pro Glu Ala Lys Pro Leu His Leu Val Glu Thr Ile Asp Phe

```

130		135		140
Gly Asp Leu Ser Leu	Glu Glu Phe Val Ser Gln	Val Gly Glu Pro Arg		
145	150	155	160	
Arg Ala Thr Ser Ala	Asp Val Ser Ala Gln Thr	Leu Gln Gln Phe Glu		
	165	170	175	
Lys Glu Arg Asp Lys	Tyr Gln Glu Leu His Ala	Ala Ile Thr Ser Cys		
	180	185	190	
Asp Asp Val Ser Lys	Ser Val Glu Val Tyr Leu	Asn Asp Phe Gln Ser		
	195	200	205	
Glu Leu Gly Ala Val	Ser Ala Glu Ile Glu Thr	Leu Gln Thr Arg Ser		
	210	215	220	
Val Gln Leu Asn Ala	Met Leu Glu Asn Arg Arg	Lys Val Glu Gln Leu		
225	230	235	240	
Leu Gly Pro Ala Val	Glu Glu Ile Ser Ile Ser	Pro Arg Ala Val Arg		
	245	250	255	
Met Ile Ala Glu Gly	Pro Ile Asp Glu Asn Trp	Val Lys Ala Leu Asn		
	260	265	270	
Glu Ile Glu Ala Arg	Met Thr Ser Ile Glu Ala	Lys Val Ser Gly Ser		
	275	280	285	
Ser Ser Thr Lys Ala	Ile Glu Asp Val Arg Pro	Leu Leu Asn Asp Ile		
	290	295	300	
Lys Asn Lys Val Ser	Ile Ile Ser Ile Gly Pro	Asn Phe Glu Ser Val		
305	310	315	320	
Leu Thr Arg Val Ala	Gly Ser Gly Lys Asp Pro	Gly Leu Pro Ser Val		
	325	330	335	
Pro Asp Gln Ser Ile	Ala Phe Ser Glu His Gln	Cys Ser Asn His Pro		
	340	345	350	
Ala Ala Ala Leu Gly	Gln Val			
	355			

&lt;210&gt; 40571

&lt;211&gt; 334

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (329)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40571

Phe Glu Phe Leu Ser Tyr	Phe Tyr Ala Tyr Gly	Leu Thr Arg Ser Leu
1	5	10
Asn Cys Gln Val Ile His	Ala Gly Ile Tyr Tyr Gly	Thr Asp Ser Leu
	20	25
Lys Ala Lys Leu Cys Ile	Arg Gly Lys Gln Met Met	Tyr Asp Leu Cys
	35	40
Ala Lys Arg Gly Ile Pro	His Arg Asn Thr Lys Lys	Trp Ile Val Ala
	50	55
Gln Asn Glu Glu Gln Trp	Ala Ala Ala Leu Gly	Thr His Lys Leu Ala
65	70	75
Gln Thr Leu Gly Val Pro	Thr Arg Leu Val Gly	His Glu Glu Ala Gln
	85	90
Arg Arg Glu Pro Glu Val	Gln Ala Leu Ala Gly	Ile Val Glu Ser Asp
	100	105
Thr Thr Gly Ile Val Asp	Ser His Ala Leu Met	Thr Tyr Leu Gln Gly



17767

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      115              120              125
Asp Phe Glu Asp Arg Gly Gly Asp Cys Ala Phe Leu Thr Asn Val Thr
  130              135              140
Gly Ile Glu Ala Leu Asp Gly Gly Arg Ala Gly Tyr Arg Ile Thr Ala
  145              150              155              160
Val Ser Ala Asp Gly Ala Glu Thr Ser Ile Thr Ala Glu Thr Leu Ile
      165              170              175
Asn Ser Ala Gly Asn Gly Ala Cys Ala Ile Asn Asn Met Val Leu Pro
      180              185              190
Arg Glu Arg His Arg Thr Pro Phe Tyr Ala Lys Gly Thr Tyr Phe Ser
      195              200              205
Tyr Ser Ala Ser Phe Pro Arg Thr Ser Val Leu Val Tyr Pro Asp Thr
      210              215              220
Leu Pro Gly His Gly Gly Leu Gly Thr His Leu Thr Leu Asp Leu Gly
  225              230              235              240
Gly Arg Ile Arg Phe Gly Pro Asp Val Glu Trp Val Asp Asp Pro Thr
      245              250              255
Asp Leu Lys Pro Ser Pro Ala Arg Val Gln Gln Ala Leu Pro Glu Ile
      260              265              270
Lys Ala Tyr Leu Pro Arg Val Ala Pro Glu Ala Ile Ser Leu Asp Tyr
      275              280              285
Cys Gly Ile Arg Pro Lys Leu Gly Arg Gly Gly Ala Val Asn Thr Gly
      290              295              300
Lys Gly Phe Gln Asp Phe Val Ile Gln Glu Glu Ala Gly Phe Pro Ser
  305              310              315              320
Ser Thr Thr Gly Gly Arg Lys Asp Xaa Glu His Arg Cys Gly
      325              330

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<210> 40572

<211> 134

<212> PRT

<213> A.fumigatus

<400> 40572

```

Arg Glu Trp Gln Ala Val Glu Arg Ile Arg Asp Tyr Leu Val Ser Gln
  1              5              10              15
Ile Arg Ala Leu Arg Ser Pro Asn Ile Asn Ala Gln Ile Ile Gln Gln
      20              25              30
Gln Arg Leu Val Lys Phe Lys Asp Leu Tyr Ser Tyr Ile Ser Arg Ala
      35              40              45
His Pro Gln Leu Thr Gly Glu Ile Thr Gln Ala Tyr Ile Asn Thr Met
      50              55              60
Arg Trp Tyr Tyr Leu Ser His Phe Ser Arg Tyr Leu Gln Ala Leu Glu
      65              70              75              80
Lys Ile Lys Val Tyr Pro Ser Asp Arg Asn Asp Ile Leu Gly Gly Asp
      85              90              95
Pro Ser Ala Pro Lys Thr Gly Ser Ser Phe Leu Ser Ser Cys Ser Ser
      100              105              110
Leu Gln Ser Arg Leu Met Phe His Arg Ala Tyr Tyr Leu Leu Gly Ser
      115              120              125
Leu Trp Val Arg Cys Ala
      130

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<210> 40573

<211> 392

<212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40573

Cys Pro Arg Ser Glu His Cys Val Leu Arg Thr Ser Met Leu Lys Ser  
 1 5 10 15  
 Ser Ser Ser Ser Ala Trp Ser Ser Leu Arg Thr Cys Thr Val Thr Ser  
 20 25 30  
 Arg Glu Leu Ile Leu Ser Leu Arg Glu Arg Leu Arg Arg His Thr Leu  
 35 40 45  
 Thr Leu Cys Ala Gly Thr Ile Ser Leu Ile Ser Val Ala Ile Cys Arg  
 50 55 60  
 Pro Leu Lys Arg Ser Lys Ser Ile Arg Val Ile Gly Thr Ile Tyr Leu  
 65 70 75 80  
 Glu Glu Thr Leu Pro Arg Arg Arg Gln Val Arg His Ser Cys Pro Val  
 85 90 95  
 Ala Leu Leu Cys Ser Gln Gly Leu Cys Phe Ile Gly His Ile Ile Ser  
 100 105 110  
 Ser Gly Arg Ser Gly Ser Ala Ala His Asp Pro Phe Ser Leu Gly Arg  
 115 120 125  
 Arg Ile Asp Ile Leu Arg Thr Ser Asn His Met Ala Leu Ser Ala Tyr  
 130 135 140  
 Leu Ala Glu Glu Asp Asn Ala Phe His Gly Ile Glu Val Pro Phe Arg  
 145 150 155 160  
 Asn Phe Asn Leu Ala Leu Val Asp Asn Ile Ser Ala Glu Tyr Ser Phe  
 165 170 175  
 Met Thr Glu Met Phe Ser Thr Leu Ser Phe His Gln Ile Ser Arg Lys  
 180 185 190  
 Ala Val Glu Ile Phe Glu Pro Val Phe Ala Leu Gly Gln Gly Leu Thr  
 195 200 205  
 Lys Gln Leu Ile Glu Asn Ser Thr Asp Ser Leu Gly Val Leu Ile Cys  
 210 215 220  
 Val Arg Leu Asn Gln Gln Ala Ala Phe Glu Leu Gln Arg Arg Lys Val  
 225 230 235 240  
 Pro Val Ala Asp Ser Tyr Ile Asn Gly Ile Asn Met Gln Leu Trp Pro  
 245 250 255  
 Arg Phe Gln Val Ile Met Asp Leu His Arg Glu Ser Leu Lys Arg Val  
 260 265 270  
 Ala Ser Asn Thr Gly Arg Ser Ala Val Ser Ala Leu Ser Leu Ala Gly  
 275 280 285  
 Gly Asp Asp Leu Thr Gln Ser Ser Ala Pro His Phe Leu Thr Gln Arg  
 290 295 300  
 Phe Gly Gln Leu Leu His Gly Ile Leu Val Leu Ser Ser Asp Ala Gly  
 305 310 315 320  
 Asp Asp Glu Pro Val Ala Asn Ser Leu Lys Arg Leu Val Ala Glu Phe  
 325 330 335  
 Asp Gly Leu Leu Thr Lys Leu Ser Arg Ser Gly Gly Asp Ala Lys Arg  
 340 345 350  
 Arg Glu Lys Phe Leu Phe Asn Asn Tyr Ser Leu Val Leu Thr Ile Ile  
 355 360 365  
 Ser Val Ser Arg Ile Ile His Ser Gly Met Cys Leu Ile Ser Asp Arg  
 370 375 380  
 Glu His Arg Ile Pro Met Ala Asn  
 385 390

&lt;210&gt; 40574

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40574

```

Asn Gly Val Arg Cys Arg Ser Arg Gly Arg Thr Met Leu Leu Ile Ala
1      5      10      15
Gln Ala Pro Phe Pro Ala Leu Leu Met Ser Val Ser Ala Val Met Glu
      20      25      30
Val Ser Ala Pro Ser Ala Asp Thr Ala Val Ile Leu Tyr Pro Ala Arg
      35      40      45
Pro Pro Ser Ser Ala Ser Ile Pro Val Thr Phe Val Arg Asn Ala Gln
      50      55      60
Ser Pro Pro Arg Ser Ser Lys Ser Pro Cys Arg Tyr Val Met Ser Ala
65      70      75      80
Trp Leu Ser Thr Met Pro Val Val Ser Leu Ser Thr Ile Pro Ala Arg
      85      90      95
Ala Cys Thr Ser Gly Ser Arg Arg Trp Ala Ser Ser Trp Pro Thr Ser
      100      105      110
Arg Val Gly Thr Pro Arg Val Cys Ala Ser Leu Cys Val Pro Ser Ala
      115      120      125
Ala Ala His Cys Ser Ser Phe Cys Ala Thr Ile His Phe Phe Val Leu
      130      135      140
Arg Trp Gly Met Pro Arg Phe Ala Gln Arg Ser Tyr Ile Ile Cys Leu
145      150      155      160
Pro Arg Met Gln Ser Leu Ala Leu Arg Glu Ser Val Pro
      165      170

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&lt;210&gt; 40575

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40575

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Ser Lys Ser Met Leu Gly Ser Cys Ile Pro Val Ser Val Arg Leu Leu
1      5      10      15
Ile Cys His Gly Tyr Pro Val Leu Pro Val Arg Asp Gln Thr His Ser
      20      25      30
Gly Val Asp Asp Ser Ala Tyr Thr Asp Asp Gly Gln His Gln Arg Ile
      35      40      45
Ile Ile Glu Gln Lys Phe Leu Pro Ser Leu Cys Val Thr Pro Ala Ala
      50      55      60
Thr Lys Phe Gly Gln Gln Ala Ile Lys Phe Gly Asp Gln Ser Leu Gln
65      70      75      80
Thr Val Arg Asn Arg Phe Val Ile Pro Ser Ile Ala Ala Gln His
      85      90      95

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&lt;210&gt; 40576

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40576

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Phe Thr Val Tyr Phe Ala Ala Phe Leu Leu Ser Gly Cys Pro Ala Ser
1      5      10      15
Met His Met Ser Pro Leu Leu Leu His Thr Ser Thr Ile Glu Arg Pro
      20      25      30

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## 17770

Ser Tyr Asn Cys Leu Gln Leu Ser Ser Tyr Ser Gly Trp Ala Leu Ser  
 35 40 45  
 Thr Asp Ile Cys Ser Phe Gln His Glu Thr Phe Glu Ser Ala Asp Ala  
 50 55 60  
 Gly Ala Ser Ala Thr Tyr Pro Met Gln Cys Ser Ala Leu Arg Lys Asn  
 65 70 75 80  
 Gly His Val Val Ile Lys Gly Arg Pro Cys Lys Ile Val Asp Met Ser  
 85 90 95  
 Thr Ser Lys Thr Gly Lys His Gly His Ala Lys Val His Ile Val Ala  
 100 105 110  
 Leu Asp Ile Phe Thr Gly Lys Lys Leu Glu Asp Leu Ser Pro Ser Thr  
 115 120 125  
 His Asn Met Asp Val Pro Asn Val Thr Arg Arg Glu Tyr Gln Leu Val  
 130 135 140  
 Ser Arg Pro Ala Lys Ala Met Ser Ile Ser Pro Pro Asp Val Ser Leu  
 145 150 155 160  
 Ile Cys Phe Ala Ala  
 165

&lt;210&gt; 40577

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (53), (66)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40577

Ser Trp Gly Asn Gln Trp Tyr Val Cys Asp Tyr Met Ala Gly Tyr Gln  
 1 5 10 15  
 Leu Asp Thr Cys Val Ala Val Phe Cys Leu Met Met Ser Thr Glu Gly  
 20 25 30  
 Tyr Phe Lys Pro Arg Ile Leu Lys Pro Ala Asp Leu Leu Leu Arg His  
 35 40 45  
 Ala His Cys Leu Xaa Cys Arg Val Gly Cys Glu Ser Val Arg Val Gln  
 50 55 60  
 Thr Xaa Phe  
 65

&lt;210&gt; 40578

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40578

Val Asn Pro His Ile Asn Leu Phe Phe Phe Asn Ser Arg Gly Ser Val  
 1 5 10 15  
 Gly Arg Pro Val Thr His Arg Lys Gly Arg Gly Trp Arg Gly Gly Phe  
 20 25 30  
 Leu Gly Ser Ala Ile Glu Gln Tyr Ile Lys Leu Asp Met Asn Lys Trp  
 35 40 45  
 Leu Arg Val Leu Arg His Leu Glu Leu Met Pro Arg Pro Leu Gly Gln  
 50 55 60  
 Asp Trp Ser Glu Ile Trp Leu Gln Lys Phe Ser Gly Thr Ile Thr Ile

## 17771

65		70		75		80									
Trp	Pro	Lys	Ser	Ile	Pro	Ser	Asp	Phe	Tyr	His	Ile	Leu	Ser	Asp	Leu
			85						90					95	
Ser	Pro	Glu	Arg	Ile	Ala	Arg	Met	Leu	His	Val	Gly	Lys	Gln	Ser	Ala
			100					105					110		
Phe	Pro	Lys	Ile	Gln	Phe	Ile	Lys	Asn	Arg	Leu	Lys	Ile	Glu	Asn	Ala
		115					120					125			
Ile	Met	Gln	Gly	Leu	Gln	Gln	Cys	Ser	Ser	Gly	Gly	Gly	Arg	Val	Met
	130					135					140				
Ser	Pro	Ile	Leu	Ser	Arg	Arg	Arg	Gln	Asp	Arg	Ala	Gln	Glu	His	Ala
145					150				155					160	
Asp	Arg	Met	Val	Glu	Arg	Leu	Asp	Gln	Ser	Phe	Pro	Glu	Arg	Gln	Ser
			165					170						175	
Asp	Tyr	Lys	Asp	Glu	Ser	His	Tyr	Ala	Glu	Val	Ser	Asp	Ser	Leu	Ser
		180					185					190			
Ala	Thr	Ser	Ser	Arg	Pro	His	Thr	Pro	Asp	Ala	Arg	Arg	Ser	Ser	Met
	195					200						205			
Phe	Glu	Glu	Met	Arg	Arg	Gln	Ser	Ala	Val	Phe	Phe	Asp	Asp	Pro	Asp
	210					215					220				
Met	Tyr	Ala	Asp	Glu	Asp	Ala	Val	Thr	Thr						
225					230										

&lt;210&gt; 40579

&lt;211&gt; 543

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40579

Pro	Gly	Val	Gly	Ile	Val	Ala	Cys	Leu	Pro	Met	Arg	Gly	Ala	Val	Thr
1			5						10					15	
Pro	Ser	Asp	Val	Asp	Val	Lys	Leu	Leu	Ala	Ala	Ser	Lys	Gln	Ala	Leu
		20					25					30			
Gly	Ile	Ala	Ser	Gln	Gln	Arg	Phe	Phe	Ser	Leu	Leu	Tyr	Ile	His	Tyr
	35					40					45				
Glu	Cys	Tyr	Pro	Thr	Met	Thr	Ser	Asp	Glu	Lys	Ser	Ala	Thr	Arg	Asp
	50				55					60					
Ile	Tyr	Asp	Pro	Asn	Thr	Leu	Pro	Asp	Tyr	Asp	Arg	Glu	Phe	Ile	Glu
65				70					75					80	
Pro	Asp	Asp	Leu	Arg	Gln	Phe	Glu	Lys	Ala	Leu	Asn	Ala	Pro	Glu	Ala
			85						90					95	
Ala	Pro	Leu	Val	Ala	Leu	Asn	Asp	Trp	Arg	Pro	Val	Asn	Gln	Arg	Val
		100						105					110		
Arg	Lys	Ser	Arg	Arg	Thr	Lys	Pro	Arg	Arg	Ser	Lys	Asp	Glu	Thr	Arg
		115				120						125			
Glu	Gly	Val	Leu	Tyr	Thr	Val	Leu	Lys	Trp	Pro	Phe	Leu	Phe	Thr	Val
	130					135					140				
Phe	Ala	Trp	Ile	Thr	Val	Leu	Gly	Phe	Ala	Tyr	Thr	Leu	Thr	Arg	Leu
145				150					155					160	
Tyr	Ile	Phe	Leu	Tyr	Glu	Gln	Phe	Val	Thr	Trp	Arg	Gly	Lys	Arg	Glu
			165					170					175		
Gln	Leu	Arg	Arg	Glu	Leu	Ser	Met	Gln	Thr	Asn	Tyr	Gln	Asp	Trp	Leu
		180					185						190		
Lys	Ala	Ala	Gln	Ala	Leu	Asp	Thr	Tyr	Leu	Gly	Asn	Leu	Lys	Trp	Lys
	195					200						205			
Glu	Thr	Asp	Glu	Tyr	Ala	Tyr	Tyr	Asp	His	Leu	Thr	Ile	Asn	Lys	Val
	210					215					220				

Val Ala Gln Leu Lys Gln Thr Arg Lys Ala Ala Glu Met Glu Met Gln  
 225 230 235 240  
 Asn Gly Arg Pro Gly Leu Ser Asp Pro Pro Ala Val Glu Glu Leu Cys  
 245 250 255  
 Phe Leu Leu Glu Ala Cys Val Lys Asn Asn Phe Ala Gly Val Glu Asn  
 260 265 270  
 Pro Arg Leu Tyr Ser Glu Thr Tyr Ser Gly Thr Lys Asp Leu Val Gln  
 275 280 285  
 Glu Tyr Met Asp Glu Val His Ser Cys Ile Arg Leu Val Arg Asp Ser  
 290 295 300  
 Lys Gln Ile Ser Asn Glu Asp Lys Tyr Gln Phe Phe Lys His Leu Asp  
 305 310 315 320  
 Thr Asn Phe Gly Arg Thr Ala Leu Cys Leu Ser Gly Gly Ala Thr Phe  
 325 330 335  
 Ala Tyr Tyr His Phe Gly Val Ile Arg Ala Leu Leu Asp Asn Asp Val  
 340 345 350  
 Leu Pro Glu Ile Ile Thr Gly Thr Ser Gly Gly Ala Leu Val Ala Ala  
 355 360 365  
 Leu Val Ala Thr Arg Thr Asp Glu Glu Leu Lys Gln Leu Leu Val Pro  
 370 375 380  
 Ala Leu Ala His Arg Ile Arg Ala Cys His Glu Gly Phe Thr Thr Trp  
 385 390 395 400  
 Val Arg Arg Trp Trp Arg Thr Gly Ala Arg Phe Asp Thr Leu Asp Trp  
 405 410 415  
 Ala Arg Gln Cys Ser Trp Phe Cys Arg Gly Ser Thr Thr Phe Arg Glu  
 420 425 430  
 Ala Tyr Glu Arg Thr Gly Arg Ile Leu Asn Val Ser Cys Val Pro Ser  
 435 440 445  
 Asp Pro His Ser Pro Thr Ile Leu Ala Asn Tyr Leu Thr Ser Pro Asp  
 450 455 460  
 Cys Val Ile Trp Ser Ala Val Leu Ala Ser Ala Ala Val Pro Gly Ile  
 465 470 475 480  
 Leu Asn Pro Val Val Leu Met Thr Lys Lys Arg Asp Gly Thr Leu Ala  
 485 490 495  
 Pro Tyr Ser Phe Gly His Lys Trp Lys Asp Gly Ser Leu Arg Thr Asp  
 500 505 510  
 Ile Pro Ile Lys Ala Leu Asn Leu His Phe Asn Val Asn Phe Thr Ile  
 515 520 525  
 Val Ser Gln Val Ser Phe Ala Phe His Trp Val Thr Ser Tyr Lys  
 530 535 540

&lt;210&gt; 40580

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40580

Val Leu Ile Phe Leu Trp Val Arg Asp Pro Pro Tyr Trp Gly Cys Arg  
 1 5 10 15  
 Asp Ala Leu Gly Thr Tyr Leu His Ser Met Val Trp Tyr Gly Thr Met  
 20 25 30  
 Val Glu Tyr Phe Glu Tyr Leu Arg Val Val Gly Ile Arg Tyr Phe Leu  
 35 40 45  
 Pro Val Ile Phe Phe Leu Ala Ala Phe Phe Tyr Ser Tyr Asn Leu Cys  
 50 55 60  
 Lys Ile Ile Met Ser

65

<210> 40581  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 40581  
 Tyr Lys Arg Lys Pro Ile Tyr Ser Arg Gly Met Ser Tyr Ala Asn Val  
 1 5 10 15  
 Thr His His Val Gln Lys Lys Trp His Tyr Ala Thr Gly Phe Pro Ser  
 20 25 30  
 Ser Phe Ala Lys Ile Pro Gly Asp Arg Leu Arg Met Val Thr Trp Arg  
 35 40 45  
 Leu Leu Thr Pro Leu Pro Thr Ser His Gln Pro Ser Met Gln Ala Ser  
 50 55 60  
 Glu Asn Arg Asn  
 65

<210> 40582  
 <211> 148  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (30), (31)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40582  
 Glu Pro Phe Thr Pro Trp Ala Ser Arg Ala Phe Phe Ser Val Met Arg  
 1 5 10 15  
 Thr Cys Ile Phe Ala His Val Gly Ile Arg Lys Thr Arg Xaa Xaa Trp  
 20 25 30  
 Ala Ala Glu Ile Asn Asn Leu Ala Lys Ser Val Pro Gly Ala Val Gly  
 35 40 45  
 Ser Ile Trp Leu Arg Leu Ser Leu Phe Tyr Ile Leu Gly Ser Leu Met  
 50 55 60  
 Val Thr Ile Thr Val Asp Pro Lys Asp Pro Asp Leu Phe Gly Ala Ser  
 65 70 75 80  
 Gly Thr Asn Ala Ser Pro Phe Val Ile Ala Tyr Arg Asn Ala Gly Leu  
 85 90 95  
 Val Pro Leu Ala His Ile Met Asn Ala Val Val Phe Ile Ser Val Val  
 100 105 110  
 Ser Thr Gly Ser Ile Gln Val Tyr Ala Gly Ser Arg Thr Leu Met Gly  
 115 120 125  
 Leu Ala His Leu Lys Met Ala Pro Lys Val Thr Cys Ser Thr Pro Ala  
 130 135 140  
 Ser Pro Gly Ser  
 145

<210> 40583  
 <211> 193  
 <212> PRT  
 <213> A.fumigatus

17774

<400> 40583

```

Leu Asn Ser Ser Gln Phe Phe Gly Lys Ala Asp Lys Val Gly Arg Pro
1          5          10          15
Val Ala Gly Leu Val Leu Thr Leu Val Ile Gly Gly Gly Leu Ala Tyr
          20          25          30
Leu Asn Val Ser Asn Ser Gly Ala Glu Val Phe Thr Trp Phe Ser Asn
          35          40          45
Leu Thr Ser Leu Leu Thr Leu Phe Gly Trp Gly Met Ile Cys Leu Ser
          50          55          60
His Leu Arg Met Arg Tyr Ala Trp Lys Val Gln Gly Arg Ser Pro Ser
65          70          75          80
Glu Leu Pro Trp Lys Ser Trp Thr Tyr Pro Val Gly Ala Ile Trp Gly
          85          90          95
Leu Phe Trp Cys Val Leu Leu Ile Val Val Glu Phe Tyr Leu Ser Val
          100          105          110
Trp Pro Leu Asp Gly Lys Pro Thr Ala Lys Gly Phe Phe Ala Asn Tyr
          115          120          125
Val Ser Val Val Ala Ile Ile Val Ile Tyr Ile Gly Ser Met Ile Tyr
          130          135          140
Tyr Lys Gly Pro Leu Leu Asn Asp Ala Arg Ser Ile Asp Leu Asp Gln
145          150          155          160
Phe Arg Arg Phe Tyr Val Asp Pro Arg Asp Glu Glu Ala Lys Ala Glu
          165          170          175
Lys Ala Gly Val Lys Lys Tyr Leu Ala Lys Gly Ile Gly Phe Val Phe
          180          185          190
Asn

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<210> 40584

<211> 69

<212> PRT

<213> A.fumigatus

<400> 40584

```

Cys Trp Leu Val Phe Arg Pro Ala Ser Met Pro Ser Phe His Ser Ser
1          5          10          15
Leu His Arg Thr Gln Pro Ser Leu Ala Lys Asp Gly Pro Asn Arg Pro
          20          25          30
Ser Leu His Val Val Ala Val Ser Val Ala Ser Phe Pro Phe Leu Leu
          35          40          45
Pro Ile Pro Pro Gln Thr Ser Ala Ile Gly Val Gly Val Gly Leu Asp
          50          55          60
Ala Asp Cys Thr Gln
65

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<210> 40585

<211> 500

<212> PRT

<213> A.fumigatus

<400> 40585

```

Gly Phe Gly Lys Gln Gly Gln Thr Gly Val Val Arg Ile Phe Ile Thr
1          5          10          15
Pro Asp Ala Gly Trp Tyr Leu Asp Leu Pro Pro Cys Pro Pro Ser Ile
          20          25          30
Leu Leu Ser Ile Ala Arg Ser Leu Leu Trp Pro Lys Met Asp Leu Thr

```



35	40	45
Val Leu Arg Ser Met Ser Ser Arg Phe Pro Trp Pro Leu Ser Leu Ser		
50	55	60
Ser Phe Leu Ser Pro Arg Lys Pro Arg Pro Ser Ala Leu Val Ser Val		
65	70	75
Ser Thr Gln Thr Val Pro Asn Ser Arg Pro Pro Ser Val Lys Val His		
85	90	95
Thr Pro Ser Pro Glu Glu Glu Leu His Ala Arg Arg Glu Ile Ala Arg		
100	105	110
Ser Asp Ala Glu Asp Trp Leu Gln Ser Leu Val Gly Gln Asp Asn Ile		
115	120	125
Lys Arg Arg Leu Asn Glu Ile Gln Thr Trp Ile Thr Ile Cys Gln Arg		
130	135	140
Gln Gly Lys Asp Pro Arg Gln Glu Trp Tyr Asn Ile Val Leu Glu Gly		
145	150	155
Asn Glu Gly Thr Gly Lys Ser Thr Val Ala Arg Val Tyr Ala Asn Val		
165	170	175
Leu Phe Ser Thr Gly Ile Thr Asp Val Leu Thr Phe Arg Glu Ile Ser		
180	185	190
Gly Ala Ala Leu Ala Ala Gln Gly Cys Glu Gly Leu Lys His Leu Ile		
195	200	205
Ser Asp Met Val Asp Thr Ala Ser Pro Ser Ala Gln Ile Val Gly Val		
210	215	220
Leu Leu Val Glu Asp Ala His Leu Leu Val Thr Ser Ser Ser Thr Arg		
225	230	235
Thr Gln Glu Ile Phe Asn Ala Leu Phe Glu Ala Met Glu Arg Thr Thr		
245	250	255
Gly Arg Val Ile Val Val Leu Ser Gly His Pro Pro His Met Glu Gly		
260	265	270
Leu Val Arg Ser His Pro Arg Leu Glu Arg Thr Ile Cys Cys Thr Leu		
275	280	285
His Phe Ala Asp Phe Thr Ser Asn Asp Tyr Leu Thr Met Leu Ala Gln		
290	295	300
Ser Leu Arg Glu Arg Tyr Asn Gly Lys Leu Glu Val Ala Gly Gly Leu		
305	310	315
Asp Gly Pro Phe Met Gln Met Ala Ala Arg Arg Leu Ala Arg Ala Ala		
325	330	335
Ala Gly Asn Gly Pro Arg Asn Val His Ala Val Gln Arg Leu Leu Asp		
340	345	350
Thr Ile Thr Leu Arg Gln Leu Gln Ser His Met Thr Gln Glu Glu Asp		
355	360	365
Asn Leu Glu Glu Val Asp Thr Phe Phe Phe Ser Pro Glu Asp Ile Val		
370	375	380
Gly Leu Arg Pro Ala Asp Val Leu Ala Lys Ser Arg Ala Trp Ala Asp		
385	390	395
Leu Gln Lys Leu Val Gly Gln Glu Ala Val Lys Ala Ser Val Ser Glu		
405	410	415
Leu Leu Asp Thr Ile Glu Glu Asn Phe Trp Arg Glu Ala Arg Asn Gln		
420	425	430
Arg Pro Phe Ser Val Arg Val Asn Arg Ile Phe Val Gly Pro Pro Gly		
435	440	445
Thr Gly Lys Ser Thr Val Ala Arg Leu Tyr Gly His Val Leu Ala Asp		
450	455	460
Val Gly Leu Leu Ser Ser Gly Lys Gly Glu Leu Ser Ile Phe Glu Thr		
465	470	475
Glu Thr Ala Ala Leu Thr Thr Ala Val Val Glu Met Arg Val Ser Gln		
		480

Arg Pro Asp Val  
500

485

490

495

<210> 40586  
<211> 475  
<212> PRT  
<213> A.fumigatus

<400> 40586

Asp	Leu	Leu	Asp	Ser	Ser	Ile	Gly	Lys	Val	Leu	Leu	Val	Asp	Val	Ser
1				5					10					15	
Asp	Leu	Asp	Glu	Ser	Ser	Gln	Ile	Trp	Leu	Lys	Thr	Leu	Ile	Ser	Gln
		20						25					30		
Leu	Ser	Leu	Ile	Pro	Arg	His	Asp	Arg	Cys	Val	Ile	Leu	Val	Gly	Thr
	35						40					45			
Asn	Ser	Ser	Ile	Glu	Ala	Leu	Val	Gln	Glu	Lys	Asp	Leu	Leu	Lys	Leu
	50					55					60				
Phe	Arg	Gln	His	His	Ile	Val	Gln	Phe	His	Ser	Phe	Thr	Lys	Ala	Gln
65					70				75						80
Leu	Arg	Gln	Ile	Leu	Glu	Met	Lys	Leu	His	Asp	Asp	Glu	Val	His	Val
				85					90					95	
Thr	Ser	Glu	Ala	Leu	Asp	Asn	Ala	Val	Lys	Leu	Leu	Glu	Val	Ala	Arg
			100					105					110		
Met	Arg	Lys	Asp	Phe	Asn	Asn	Gly	Arg	Ala	Ile	Ala	His	Leu	Leu	Gly
	115						120					125			
Ser	Ala	His	Ser	Ala	Tyr	Glu	Arg	Ser	Arg	Ser	Gln	Gly	Glu	Gly	Thr
	130					135					140				
Gln	Ser	Gln	Leu	Ala	Arg	Ile	Leu	Val	Pro	Glu	Asn	Phe	Glu	Asp	Asp
145					150					155					160
Leu	Ser	Ser	Cys	Arg	Ser	Lys	Leu	Asp	Phe	Arg	Glu	Glu	Leu	Lys	Tyr
			165						170					175	
Thr	Leu	Val	Ser	Asp	Asp	Leu	Ile	Thr	Leu	Leu	Glu	Arg	Tyr	Arg	His
		180						185					190		
Asp	Leu	Lys	Ala	Ala	Trp	Leu	Leu	Asn	Thr	Asp	Pro	Thr	Arg	Arg	Val
	195						200					205			
Pro	Leu	Ala	Met	Val	Phe	Lys	Gly	Ala	Ile	Gly	Ile	Gly	Arg	Arg	Ile
	210					215					220				
Phe	Ala	Arg	Leu	Ile	Gly	Arg	Leu	Tyr	Tyr	Asp	Met	Gly	Val	Leu	Asp
225					230					235					240
Ser	Gly	Lys	Phe	Met	Glu	Cys	Ser	Ala	Thr	Asp	Leu	Ala	Leu	Asn	Ala
			245						250					255	
Cys	Asn	Pro	Ser	Thr	Pro	Thr	Arg	Ser	Leu	Leu	Glu	Arg	Ala	Arg	Gly
		260						265					270		
Gly	Val	Leu	Phe	Ile	Glu	Asp	Ala	His	Arg	Leu	Ser	Glu	Ile	Glu	Ser
	275						280					285			
Ala	Ala	Arg	Thr	Ile	Asn	Asp	Leu	Val	Tyr	Leu	Met	Pro	Lys	Tyr	Ser
	290					295					300				
Arg	Asp	Thr	Val	Val	Ile	Leu	Ala	Gly	Ser	Gly	Pro	Glu	Met	Asp	Leu
305					310					315					320
Leu	Leu	Cys	Asn	Gln	Pro	Arg	Leu	Ser	Ser	Leu	Phe	Gln	Glu	Glu	Val
			325						330					335	
Val	Phe	Lys	Ser	Pro	Thr	Pro	Arg	Glu	Cys	Leu	Arg	Leu	Leu	Asp	Gln
		340						345					350		
Arg	Leu	Gln	Gln	Glu	Lys	Ile	Pro	Gly	Ser	Arg	Pro	Phe	Leu	Thr	Asp
	355						360					365			

17777

Thr Arg Thr Glu Thr Tyr Arg Glu Phe Thr Arg Ala Met Gln Thr Leu  
 370 375 380  
 Ser Leu Phe Pro Cys Trp Ser Asn Ala Arg Asp Ile Asp Val Leu Ala  
 385 390 395 400  
 Met Trp Met Val Ser Ser Val Leu Arg Ala Val Pro Leu Asp Gly Asp  
 405 410 415  
 Ser Leu Cys Ala Pro Gln Leu Thr Glu Glu Gln Ala Met Ala Cys Val  
 420 425 430  
 Ile Lys Met Tyr Asn Leu Lys Arg Asp Arg Leu Arg Phe Asn Gln Asp  
 435 440 445  
 Pro Lys Val Lys Ser Leu Pro Arg Asn Leu Ser Gln Pro Arg Ser Ser  
 450 455 460  
 Pro Ser Ile Arg Ser Ala Val Arg Phe Pro Val  
 465 470 475

<210> 40587

<211> 112

<212> PRT

<213> A.fumigatus

<400> 40587

Pro Glu Gln Val Ser Asn Cys Ser Ala Ile Val Glu Val Leu Ala His  
 1 5 10 15  
 Ala Ser Asp Phe Glu Lys Phe Asn Ser Ile Ile Gln Arg Leu Arg Ser  
 20 25 30  
 Asn Met Asn Phe Val Val Val Gln Leu His Phe Lys Asp Leu Thr Gln  
 35 40 45  
 Leu Cys Phe Gly Glu Arg Met Glu Leu Asn Asp Val Met Leu Ser Glu  
 50 55 60  
 Lys Leu Gln Gln Val Leu Phe Leu Asn Gln Arg Leu Asn Ala Ala Val  
 65 70 75 80  
 Gly Ser Asn Gln Asp Tyr Thr Ala Ile Met Ala Arg Asn Glu Arg Gln  
 85 90 95  
 Leu Arg Asp Glu Ser Phe Gln Pro Asn Leu Arg Arg Leu Ile Lys Val  
 100 105 110

<210> 40588

<211> 208

<212> PRT

<213> A.fumigatus

<400> 40588

Ile Tyr His Gly Asp Arg Phe His Leu Met Pro Ile Ile Thr Pro Ala  
 1 5 10 15  
 Tyr Pro Ser Met Cys Ala Thr His Asn Ile Ser Met Ser Thr Lys Ala  
 20 25 30  
 Val Ile Leu Arg Glu Leu Gln Arg Gly Gly Asp Ile Val Asp Lys Ile  
 35 40 45  
 Phe Leu Lys Gln Leu Thr Trp Asn Asp Leu Phe Ala Arg His Ser Phe  
 50 55 60  
 Phe Thr Gln Asp Tyr Lys Tyr Tyr Leu Ser Ile Thr Ala Ser Ser Arg  
 65 70 75 80  
 Thr Lys Glu Ala Glu Ala Val Trp Ser Gly Leu Val Glu Ser Lys Ile  
 85 90 95  
 Arg His Leu Val Gly Ala Leu Asp Arg Lys Pro Thr Ile Ala Val Ala  
 100 105 110

## 17778

His Pro Phe Pro Lys Gly Phe Glu Arg Val His Ile Val Ser Asn Glu  
 115 120 125  
 Glu Glu Ala Glu Ala Val Lys Asn Gly Ser Thr Lys Tyr Gln Asp Lys  
 130 135 140  
 Gly Thr Lys Thr Glu Thr Thr Asp Glu Arg Lys Asp Ala Ala His Gln  
 145 150 155 160  
 Ala Ala Ala Leu Ser Gly Val Glu Asn Ala Glu Val Glu Pro Val Gly  
 165 170 175  
 Glu Lys Ser Val Asn Gly Asp Ser His Ile Ile Tyr Thr Thr Thr Tyr  
 180 185 190  
 Tyr Ile Gly Leu Glu Leu Lys Pro Leu Glu Pro Gly Met Tyr Gly Ala  
 195 200 205

&lt;210&gt; 40589

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40589

Phe Trp Ser Thr Pro Ala Gly Tyr Lys Met Ser Thr Pro Pro Val Arg  
 1 5 10 15  
 Gln Trp Gly Val Thr Pro Pro Ile Ser Thr Ala Leu Pro Thr Pro Glu  
 20 25 30  
 Glu Leu Ala Ala Asn Asp Asp Leu Ile Ser Glu Leu Lys Ala Gln Asn  
 35 40 45  
 Asn Phe Glu Ser Pro Ala Glu Thr Glu Arg Arg Trp Asp Gln Pro Gly  
 50 55 60  
 Tyr Ile Ser Leu Cys  
 65

&lt;210&gt; 40590

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40590

Cys Phe Ala Leu Thr Pro Cys Leu Leu Ser Gly Arg Lys Gln Val Leu  
 1 5 10 15  
 Gln Leu Leu Gln Arg Val Thr His Glu Phe Val Lys Val Val Ser Arg  
 20 25 30  
 Lys Lys Gly Leu Ser Pro Ala Ala Val Glu Ala Ala Gly Gly Lys Ile  
 35 40 45  
 Phe Thr Tyr Gly Ser Tyr Arg Leu Gly Val Tyr Gly Pro Gly Gln  
 50 55 60

&lt;210&gt; 40591

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40591

His Asn Arg Arg Asp Ile Asp Asn Ala Ile Gly Ser Asp Ile Asp Thr  
 1 5 10 15  
 Leu Val Val Gly Pro Lys His Val Leu Ile Asp Asp Phe Phe Ser Asp  
 20 25 30  
 Phe Pro Pro Val Leu Glu Lys Met Ala Pro Pro Gly Ala Ile Glu Lys

17779

	35		40		45
Met	Thr	Pro	Val	Pro	Asp
	50		55		60
Ser	Gly	Ile	Ser	Ile	Asp
65			70		75
Val	Pro	Leu	Asn	Leu	Asp
		85		90	
Asp	Glu	Lys	Glu	Val	Arg
	100		105		110
Ile	Leu	Glu	Leu	Val	Pro
	115		120		125
Ala	Ile	Lys	Leu	Trp	Ala
	130		135		140
Ser	Pro	Leu	Ile	Ile	Ser
145			150		

<210> 40592

<211> 138

<212> PRT

<213> A.fumigatus

<400> 40592

His	Arg	Leu	Thr	Gly	Arg	Ala	Ile	Tyr	Ser	Asn	Ile	Val	Gly	Phe	Pro
1			5					10					15		
Gly	Gly	Val	Ala	Trp	Ala	Met	Leu	Val	Ala	Arg	Val	Cys	Gln	Leu	Tyr
		20					25					30			
Pro	His	Ala	Thr	Gly	Ser	Val	Ile	Val	Gly	Lys	Phe	Phe	Arg	Ile	Met
		35					40					45			
Asn	Lys	Trp	Ala	Trp	Pro	Gln	Pro	Val	Leu	Leu	Lys	Pro	Ile	Glu	Asp
	50					55					60				
Gly	Pro	Leu	Gln	Met	Lys	Val	Trp	Asn	Pro	Lys	Val	Arg	Ala	Ser	Lys
65				70				75						80	
Ala	Leu	His	Cys	Ile	Leu	Arg	Asp	Ile	Asp	Ile	Asn	Asp	Arg	Phe	Thr
			85					90						95	
Met	Ala	Thr	Gly	Ser	Thr	Leu	Cys	Leu	Ser	Ser	Pro	Leu	Arg	Ile	His
		100						105					110		
Arg	Cys	Val	Arg	Arg	Thr	Thr	Ser	Gln	Cys	Pro	Gln	Lys	Arg	Leu	Ser
		115					120					125			
Phe	Ala	Ser	Ser	Asn	Gly	Glu	Val	Ile	Leu						
	130					135									

<210> 40593

<211> 170

<212> PRT

<213> A.fumigatus

<400> 40593

Ser	Thr	Ser	Ala	Glu	Ala	Gly	Thr	His	Val	Val	Lys	Thr	Asp	Glu	Asp
1			5						10				15		
Lys	Val	Leu	Asn	Pro	Lys	Lys	Tyr	Phe	Ile	Ile	Ile	Pro	Ala	Leu	Phe
		20					25					30			
Gly	Asn	Gly	Gln	Ser	Ser	Ser	Pro	Ser	Asn	Gln	Pro	Asn	Ala	Gly	Pro
	35						40					45			
Phe	Pro	Lys	Cys	Ser	Phe	Tyr	Asp	Asn	Val	Arg	Ala	Gln	His	Lys	Leu
	50					55					60				
Val	Thr	Glu	His	Phe	Gly	Ile	Arg	His	Leu	Arg	Ala	Val	Ile	Gly	Trp

17780

65					70					75					80
Ser	Met	Gly	Gly	Ala	Gln	Thr	Tyr	Gln	Trp	Ala	Thr	Gln	Tyr	Pro	Glu
				85					90					95	
Phe	Met	Asp	Val	Ala	Ile	Pro	Phe	Cys	Gly	Ser	Ala	Lys	Thr	Ser	Leu
			100					105					110		
His	Asn	Gln	Val	Phe	Leu	Glu	Gly	Val	Lys	Ser	Ala	Leu	Leu	Ala	Ala
		115					120					125			
Lys	His	Val	Pro	Ser	Ala	Gly	Ser	Gly	Lys	Ile	Gly	Asp	Leu	Lys	Ala
	130					135					140				
Asp	Gln	Thr	Leu	Gly	Thr	Trp	Ser	Ala	Glu	Asp	Arg	Glu	Ile	Gly	Leu
145					150					155					160
Arg	Ala	Phe	Ala	Arg	Val	Tyr	Ala	Gly	Trp						
				165					170						

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<210> 40594
<211> 295
<212> PRT
<213> A.fumigatus
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<400>	40594														
Lys 1	Arg	Val	Gly	Ser 5	Ser	Gln	Val	His	Val 10	Ser	Asp	Arg	Arg	His 15	Arg
Pro	Pro	Arg	Arg	Gln	Tyr	Ile	Ala	Arg	Pro	Leu	Pro	Pro	Arg	Ser	Arg
			20				25						30		
Arg	Arg	Ala	Val	Arg	Val	Arg	Pro	Cys	Arg	Cys	Met	Gly	Ala	Gly	Pro
		35					40					45			
Leu	Leu	Leu	Ser	Gly	Arg	Thr	Val	His	His	Gln	Arg	Cys	Thr	Leu	Cys
	50					55					60				
Ser	Arg	Gly	Gly	Glu	Ser	Gly	Pro	Ser	Gly	Leu	Asp	Thr	Val	Arg	Gln
65					70					75					80
Arg	Arg	Asp	Leu	Trp	Val	Gln	Lys	Leu	Glu	Ser	Glu	Gly	Leu	Cys	His
				85					90					95	
Gly	Glu	Ser	Ala	Trp	Ala	Val	Arg	Pro	Arg	Ala	Thr	Ala	Leu	Asp	His
			100					105					110		
Asn	Arg	Gly	Tyr	Pro	Asn	Arg	Arg	Ala	Arg	Trp	Arg	Ile	Gln	Glu	Thr
		115					120					125			
His	Lys	Phe	Pro	Gln	Gly	Arg	Arg	Arg	His	Arg	Gln	Arg	Arg	Ser	Gly
	130					135					140				
Val	Arg	His	Ala	Cys	Phe	Arg	Arg	Arg	Phe	Ala	Thr	Gly	Tyr	Val	Arg
145					150					155					160
Thr	Leu	Ser	Val	Val	Asp	Pro	Ile	Leu	Ser	Lys	Asn	Ser	Arg	Lys	Gln
				165					170					175	
Arg	Lys	Thr	Leu	Pro	Leu	Pro	His	Trp	Arg	Ser	Leu	Arg	Leu	Leu	Pro
			180					185					190		
Ala	Arg	Asn	Pro	Leu	His	Pro	Thr	His	His	Ser	Pro	Thr	Thr	Gly	Ser
		195					200					205			
Pro	Leu	Pro	Ser	Gly	Asn	Arg	Arg	Ser	His	Pro	Arg	Arg	Leu	Leu	Arg
	210					215					220				
Pro	Gln	Asp	Asn	Arg	Pro	Ala	Gln	Ser	Pro	Asn	Arg	His	Pro	Arg	Arg
225					230					235					240
Asn	Arg	His	Pro	Arg	His	His	Arg	Asn	Gly	Arg	Arg	Gly	Ser	Asp	Arg
				245					250					255	
Leu	Pro	Arg	Thr	Arg	Gly	Ala	Arg	Asp	Pro	Pro	Arg	Cys	Ser	Ala	Gly
			260					265					270		
Arg	Asn	Ala	Pro	Ala	Val	Arg	Gln	Gly	Tyr	Ala	Gly	His	Asp	Glu	Ser
		275					280					285			

17781

Glu Ala Gly Asp Gly Ala Gly  
290 295

<210> 40595

<211> 282

<212> PRT

<213> A.fumigatus

<400> 40595

Lys	Tyr	Leu	Phe	Leu	Tyr	Thr	Lys	Ser	Thr	Cys	His	Pro	Gln	Lys	Lys
1				5					10					15	
Tyr	Pro	Ala	Leu	Pro	Arg	Glu	Ser	Thr	Leu	Ala	Gln	Leu	Pro	Pro	Glu
		20					25					30			
Tyr	Pro	Ala	Asp	Ala	Gln	Glu	Gln	Ile	Val	Gln	Leu	Leu	Ser	Thr	Ser
		35				40					45				
Ser	Leu	Asn	Arg	Leu	Val	Val	Leu	Asp	Asp	Asp	Pro	Thr	Gly	Thr	Gln
50					55						60				
Thr	Cys	His	Asp	Ile	Pro	Val	Leu	Ala	Val	Trp	Asp	Val	Pro	Thr	Leu
65				70					75						80
Ile	Lys	Glu	Phe	Gln	Gln	Asp	Ser	Pro	Gly	Phe	Phe	Ile	Leu	Thr	Asn
				85					90					95	
Ser	Arg	Ala	Leu	Pro	Pro	Leu	Asp	Ala	Glu	Lys	Leu	Ile	Arg	Gly	Ile
			100					105					110		
Cys	Glu	Asn	Val	Leu	Glu	Ala	Ala	Arg	Ser	Thr	Ser	Gln	Thr	Val	Asp
		115					120					125			
Ile	Val	Leu	Arg	Gly	Asp	Ser	Thr	Leu	Arg	Gly	His	Phe	Pro	Leu	Glu
130					135						140				
Ala	Asp	Val	Ala	Gln	Ser	Val	Phe	Gly	Pro	Ala	Asp	Ala	Trp	Val	Leu
145				150						155					160
Ala	Pro	Phe	Phe	Phe	Gln	Gly	Gly	Arg	Phe	Thr	Ile	Asn	Asp	Val	His
			165					170					175		
Tyr	Val	Ala	Glu	Gly	Glu	Asn	Leu	Val	Pro	Ala	Gly	Leu	Thr	Gln	Phe
		180						185					190		
Ala	Lys	Asp	Ala	Thr	Phe	Gly	Tyr	Lys	Ser	Ser	Asn	Leu	Arg	Asp	Tyr
		195					200					205			
Val	Met	Glu	Lys	Ala	Pro	Gly	Arg	Phe	Ala	Pro	Glu	Gln	Leu	His	Ser
		210				215					220				
Ile	Thr	Ile	Glu	Asp	Ile	Arg	Thr	Gly	Gly	Pro	Asp	Gly	Val	Tyr	Arg
225				230						235					240
Lys	Leu	Ile	Ser	Phe	Pro	Lys	Gly	Gly	Val	Val	Ile	Val	Asn	Ala	Ala
				245					250					255	
Ala	Glu	Ser	Asp	Met	His	Val	Phe	Val	Ala	Gly	Leu	Leu	Leu	Gly	Thr
			260					265					270		
Ser	Glu	Arg	Phe	Leu	Ser	Leu	Ile	Gln	Tyr						
		275					280								

<210> 40596

<211> 171

<212> PRT

<213> A.fumigatus

<400> 40596

Val	Arg	Thr	Ala	Glu	Ser	Lys	Gly	Lys	His	Phe	Leu	Tyr	Arg	Thr	Gly
1				5					10					15	
Ala	Ala	Phe	Val	Ser	Ser	Arg	Leu	Gly	Ile	Arg	Ser	Ile	Pro	Pro	Ile
			20					25					30		

## 17782

Thr Ala Arg Gln Leu Ala Leu Pro Ser Pro Arg Glu Thr Gly Gly Leu  
 35 40 45  
 Ile Leu Ala Gly Ser Tyr Val Pro Lys Thr Thr Ala Gln Leu Lys Val  
 50 55 60  
 Leu Thr Asp Thr Arg Gly Ala Thr Gly Thr Leu Ala Ile Ile Glu Met  
 65 70 75 80  
 Asp Val Ala Asp Leu Ile Ala Ser Pro Glu Arg Ala Glu Arg Val Ile  
 85 90 95  
 Arg Arg Val Val Gln Gln Ala Glu Thr His Leu Gln Ser Gly Lys Asp  
 100 105 110  
 Thr Leu Val Met Thr Ser Arg Lys Leu Val Thr Gly Arg Asp Glu Leu  
 115 120 125  
 Asp Ser Leu Ala Ile Gly Ala Arg Val Ala Glu Ala Leu Val Lys Val  
 130 135 140  
 Leu Gln Gln Ile Gln Val Arg Pro Arg Tyr Ile Ala Lys Val Gly  
 145 150 155 160  
 Asn Arg Ala Leu Arg Ser Glu Asn Pro Ser Arg  
 165 170

&lt;210&gt; 40597

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40597

Arg Ser Asp Gln Arg His Ser Ser Asp His Arg Thr Leu Arg Thr Ser  
 1 5 10 15  
 Thr Gly Ala Lys Pro Met Thr Leu Ala Pro Gly Glu Ala Val Ala Met  
 20 25 30  
 Ser Leu Ala Ala Phe Ser Val Phe Ser Thr Phe Arg Pro Thr Met Gln  
 35 40 45  
 Ala Ser Ala Pro Arg Trp Thr Arg Ala Arg Thr Cys Ala Leu Gln Met  
 50 55 60  
 Val Pro Ala Pro Pro Val Gln Lys Thr Thr Leu Phe Ala Glu Gly His  
 65 70 75 80  
 Ile Ser Gly Leu Val Ala Met Ser Pro Phe  
 85 90

&lt;210&gt; 40598

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40598

Ser Cys Arg Pro Leu Arg Ile Ala Arg Ala Ala Ser Thr Ala Val Glu  
 1 5 10 15  
 Arg Ala Val Ser Leu Asn His Lys Ser Thr Val Val Cys Val Ser Asp  
 20 25 30  
 Ser Ala Cys Gln Ser Thr Lys Tyr Leu Thr Phe Cys Tyr Cys Ala Glu  
 35 40 45  
 Ile Leu Ala Thr Leu Leu Asn Asn Gly Thr Ser Pro Ile Thr Gly Lys  
 50 55 60  
 Arg Ile Leu Glu Thr Thr Thr Val Asp Glu Met Phe Arg Asn Gln Ile  
 65 70 75 80  
 Pro Asn Leu Pro Asn Phe Ala Ala Gln Gly Ile Pro Pro Ser Lys Pro  
 85 90 95



## 17783

Asp Leu Thr Asn Glu Ile Ala His Leu Tyr Pro Ser Pro Thr Pro Gln  
                   100                  105                  110  
 Gly Trp Gly Leu Thr Phe Met Leu Thr Gly Gly Ser Thr Gly Arg Ser  
                   115                  120                  125  
 Glu Gly Thr Ala His Trp Ala Gly Leu Ala Asn Leu Trp Trp Trp Cys  
                   130                  135                  140  
 Asp Arg Glu Lys Gly Val Ala Gly Met Ile Cys Thr Gln Leu Leu Pro  
 145                  150                  155                  160  
 Phe Ala Asp Pro Gln Val Trp Ser Leu Trp Leu Asp Val Glu Ser Ala  
                   165                  170                  175  
 Val Tyr Arg Gly Leu Ala Gln Asp  
                   180

&lt;210&gt; 40599

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40599

Glu Thr Asp Arg Thr Ser Gln Gly Leu Ser Tyr Ser Ala Ser Ala Val  
 1                  5                  10                  15  
 Thr Ile Pro Ser Leu Ser Leu Leu Pro Thr Ser Ala Asn Ala Leu Arg  
                   20                  25                  30  
 Ser Leu Asn Glu Val Lys Arg Leu Asn Arg Lys His Gly Leu Arg Leu  
                   35                  40                  45  
 Thr Asn Ile Ala Asn Ala Cys Leu Ile Phe Ala Tyr Ser Val Ser Pro  
                   50                  55                  60  
 Lys His Arg Lys His Pro Tyr Leu Ile Trp Met Cys Val Ala Ser Ile  
 65                  70                  75                  80  
 Val Gly Ser Tyr Gly Met Asp Phe Trp Phe His Arg Glu Leu Gly Leu  
                   85                  90                  95  
 Lys Ala Trp Ala Arg Ser Leu Ile Arg Asp Ser Gly Cys Met Ser Phe  
                   100                  105                  110  
 Ser Arg Gly Asn Ser Thr Lys Lys Asp Glu Asp Leu Val Val Val Glu  
                   115                  120                  125  
 Ala Glu Glu Ser Val Asn Gly Glu Ser Val Arg Glu Glu Met Ala Arg  
                   130                  135                  140  
 Glu Arg Arg Leu Gln Cys Ala Arg Ala Val Cys Ser Gly Leu Ala Leu  
 145                  150                  155                  160  
 Ala Met Gly Ile Val Gly Leu Trp Gly Asp Arg Lys  
                   165                  170

&lt;210&gt; 40600

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40600

Gln Pro Val Leu Thr Gly Asn Ile Ala Gly Phe Gly Tyr Thr Phe Phe  
 1                  5                  10                  15  
 Asn Glu Lys Leu Arg Asp Tyr Ser Lys Pro Val Gly Tyr Asp Glu Phe  
                   20                  25                  30  
 Ser Gly His Ile Tyr Asp Met Leu Gln Pro Leu Val His Gln Pro Gly  
                   35                  40                  45  
 Glu Lys Trp Glu Tyr Gly Val Arg Ser Ser Ala Ser Asn Ala Ile Phe  
                   50                  55                  60

Tyr Asp His Leu Leu Ile Val Val  
65 70

<210> 40601  
<211> 138  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (14)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40601  
Gly Arg Val Phe Ala Trp Glu Met Ala Lys Leu Gly Val Xaa Trp Asn  
1 5 10 15  
Thr Leu Ser Glu Pro Val Phe Gly Pro Gln Ala Cys Val Thr Cys Thr  
20 25 30  
Pro Asp Ala Pro Val Pro Ile Thr Ala Gln Arg Phe Leu Arg Thr Ser  
35 40 45  
Met Val Cys Ser Pro Gly Gln Lys Glu Glu Trp Trp Thr Met Pro Trp  
50 55 60  
Asn Val Ser Ile Pro Gly His Ser Gly Met Tyr Arg Phe Ala Glu Asn  
65 70 75 80  
Pro Ala Ala Ile Met Arg Tyr Leu Asp Asp Ala Val Leu Pro Ser Ala  
85 90 95  
Val Leu Thr Cys Gln Arg Pro Ser Ser Val Ser Lys Arg Ala Ser Thr  
100 105 110  
Thr Thr Leu Leu Lys Ala Gln Ser Phe Phe Thr Trp Ser Thr Trp Ser  
115 120 125  
Thr Trp Ser Lys Tyr Arg Leu Ser Ser Ser  
130 135

<210> 40602  
<211> 152  
<212> PRT  
<213> A.fumigatus

<400> 40602  
Phe Asp Pro Ile Thr Gly Phe Leu Arg Leu Thr Met Thr Ser Leu Ser  
1 5 10 15  
Pro Gln Ala Val Thr Ala Leu Lys Ala Arg Val Asp Ala Ala Cys Ala  
20 25 30  
Asp Gln His Lys Gly Ile Pro Gly Ala Val Val Val Val Gly Lys  
35 40 45  
Asp Gly Lys Glu His Phe Ala His Ala Ser Gly Lys Arg Gly Tyr Gly  
50 55 60  
Ser Glu Glu Ala Met Thr Leu Asp Ser Val Phe Trp Ile Ala Ser Cys  
65 70 75 80  
Thr Lys Thr Ile Thr Gly Ile Ala Cys Leu Gln Leu Val Glu Arg Gly  
85 90 95  
Arg Leu Ser Leu Asp Asp Ser Asp Gln Val Glu Thr Ile Cys Pro Glu  
100 105 110  
Leu Lys Glu Val Lys Val Leu Gln Asp Asp Gly Thr Leu Val Glu Lys  
115 120 125  
Arg Arg Gly Ile Thr Leu Arg Met Leu Leu Asn His Thr Gly Glu Trp

## 17785

130 135 140  
 Thr Ser Pro Arg Asp Ser Gln Phe  
 145 150

<210> 40603  
 <211> 231  
 <212> PRT  
 <213> A.fumigatus

<400> 40603  
 Leu Gly Leu Ala Ile Arg Phe Ser Met Arg Ser Cys Glu Thr Thr Ala  
 1 5 10 15  
 Ser Arg Leu Val Thr Thr Asn Ser Gln Asp Thr Ser Thr Thr Cys Cys  
 20 25 30  
 Ser Arg Trp Phe Ile Ser Leu Gly Lys Ser Gly Asn Met Gly Cys Val  
 35 40 45  
 Arg Gln Leu Ala Thr Leu Phe Ser Met Ile Ile Cys Ser Leu Trp Phe  
 50 55 60  
 Lys Val Asn Ile Asp Trp Ala Gly Val Met Val Glu Arg Val Thr Gly  
 65 70 75 80  
 Gln Ser Leu Asn Glu Tyr Phe His Arg Asn Ile Phe Glu Pro Leu Gly  
 85 90 95  
 Leu Asn Asn Ile Ser Met Phe Pro Ser Ala Ser Met Lys Glu Lys Leu  
 100 105 110  
 Ala Tyr Met Asn Gln Arg Asp Ala His Gly His Leu Ser Ser Arg Asp  
 115 120 125  
 His Leu Leu Arg Arg Pro Leu Ile Val Gln Thr Ala Ala Asp Arg Lys  
 130 135 140  
 Ser Cys Phe Asn Ser Gly Gly Ala Gly Cys Phe Ala Gln Pro Gln Glu  
 145 150 155 160  
 Tyr Cys Arg Met Cys Leu Gly Leu Cys Leu Ser Ile Tyr Lys Ile Leu  
 165 170 175  
 Asn Phe Leu Leu Leu Arg Arg Asn Pro Cys Tyr Thr Ala Lys Gln Arg  
 180 185 190  
 His Leu Thr His His Arg Gln Ala Asn Pro Arg Asp Asn His Ser Arg  
 195 200 205  
 Arg Asp Val Pro Gln Ser Asp Pro Gln Pro Pro Gln Phe Cys Arg Thr  
 210 215 220  
 Arg His Pro Ser Phe Glu Ala  
 225 230

<210> 40604  
 <211> 439  
 <212> PRT  
 <213> A.fumigatus  
 <220>  
 <221> UNSURE  
 <222> (108)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40604  
 Arg Arg Thr Ala Pro Ser Thr Ala Trp Trp Trp Arg Pro Ala Leu Thr  
 1 5 10 15  
 Gln Thr Lys Ala Ala Gly Arg Ser Lys Arg Pro Met Gly Glu Arg Arg  
 20 25 30

Arg Pro Ser Thr Ser Leu Ser Pro Pro Gly Ser Leu Gln Ser Gly Thr  
 35 40 45  
 Ser Pro Ser Gly Arg Glu Trp Ile His Ser Arg Ala Leu Ser Thr Thr  
 50 55 60  
 Pro Pro Phe Gly Arg Ala Ser Thr Pro Ser Met Ser Glu Glu Ser Ala  
 65 70 75 80  
 Ala Arg Leu Ser Ala Leu Ala Arg Gln Gly Cys Lys Ser Arg Arg Pro  
 85 90 95  
 Gly Val Gln Arg Arg Ala Arg Ser Arg Cys Ser Xaa Gly Leu Pro Thr  
 100 105 110  
 Trp Pro Phe Pro Met Arg Lys Arg Ala Leu Ser Ala Glu Ala Gln Gln  
 115 120 125  
 Glu Ala Lys Ala Leu Tyr Pro Glu Leu Phe Ser Phe Arg Glu Lys Ala  
 130 135 140  
 Phe Ala Ala Phe Leu Tyr Thr Phe Ser Glu Lys Ser Leu Trp Glu Asp  
 145 150 155 160  
 Asn Glu Glu Glu Arg Glu Ala Phe Leu Glu Lys Leu Trp Ala Glu Gly  
 165 170 175  
 Gly Phe Arg Phe Trp Val Ala Asn Tyr Arg Asp Tyr Leu Phe Asp Ala  
 180 185 190  
 Glu Ala Asn Arg Ile Val Tyr Asp Phe Trp Cys Arg Lys Val Arg Gln  
 195 200 205  
 Arg Ile Gly Asp Pro Lys Ala Arg Glu Leu Leu Ala Pro Arg Glu Pro  
 210 215 220  
 Pro His Tyr Phe Gly Val Lys Arg Pro Cys Leu Glu Glu Thr Tyr Phe  
 225 230 235 240  
 Glu Gln Phe Asn Arg Lys Asn Val Glu Val Val Asp Ile Lys Asn Asn  
 245 250 255  
 Pro Val Val Ala Phe Thr Glu Thr Gly Ile Gln Leu Glu Asp Gly Thr  
 260 265 270  
 Val His Glu Val Asp Val Val Cys Val Ala Thr Gly Leu Asp Ile Thr  
 275 280 285  
 Thr Gly Gly Met Thr Asn Met Gly Leu Thr Ser Ile His Gly Thr Thr  
 290 295 300  
 Leu Lys Asp Glu Trp Lys Asp Gly Ala Tyr Thr Tyr Leu Gly Leu Thr  
 305 310 315 320  
 Val Ser Gly Tyr Leu Asn Met Phe His Leu Tyr Gly Pro Gln Gly Pro  
 325 330 335  
 Thr Leu Leu Ser Asn Gly Pro Thr Ser Val Glu Val Gln Gly Arg Trp  
 340 345 350  
 Ile Ala Asp Ala Ile Lys Gln Ile Glu Arg Gln Gly Ile Lys Tyr Ile  
 355 360 365  
 Asp Pro Leu Pro Glu Ser Ala Arg Ala Trp Lys Lys Arg Ile Asn Glu  
 370 375 380  
 Leu Ser Asp Leu Thr Leu Phe Pro Thr Thr Arg Ser Thr Tyr Met Gly  
 385 390 395 400  
 Gly Thr Ile Pro Gly Lys Val Phe Glu Gln Gly Asn Tyr Thr Gly Gly  
 405 410 415  
 Ile Pro Gln Tyr Leu Ala Glu Ile Arg Ala Ala Leu Pro Lys Phe Asp  
 420 425 430  
 Gly Phe Thr Thr Val Lys Tyr  
 435

&lt;210&gt; 40605

&lt;211&gt; 276

&lt;212&gt; PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (93)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40605

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His Arg Arg Arg Pro Leu Ala Gly Gln Asn Gly Arg Trp Glu Asn Gly
1      5      10      15
Val Val Gln Val Pro His Tyr Arg Arg Arg Val Leu Cys Lys Ala Val
      20      25      30
His Pro Arg Val Ala Gly Asn Gly Tyr Ile Pro Gly His Cys Pro Pro
      35      40      45
Leu Leu Leu Leu Ala Gly Arg Ala His His Arg Cys Pro Lys Lys Ala
      50      55      60
Leu Arg Gly Tyr Arg His Trp Arg Val Arg Gly Ala Ser His Ala Gly
      65      70      75      80
Leu Gly Ser Lys Asp Gly Leu Ala Gln Gly Val Pro Xaa Asp Ser Gln
      85      90      95
Leu Gly His Phe Pro Cys Glu Asn Ala Pro Leu Ala Pro Arg Leu Ser
      100     105     110
Lys Lys Pro Lys Arg Ser Ile Pro Asn Cys Ser Arg Ser Val Arg Arg
      115     120     125
Pro Ser Arg His Ser Cys Thr His Ser Val Lys Arg Val Ser Gly Lys
      130     135     140
Thr Thr Lys Lys Asn Gly Lys Leu Ser Trp Arg Ser Tyr Gly Pro Lys
      145     150     155     160
Gly Ala Ser Ala Ser Gly Ser Pro Ile Thr Ala Thr Thr Ser Ser Thr
      165     170     175
Pro Lys Pro Thr Ala Ser Cys Thr Thr Ser Gly Ala Glu Arg Ser Ala
      180     185     190
Ser Ala Ser Ala Thr Gln Arg Pro Gly Ser Cys Leu Arg Arg Ala Ser
      195     200     205
His Arg Thr Thr Ser Ala Ser Ser Val Leu Val Ser Lys Lys Pro Thr
      210     215     220
Ser Ser Ser Ser Thr Gly Arg Met Ser Arg Ser Trp Ile Ser Arg Ile
      225     230     235     240
Thr Pro Ser Trp Arg Ser Pro Arg Pro Gly Ser Ser Ser Lys Thr Ala
      245     250     255
Pro Tyr Thr Arg Ser Thr Ser Ser Ala Ser Arg Pro Gly Ser Thr Leu
      260     265     270
Pro Leu Ala Glu
      275

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<210> 40606

<211> 69

<212> PRT

<213> A.fumigatus

<400> 40606

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Pro Ser Ala Asn Lys Val Val Phe Cys Thr Gly Gly Ala Gly Thr Ile
1      5      10      15
Cys Ser Ala Gln Val Arg Ala Leu Val His Leu Gly Ala Asp Ala Cys
      20      25      30
Ile Val Gly Arg Asn Val Glu Lys Thr Glu Lys Ala Ala Ser Asp Ile

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17788

35 40 45  
Ala Thr Ala Ser Pro Gly Ala Lys Val Ile Gly Phe Ala Pro Val Asp  
50 55 60  
Val Arg Lys Val Arg  
65

<210> 40607  
<211> 106  
<212> PRT  
<213> A.fumigatus

<400> 40607  
Leu Gly Val Pro Tyr Val Ile Tyr Leu Pro Val Trp Val Ala Ser Asp  
1 5 10 15  
Cys Phe Ile Val Arg Pro Ser Pro Leu Gly Thr Gly Gly Arg Ile Ile  
20 25 30  
Phe Val Ser Ala Thr Ile His Tyr Arg Ala Met Pro Phe Gln Ala His  
35 40 45  
Val Ala Val Ala Lys Ala Gly Ile Asp Ala Leu Ser His Thr Val Ser  
50 55 60  
Ile Glu Tyr Gly Pro Leu Gly Val Thr Ser Asn Ile Ile Ala Pro Gly  
65 70 75 80  
Pro Ile Ala Ser Thr Glu Val His Phe Pro Pro Ser Val Phe Thr Thr  
85 90 95  
Gly Leu Gln Gly Ala Ala Ala Trp Arg Ser  
100 105

<210> 40608  
<211> 243  
<212> PRT  
<213> A.fumigatus  
  
<220>  
<221> UNSURE  
<222> (229)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40608  
Arg Asn Pro Asn Met His Ile Arg Lys Glu Leu Ser Glu Tyr Ala Ser  
1 5 10 15  
Leu Arg Gly Thr Thr Gly Pro Tyr Ala Asp Asn Leu Ser Val Asp Val  
20 25 30  
Val Ile Val Gly Ala Gly Phe Gly Gly Ile Tyr Cys Leu Tyr Glu Met  
35 40 45  
Arg Lys Leu Gly Leu Lys Ala Val Ile Tyr Glu Ala Gly Asp Asp Val  
50 55 60  
Gly Gly Thr Trp Arg Trp Asn Cys Tyr Pro Gly Ala Ala Val Asp Ser  
65 70 75 80  
Glu Ile Pro Glu Tyr Arg Tyr Ser Ile Pro Glu Thr Trp Lys Asp Trp  
85 90 95  
Thr Trp Ser Thr Asn Tyr Pro Asn Tyr Glu Glu Leu Arg Arg Tyr Phe  
100 105 110  
Asp His Val Asp Gln Val Leu Gln Val Lys Lys Asp Cys Ala Phe Asn  
115 120 125  
Ser Val Val Val Glu Ala Arg Phe Asp Thr Asp Glu Gly Arg Trp Gln  
130 135 140

## 17789

Val Lys Thr Ala Asp Gly Arg Thr Ala Ser Ser Lys Tyr Leu Ile Ile  
 145 150 155 160  
 Ala Ala Gly Phe Ser Ala Lys Arg Tyr Ile Pro Glu Trp Pro Gly Met  
 165 170 175  
 Asp Thr Phe Gln Gly Ile Val His His Ser Ser Phe Trp Pro Gly Glu  
 180 185 190  
 His Thr Ile Asp Val Arg Arg Lys Arg Cys Ala Val Ile Gly Thr Gly  
 195 200 205  
 Ala Ser Gly Val Gln Val Thr Gln Ala Trp Gly Pro Lys Thr Gly Ser  
 210 215 220  
 Leu Lys Val Phe Xaa Arg Thr Pro Asn Leu Ala Ile Ser His Ala Lys  
 225 230 235 240  
 Thr Arg Pro

&lt;210&gt; 40609

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40609

Gln Thr Val His Asn Ser Ala Gly Ala Ala Gly Asn Phe Leu Ala Ser  
 1 5 10 15  
 Ile Gln Gln Leu Ser Val Asn Ala Phe Lys Ser Val Ile Asp Ile Asp  
 20 25 30  
 Val Leu Gly Ser Tyr Asn Thr Leu Lys Ala Thr Ile Pro His Leu Val  
 35 40 45  
 Glu Ser Ala Lys Lys His Arg Val Asp Ser Glu Ser Arg Met Leu Ser  
 50 55 60  
 Thr Cys Arg Phe Gly Ser His Leu Thr Val Ser  
 65 70 75

&lt;210&gt; 40610

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40610

Arg Ser Ser Ser Arg Gly Gly Asp Ser Leu Gln Cys Leu Val Ser Lys  
 1 5 10 15  
 Leu Arg Ile Arg Ile Thr Leu His Leu Leu Val Leu Ile Ser Trp Ser  
 20 25 30  
 Pro Val Ala Gly Ala Gln Glu Lys Ile Ala Thr Leu Arg Tyr Arg His  
 35 40 45  
 Glu Leu Ile Ser Gly Ser Ile Ala Gln Leu Glu Asp Arg Val Ala Arg  
 50 55 60  
 Asn Thr Ala Glu Leu Glu Gln Met Ser Gln Ser Tyr Gly Glu Glu Tyr  
 65 70 75 80  
 Gly Asp Tyr Asp Asn Pro Thr Thr Ala Thr Leu Glu Val Thr Asp Ala  
 85 90 95  
 Asp Ile Glu Arg Glu Met Glu Glu Ile Arg Glu Leu Glu Arg Arg Lys  
 100 105 110  
 Arg Ala Leu Glu Ala Arg Val Ser Gly Met Glu Arg Asp Leu Gly Gly  
 115 120 125  
 Leu Ile Gly  
 130

<210> 40611  
 <211> 696  
 <212> PRT  
 <213> A.fumigatus

<400> 40611

Arg	Lys	Met	Pro	Ala	Glu	Arg	Arg	Ser	Leu	Arg	Ser	Asn	Ser	Lys	Ser
1				5					10					15	
Asp	Thr	Ser	Ser	Ser	Ala	Asn	Gly	Glu	Lys	Ala	Arg	Ser	Asn	Ser	Gln
		20						25					30		
Ser	Ser	Ser	Ser	Asn	Lys	Asp	Lys	Ala	Ala	Pro	Asn	Arg	Ala	Ala	Ala
		35					40					45			
Asn	Lys	Ala	Lys	Ser	Pro	Thr	Pro	Ala	Ala	Ser	Ser	Asn	Asn	Val	Ser
	50					55						60			
Asn	Ser	Gly	Met	Gly	Glu	Gln	Arg	Asp	Gln	Pro	His	Thr	Asn	Gly	Val
65					70					75					80
Asn	Gly	Ser	Glu	Asp	Ile	Glu	Met	Gly	Glu	Asp	Thr	Ala	Gly	Gly	Pro
			85						90					95	
Thr	Ser	Ser	Phe	Asn	Thr	Arg	Lys	Asp	Arg	Lys	Gly	Asp	Glu	Lys	Met
			100					105					110		
Thr	Val	Val	Val	Pro	Pro	Ser	Lys	Gly	Ser	Arg	Leu	Ser	Gly	Glu	Lys
		115					120						125		
Gly	Gln	Asp	Arg	Glu	Glu	Asp	Val	Val	Met	Glu	Ala	Ala	Glu	Thr	Asp
	130					135					140				
Ser	Gln	Lys	Pro	Glu	Ser	Glu	Val	Asp	Pro	Arg	Val	Lys	Ala	Ile	Gln
145					150					155					160
Gly	Ser	Phe	Leu	Phe	Pro	Ala	Ala	Val	Leu	Met	Asp	Ala	Cys	Leu	Thr
			165						170					175	
Ile	Thr	Val	Ile	Thr	Trp	Ala	Ile	Asp	Ile	Lys	Thr	Asn	Phe	Thr	Leu
		180						185					190		
Leu	Glu	Arg	Ala	Val	Ala	His	Phe	Asp	Pro	Arg	Phe	Thr	Leu	Arg	Val
	195						200					205			
Leu	Arg	Ser	Ile	Ser	Ser	Met	Arg	Lys	His	Ile	Thr	Ala	Asp	Val	Leu
	210					215					220				
Ala	Glu	Val	Ile	Val	Glu	Thr	Tyr	Pro	Pro	Ser	Ser	Ala	Thr	Ala	Phe
225					230					235					240
Phe	Leu	Leu	Glu	Ala	Ile	Asp	Gln	Ser	Gly	Ala	Tyr	Glu	Ser	Ala	Ile
			245						250					255	
Ala	Ser	Ser	Lys	Met	Glu	Val	Asp	Ser	Asp	Lys	Asn	Lys	Ser	Ala	Pro
			260					265					270		
Lys	Glu	Ile	Leu	Pro	Glu	Val	Asp	Thr	Tyr	Leu	Ser	Ile	Leu	Val	Gln
		275					280					285			
Ile	Tyr	Leu	Tyr	Asp	Lys	Lys	Asp	Ile	Gln	Gly	Gly	Ala	Lys	Phe	Ser
	290					295					300				
Thr	Ala	Leu	Thr	Glu	Arg	Leu	Arg	Thr	Leu	Asn	Arg	Arg	Thr	Leu	Asp
305					310					315					320
Ser	Leu	Ala	Ala	Arg	Val	Tyr	Phe	Tyr	Tyr	Ser	Leu	Phe	Phe	Glu	Gln
			325						330					335	
Val	Ala	Pro	His	Pro	Pro	Ser	Pro	Ala	Ala	Ala	Val	Thr	Ser	Ile	Arg
			340					345					350		
Gln	Pro	Leu	Leu	Ala	Ala	Leu	Arg	Thr	Ala	Val	Leu	Arg	Lys	Asp	Val
		355					360					365			
Asp	Thr	Gln	Ala	Thr	Val	Met	Thr	Leu	Leu	Leu	Arg	Asn	Tyr	Leu	Ser
	370					375					380				
Thr	Ser	His	Ile	Pro	Gln	Ala	Asp	Leu	Leu	Ile	Ser	His	Asn	Arg	Phe



## 17791

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385          390          395          400
Pro Pro Ser Ala Ser Asn Asn Gln Ile Ala Arg Tyr Leu Tyr Tyr Leu
          405          410          415
Gly Arg Ile Arg Ala Ile Gln Leu Gln Tyr Thr Asp Ala His Gly His
          420          425          430
Leu Ile Gly Ala Thr Arg Lys Ser Pro Ser Ser His Ser Ala Arg Gly
          435          440          445
Phe Tyr Gln Ala Ser His Lys Leu Leu Val Val Val Glu Leu Leu Met
          450          455          460
Gly Asp Ile Pro Asp Arg Ala Ile Phe Arg Gln Pro Ala Leu Glu Arg
465          470          475          480
Ala Leu His Pro Tyr Phe Leu Leu Val Gln Ala Val Ser Val Gly Asp
          485          490          495
Leu Asp Gly Phe Leu Asn Ile Val Asn Thr His Ser Ala Thr Phe Arg
          500          505          510
Lys Asp Gly Thr Tyr Thr Leu Ile Leu Arg Leu Arg Gln Asn Val Ile
          515          520          525
Lys Thr Gly Ile Arg Met Met Ser Leu Ser Tyr Ser Arg Ile Ser Leu
          530          535          540
Arg Asp Ile Cys Leu Arg Leu Gly Leu Asp Ser Glu Glu Ser Ala Glu
545          550          555          560
Tyr Ile Val Ala Lys Ala Ile Arg Asp Gly Val Ile Glu Ala Thr Leu
          565          570          575
Asp His Glu His Gly Tyr Met Lys Ser Lys Glu Val Gly Asp Ile Tyr
          580          585          590
Ala Thr Arg Glu Pro Gly Glu Val Phe His Glu Arg Ile Arg Ala Cys
          595          600          605
Leu Ala Leu His Asp Glu Ser Val Lys Val Gly Ser Arg Ser Phe Phe
          610          615          620
Phe Phe Phe Thr Ala Pro Leu Ser Pro Pro Pro Pro Phe Phe Phe Lys
625          630          635          640
Gly Phe Arg Ser Ser Glu Leu Ala Phe Glu Phe Ile Thr Asn Ile Cys
          645          650          655
Val Phe Phe Cys Val Gly His Glu Ile Ser His Glu Ser Ala Ser Pro
          660          665          670
Arg Ala Gln Glu Arg Thr Gly Gly Ser Gly Thr Gly Thr Arg Ala Arg
          675          680          685
Gln Arg Asp Ser Gly Gly Gly Tyr
          690          695

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&lt;210&gt; 40612

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40612

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Ile Val Arg Thr Leu Gly Cys Ser Trp Thr Leu Leu Tyr Leu Leu Phe
1          5          10          15
Phe Phe Phe Phe Lys Ile Ala Thr Pro Ser Glu Ile Asn Tyr Ser Tyr
          20          25          30
Ser Arg Leu Ser Met Arg Ala Arg Thr Val Ser Ala Ser Gly Leu Val
          35          40          45
Leu Ser Ser Arg Arg Thr Pro Ser Thr Ser Ile Cys Trp Gln Cys Leu
          50          55          60
Arg Asp Asp Leu Ser Lys Gln Leu Gln Thr His Ala Arg Asn Tyr His
65          70          75          80

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Pro Thr Arg Arg Lys Asp Ala Ser Pro Phe Gly Ala Ala Val Ser Ala  
                   85                  90                  95  
 Ala Gln Thr Ile Phe Lys Gly Leu Pro Lys Ala Pro Pro Gly Ile Ser  
                   100                  105                  110  
 Val Asp Pro Leu Arg Ile Val Gly Lys Glu Leu Lys Phe Leu Thr Lys  
                   115                  120                  125  
 Asn Ile Arg Gln Leu Leu Gly Ser Gly His Pro Thr Leu Asp Lys Val  
                   130                  135                  140  
 Ala Lys Tyr Tyr Thr Arg Ser Glu Gly Lys His Met Arg Pro Leu Leu  
 145                  150                  155                  160  
 Val Leu Leu Met Ser Gln Ala Thr Ala Val Phe Thr Gly Gly Ala Arg  
                   165                  170                  175  
 Ala Ser Cys Gln Arg  
                   180

&lt;210&gt; 40613

&lt;211&gt; 727

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40613

Ile Ser Gln Asp Pro Thr Met Ser Ser Ser Ser Val Tyr Glu Pro Asp  
 1                  5                  10                  15  
 Glu Asp Glu Glu Ala Ser Asp Ser Asp Ile Glu Ser Arg Tyr Ser Ser  
                   20                  25                  30  
 Thr Lys Phe Ser Ala Ser Ser Leu Ser Ile Asp Asp Phe Glu Arg Leu  
                   35                  40                  45  
 Glu Ser Thr Glu Ser Lys Asp Glu Asp Ala Arg Glu Val Ile Pro Arg  
                   50                  55                  60  
 Ser Thr Arg Gly Thr Arg Ala Gln Ile Leu Asp Thr Leu Arg Thr Ser  
 65                  70                  75                  80  
 Leu Gly Ile Gly Cys Val Asp Ala Tyr Ser Val Glu Leu Thr Gly Thr  
                   85                  90                  95  
 Ala Asn Asn Thr Ser Phe Ser Thr Val Gly Arg Glu Asn Tyr Asn Pro  
                   100                  105                  110  
 Thr Gln Asn Gly Val Ala Ile Trp Thr Ser Gln Glu Lys Glu Ile Leu  
                   115                  120                  125  
 Phe Ser Met Leu Asp Arg Lys Gly Lys Asn Gly Val Ala Glu Ile Ala  
                   130                  135                  140  
 Gln Ala Ile Gly Ser Lys Ser Glu Leu Glu Val Gln Glu His Leu Lys  
 145                  150                  155                  160  
 Leu Leu His Arg Gly Leu Glu Arg Gln His Val Arg Asp Ser His Ser  
                   165                  170                  175  
 Arg Thr Val Val Leu Gly Glu Val Pro Ala Ala Leu Glu Ile Ser Gln  
                   180                  185                  190  
 Glu Cys Cys Lys Ala Leu Asp Asp Tyr Ala Glu Leu Leu Ala Leu Glu  
                   195                  200                  205  
 Glu Gln Arg Ala Glu Asp Val Val Gly Arg Lys Leu His Gln Asn Leu  
                   210                  215                  220  
 Trp Ile Val Asp Arg Glu Val Ala Glu Met Val Glu Glu Gln Leu Glu  
 225                  230                  235                  240  
 Glu Arg Asp Gln Thr Pro Leu Pro Gly Ser Ser Val Tyr Val Thr Ala  
                   245                  250                  255  
 Glu Ile Phe Asn Ile Asn Lys Trp Ile Arg Leu Ser Glu Arg Phe Phe  
                   260                  265                  270  
 Met Asn Ala Gly Gly Pro Arg Leu Glu Asp Asn Trp Val Asn Val Ala

[illegible]

725

&lt;210&gt; 40614

&lt;211&gt; 603

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40614

Phe Phe Ser Gln Arg Trp Gln Val Ile Phe Thr Glu Leu Ile Gly Arg  
 1 5 10 15  
 Ile Pro Ser Arg Asn Glu Ile Gly Asp Lys Ser Leu Ile Ile Val His  
 20 25 30  
 Arg Lys Glu Leu Val Glu Gln Ala Ala Gln His Cys Arg Arg Ala Tyr  
 35 40 45  
 Pro Asp Arg Thr Val Glu Ile Glu Met Gly His Ser His Ala Ser Gly  
 50 55 60  
 Ala Gly Asp Ile Val Val Ala Ser Val Gln Thr Leu Thr Arg Gly Asn  
 65 70 75 80  
 Arg Leu Ala Lys Phe Asp Pro Lys Arg Phe Lys Leu Leu Leu Val Asp  
 85 90 95  
 Glu Ala His His Ile Val Ala Ser Ser Tyr Arg Glu Val Leu Lys His  
 100 105 110  
 Phe Gly Ala Asp Glu Thr Ser Ala Asp Ser Pro Val Leu Val Gly Val  
 115 120 125  
 Ser Ala Thr Phe Ser Arg Ser Asp Gly Leu Lys Leu Gly Ala Ala Ile  
 130 135 140  
 Asp His Ile Val Tyr His Lys Asp Tyr Ile Asp Met Ile Asn Asp Asn  
 145 150 155 160  
 Trp Leu Ala Asn Ala Val Phe Thr Thr Val Arg Ser Glu Ala Asn Leu  
 165 170 175  
 Ser Lys Val Lys Lys Asp Ser Phe Gly Asp Phe Ala Ile Gly Pro Leu  
 180 185 190  
 Ser Lys Ala Val Asn Thr Glu Asn Val Asn Asn Ile Thr Val Arg Ala  
 195 200 205  
 Trp Leu Ala Asn Ala Gln Asp Arg Lys Ser Thr Leu Val Phe Cys Val  
 210 215 220  
 Asp Val Ala His Thr Lys Ala Leu Thr Glu Thr Phe Arg Asn Tyr Gly  
 225 230 235 240  
 Ile Asp Ala Arg Tyr Ile Thr Ala Lys Thr Pro Lys Asp Val Arg Met  
 245 250 255  
 Glu Gln Leu Arg Ala Phe Arg Asn Gly Glu Tyr Pro Val Leu Leu Asn  
 260 265 270  
 Cys Gly Leu Phe Thr Glu Gly Thr Asp Ile Pro Asn Ile Asp Cys Val  
 275 280 285  
 Leu Leu Ala Arg Pro Thr Arg Ser Arg Asn Leu Leu Ile Gln Met Ile  
 290 295 300  
 Gly Arg Gly Leu Arg Leu Tyr Pro Gly Lys Glu Asp Cys His Ile Ile  
 305 310 315 320  
 Asp Met Val Ala Thr Leu Asn Thr Gly Val Leu Ser Thr Pro Thr Leu  
 325 330 335  
 Phe Gly Leu His Pro Asp Glu Ile Leu Gln Asn Ala Lys Ala Lys Asp  
 340 345 350  
 Leu Arg Asp Met Pro Leu Glu Lys Thr Thr Thr Gly Thr Gly Thr Ala  
 355 360 365  
 Leu Ala Gly Glu Glu Thr Glu Glu Pro Pro Pro Thr Pro Asp Asp Leu  
 370 375 380

## 17795

Asp Val Asn Leu Thr Phe Thr Lys Tyr Asp Thr Ile Tyr Asp Leu Ile  
 385 390 395 400  
 Ala Asp Leu Lys Ser Glu Lys His Ile Arg Ser Leu Ser Pro His Val  
 405 410 415  
 Trp Val Arg Val Gly Asp His Arg Tyr Val Leu Ser Asp Ala Ser Gly  
 420 425 430  
 Trp Leu Thr Ile Asp Lys Glu Glu Asp Thr Ser Arg Ala Tyr Arg Pro  
 435 440 445  
 Arg Leu Asn Pro Asp Pro Thr Ser Ile Ala Asn Thr Pro Asp Glu Pro  
 450 455 460  
 Tyr Ile Phe Thr Val Arg His Val Ala Lys Phe Lys Asn Ser Asp Asp  
 465 470 475 480  
 Ser Ile Met His Thr Arg Pro Arg Leu Ile Ala Thr Ala Pro Asp Phe  
 485 490 495  
 Glu Thr Ala Leu Arg Ala Ala Asp Thr Phe Ala Thr Lys Glu Phe Glu  
 500 505 510  
 Glu Arg Tyr Val Ser Val Arg Gln Thr Trp Arg Gln Leu Pro Ala Thr  
 515 520 525  
 Glu Ala Gln Val Arg Phe Leu Asn Lys Ala Lys Val Arg His Gly Ser  
 530 535 540  
 Ile Gln Arg Lys His Leu Thr Arg Gly Gln Ala Ala Asp Leu Ile Thr  
 545 550 555 560  
 Lys Leu Lys Phe Gly Gly Lys Gln Arg Phe Glu Ala Arg Arg Ala Glu  
 565 570 575  
 Arg Leu Ala Glu Leu Arg Lys Gln Glu Glu Ile Glu Glu Leu Arg Lys  
 580 585 590  
 Gln Gly Asp Val Arg Val Gly Pro Val Glu Ile  
 595 600

&lt;210&gt; 40615

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40615

Ser Pro Thr Ser Asn Pro Lys Asn Thr Phe Ala Leu Ser Ala His Met  
 1 5 10 15  
 Ser Gly Ser Ala Ser Ala Ile Thr Ala Thr Ser Ser Leu Thr Pro Gln  
 20 25 30  
 Ala Gly Ser Gln Ser Thr Arg Lys Lys Thr Gln Val Glu Arg Thr Asp  
 35 40 45  
 Pro Asp Ser Thr Leu Thr Arg Pro Leu Leu Pro Thr His Leu Thr Asn  
 50 55 60  
 Leu Thr Ser Leu Pro Ser Ala Thr Ser Pro Asn Ser Arg Thr Pro Met  
 65 70 75 80  
 Thr Ala Ser Cys Ile Pro Val Arg Asp Ser Ser Pro Gln Pro Pro Thr  
 85 90 95  
 Ser Arg Pro Pro Ser Ala Pro Gln Ile His Ser Gln Pro Lys Ser Ser  
 100 105 110  
 Arg Lys Asp Thr Ser Arg Tyr Gly Arg His Gly Gly Ser Ser Pro Arg  
 115 120 125  
 Arg Arg Arg Arg Cys Ala Ser  
 130 135

&lt;210&gt; 40616

&lt;211&gt; 199

17796

<212> PRT  
<213> A.fumigatus

<400> 40616

Gln	Glu	Thr	Ser	Thr	Gly	Ala	Ser	Ala	Met	Ile	Ser	Thr	Ser	Asp	Asn
1				5					10					15	
Ser	Lys	Ser	Phe	Asp	Ser	Phe	Ala	Glu	Tyr	Leu	Lys	Thr	Gln	Ile	Gly
			20					25					30		
His	Thr	Leu	Ala	Ala	Gly	Ser	Val	Ser	Arg	Gly	Leu	Ala	Lys	Ser	Pro
			35				40					45			
Gly	Asp	Val	Thr	Pro	Pro	Ser	Gln	Ala	Asn	Lys	Pro	Ala	Thr	Leu	Pro
	50					55				60					
Ala	Leu	Glu	Ala	Phe	Leu	Glu	Ala	Thr	Cys	Val	Leu	Pro	Leu	Leu	Gly
65					70				75						80
Gly	Asn	Phe	Gly	Ser	Phe	Asp	Asn	Leu	Val	Gly	Asn	Thr	Thr	His	Gly
				85					90					95	
Cys	Ala	Val	His	Thr	Lys	Ala	Thr	Phe	Ser	Asp	Ala	Val	Leu	Gln	Phe
			100					105					110		
Val	Gln	Glu	Ser	Asp	Thr	Ser	Phe	Leu	Ile	Ile	Asp	Met	Tyr	Phe	His
			115				120					125			
Ala	Phe	Gly	Arg	Asp	Leu	Arg	Val	Thr	Ile	Glu	Phe	Arg	Ser	Glu	Arg
	130					135					140				
Met	Ile	Val	Ser	Arg	Lys	Glu	Ala	His	Cys	Ser	Asn	Met	Ser	Gly	Asp
145					150					155					160
Met	Met	Gln	His	Cys	Leu	Ser	Asn	Ser	Asp	Pro	Val	Ile	Arg	Thr	Ser
				165					170					175	
Ser	Thr	Ala	Lys	Leu	Ile	Glu	Asn	Asp	Glu	Arg	Ser	Trp	Cys	Ser	Phe
			180					185					190		
Arg	Glu	Tyr	Leu	Leu	Arg	Leu									
			195												

<210> 40617  
<211> 74  
<212> PRT  
<213> A.fumigatus

<400> 40617

Tyr	Val	Ser	Pro	Gln	Ala	Asn	Asn	Gly	Arg	Arg	Ala	Ile	Met	Arg	Arg
1				5				10					15		
Thr	Ile	Ile	Arg	Ile	Ala	Asn	Leu	Ile	Thr	Leu	Leu	Glu	Phe	Ile	Phe
			20					25				30			
Ala	Leu	Trp	Gly	Asn	Leu	Ala	Ser	Phe	Arg	Gly	Ala	Ile	Val	Ser	Ser
			35				40					45			
Val	Gly	Pro	Glu	Tyr	His	Ile	Ile	Val	Val	Phe	Thr	Leu	Arg	Ile	Gly
	50					55					60				
Phe	Asp	Ile	Ala	Asp	Leu	Phe	Leu	Gly	Leu						
65					70										

<210> 40618  
<211> 64  
<212> PRT  
<213> A.fumigatus

<400> 40618

Arg	Trp	Val	Lys	Leu	Asn	Lys	Ala	Ala	Leu	Cys	Ala	Gln	Ala	Gln	Asp
1				5					10					15	

17797

Pro Pro Leu Phe Leu Ser Ile Thr Ile Pro Gly Gln Asp Val Ser Asp  
 20 25 30  
 Arg Pro Lys Glu Arg Thr Pro Thr Ser Gly Gly Pro Gly Trp Leu Met  
 35 40 45  
 Pro Ser Cys Lys Pro Arg Leu Glu Gln Phe Leu Leu Leu His Cys Ser  
 50 55 60

<210> 40619

<211> 231

<212> PRT

<213> A.fumigatus

<400> 40619

Thr Cys Ile Ala Val Ile Met Ala Gln Ile Gly Cys Tyr Leu Pro Cys  
 1 5 10 15  
 Arg Ser Ala Arg Leu Thr Pro Val Asp Arg Ile Met Ser Arg Leu Gly  
 20 25 30  
 Ala Asn Asp Asn Ile Phe Ala Ala Gln Ser Thr Leu Phe Val Glu Leu  
 35 40 45  
 Ser Glu Thr Lys Lys Ile Leu Ser Glu Ala Thr Pro Arg Ser Leu Val  
 50 55 60  
 Ile Leu Asp Glu Leu Gly Arg Gly Thr Ser Ser Tyr Asp Gly Val Ala  
 65 70 75 80  
 Val Ala Gln Ala Val Leu His His Val Ala Thr His Ile Gly Ala Met  
 85 90 95  
 Gly Phe Phe Ala Thr His Tyr His Ser Leu Ala Ala Glu Phe Asp Gly  
 100 105 110  
 His Pro Glu Ile Thr Pro Lys Arg Met Lys Ile His Val Asp Asp Glu  
 115 120 125  
 Glu Arg Arg Ile Thr Phe Leu Tyr Lys Leu Glu Asp Gly Val Ala Glu  
 130 135 140  
 Gly Ser Phe Gly Met His Cys Ala Ser Met Cys Gly Ile Pro Asn Lys  
 145 150 155 160  
 Val Ile Glu Arg Ala Glu Val Ala Ala Lys Gln Trp Glu His Thr Ser  
 165 170 175  
 Arg Leu Lys Glu Ser Leu Glu Arg Arg Lys Gly Gly Gly Phe Ile Gly  
 180 185 190  
 Leu Gly Trp Trp Ser Asp Val Ala Trp Ala Leu Arg Glu Thr Pro Ala  
 195 200 205  
 Asp Thr Pro Ser Ser Glu Ser Val Ser Asp Leu Ser Leu Glu Val Leu  
 210 215 220  
 Arg Lys Ala Ile Glu Ala Leu  
 225 230

<210> 40620

<211> 877

<212> PRT

<213> A.fumigatus

<400> 40620

Ala Lys Lys Gln Ile Ser Tyr Val Glu Ser Asp Ser Glu Gly Glu Asp  
 1 5 10 15  
 Asp Asp Asp Val Ile Phe Gly Pro Asn Arg Arg Asn Asn Arg Ala Ser  
 20 25 30  
 Lys Arg Arg Lys Val Ser Pro Glu Ser Glu Asp Glu Phe Glu Gln Gly  
 35 40 45

Asp Glu Val Gly Tyr Ser Asp Asp Gly Ser Ser His Asp Ser Ser Thr  
 50 55 60  
 Ala Val Val Gly Leu Arg Thr Asn Ile Leu Val Glu Met Asp Asp Phe  
 65 70 75 80  
 Ile Val Ala Asp Asp Ser Asp Glu Glu Ala Lys Pro Ser Lys Lys Arg  
 85 90 95  
 Lys Arg Pro Ser Asn Ala Thr Thr Arg Lys Ala Ser Ser Pro Pro Ala  
 100 105 110  
 Pro Pro Ser Pro Val Glu Asp Leu Asp Leu Gly Val Pro Asp Ala Ser  
 115 120 125  
 Ser Gly Thr Ala Leu Lys Trp Thr Tyr Asp Pro Glu Asn Leu Glu Pro  
 130 135 140  
 Arg Gln Asn Arg Glu Ile Gln Ala Thr Gln Lys Ser Asn Ala Ala Pro  
 145 150 155 160  
 Ala Lys Gln Lys Val His Leu Lys Glu Pro Glu Glu Arg Tyr Pro Trp  
 165 170 175  
 Leu Ala Asn Ile Arg Asp Ile Glu Gly His Pro Pro Asp His Pro Asp  
 180 185 190  
 Tyr Asp Pro Arg Thr Ile Tyr Ile Pro Pro Leu Ala Trp Ala Lys Phe  
 195 200 205  
 Ser Pro Phe Glu Lys Gln Tyr Trp Glu Ile Lys Gln Lys Phe Trp Asp  
 210 215 220  
 Thr Ile Val Phe Phe Lys Lys Gly Lys Phe Tyr Glu Leu Tyr Glu Asn  
 225 230 235 240  
 Asp Ala Thr Ile Gly His Gln Leu Phe Asp Leu Lys Leu Thr Asp Arg  
 245 250 255  
 Val Asn Met Arg Met Val Gly Val Pro Glu Met Ser Leu Asp His Trp  
 260 265 270  
 Ala Asn Gln Phe Val Ala Lys Gly Phe Lys Ile Ala Arg Val Asp Gln  
 275 280 285  
 Ser Glu Ser Ala Leu Gly Lys Glu Met Arg Glu Arg Asp Gly Lys Lys  
 290 295 300  
 Ala Gly Gly Lys Glu Asp Lys Ile Ile Lys Arg Glu Leu Ser Cys Val  
 305 310 315 320  
 Leu Thr Ala Gly Thr Leu Val Glu Gly Ser Met Leu Gln Asp Asp Met  
 325 330 335  
 Ser Thr Tyr Cys Val Ala Ile Lys Glu Ala Ile Val Asp Asp Arg Pro  
 340 345 350  
 Ala Phe Gly Leu Ala Phe Val Asp Thr Ala Thr Gly Gln Phe Ser Leu  
 355 360 365  
 Ser Glu Phe Val Asp Asp Val Asp Met Thr Lys Phe Glu Thr Phe Val  
 370 375 380  
 Ala Gln Thr Arg Pro Gln Glu Leu Leu Leu Glu Lys Ser Thr Ile Ser  
 385 390 395 400  
 Gln Lys Ala Leu Arg Ile Leu Lys Asn Asn Thr Gly Pro Thr Thr Ile  
 405 410 415  
 Trp Asn His Leu Lys Pro Gly Lys Glu Phe Trp Glu Ala Asp Ile Thr  
 420 425 430  
 Val Lys Glu Leu Asp Ala Ser Glu Tyr Phe Val Ser Gln Asp Asp Asp  
 435 440 445  
 Asn Leu Gln Ala Trp Pro Glu Thr Leu Arg Glu Ala Arg Asp Lys Glu  
 450 455 460  
 Leu Val Met Ser Ala Phe Gly Ala Leu Val Gln Tyr Leu Arg Val Leu  
 465 470 475 480  
 Lys Leu Asp Arg Asp Leu Ile Thr Ile Gly Asn Phe Ser Trp Tyr Asp  
 485 490 495



Pro Ile Arg Lys Ala Ser Ser Leu Val Leu Asp Gly Gln Thr Leu Ile  
 500 505 510  
 Asn Met Glu Ile Phe Ala Asn Ser Phe Asp Gly Gly Ser Glu Gly Thr  
 515 520 525  
 Leu Phe Gln Leu Leu Asn Arg Cys Ile Thr Pro Phe Gly Lys Arg Met  
 530 535 540  
 Phe Lys Gln Trp Val Cys His Pro Leu Met Asp Ala Lys Lys Ile Asn  
 545 550 555 560  
 Ala Arg Leu Asp Ala Val Asp Ala Leu Asn Ala Asp Ser Ser Val Arg  
 565 570 575  
 Asp Gln Phe Ser Ser Gln Leu Thr Lys Met Pro Asp Leu Glu Arg Leu  
 580 585 590  
 Ile Ser Arg Ile His Ala Ala Asn Cys Lys Ala Gln Asp Phe Val Arg  
 595 600 605  
 Val Leu Glu Gly Phe Glu Gln Ile Glu Tyr Thr Ile Thr Leu Leu Lys  
 610 615 620  
 Asp Asn Gly Ser Ser Ser Glu Gly Val Ile Gly Gln Leu Ile Ser Gly  
 625 630 635 640  
 Met Pro Asp Leu Ser Ser Leu Leu Glu Tyr Trp Lys Thr Ala Phe Asp  
 645 650 655  
 Arg Thr Lys Ala Lys Glu Asn Gly Ile Leu Val Pro Lys Pro Gly Val  
 660 665 670  
 Glu Glu Asp Phe Asp Thr Ser Gln Glu Arg Ile Glu Gln Leu His Arg  
 675 680 685  
 Asp Leu Asp Asn Leu Leu Lys Arg Gln Arg Arg Glu Leu Gly Ser Thr  
 690 695 700  
 Ala Ile Cys Tyr Arg Asp Asn Gly Lys Glu Ile Tyr Gln Leu Glu Val  
 705 710 715 720  
 Pro Ile Lys Val Lys Asn Ile Pro Lys Asn Trp Asp Gln Met Ser Ala  
 725 730 735  
 Thr Lys Gln Val Lys Arg Tyr Tyr Phe Pro Glu Leu Arg Ser Leu Ile  
 740 745 750  
 Arg Lys Leu Gln Glu Ala Gln Glu Thr His Ser Gln Ile Val Lys Glu  
 755 760 765  
 Val Ala Gly Arg Phe Tyr Ala Arg Phe Asp Glu Asn Tyr Thr Thr Trp  
 770 775 780  
 Leu Ala Ala Val Arg Ile Ile Ser Gln Leu Asp Cys Leu Ile Ser Leu  
 785 790 795 800  
 Ala Lys Ala Ser Ser Ser Leu Gly His Pro Ser Cys Arg Pro Val Phe  
 805 810 815  
 Val Glu Asp Glu Arg Ser Val Leu Glu Phe Glu Glu Leu Arg His Pro  
 820 825 830  
 Cys Leu Leu Ser Ser Val Glu Asp Phe Ile Pro Asn Asp Val Arg Leu  
 835 840 845  
 Gly Gly Glu Val Pro Asn Ile Asn Leu Leu Thr Gly Ala Asn Ala Ala  
 850 855 860  
 Gly Lys Ser Thr Ile Leu Arg Met Val Ser Arg Gln Lys  
 865 870 875

&lt;210&gt; 40621

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40621

Ser Leu Thr Val Gln Tyr Leu Ile Ala Lys Pro Ser Met Thr Asp Ser

## 17800

```

1           5           10           15
Gln Thr Thr Glu Arg Gln Arg Asn Ser Leu Ser Thr His Arg Asp Ser
20           25           30
Asp Pro Arg Pro Pro Tyr Asp Ser Ile Thr Pro His Ala Met Pro Pro
35           40           45
Thr Pro Pro Leu Arg Pro Gly Ser Gly Phe His Ser Asn Gly His Ser
50           55           60
Pro Ser Thr Ser Ser Val Ser Ala Ala Ser Ser Ser Ala Leu Met Lys
65           70           75           80
Asn Thr Glu Ser Tyr Pro Gln Ala Pro Ile Gly Leu Pro Ser Pro Thr
85           90           95
Asp Arg Ser Ser Ile Ser Ser Gln Gly Ser Val Gln His Ala Ala Ser
100          105          110
Ala Pro Tyr Ala Ser Pro Ala Pro Ser Val Ser Ser Phe Ser Ser Pro
115          120          125
Ile Glu Pro Ser Ala Pro Ser Thr Ala Ala Tyr Tyr Gln Lys Asn Pro
130          135          140
Ala Pro Asn Thr Phe Gln Asn Pro Ser Pro Phe Pro Gln Thr Ser Thr
145          150          155          160
Ala Ser Leu Pro Ser Pro Gly His Gln Gln Met Ile Ser Pro Val Thr
165          170          175
Pro Ala Trp Gln His His His Tyr Phe Pro Pro Ser Ser Ser Thr Ser
180          185          190
Tyr Gln Gln Asn His Asp Arg Tyr Ile Cys Arg Thr Cys His Lys Ala
195          200          205
Phe Ser Arg Pro Ser Ser Leu Arg Ile His Ser His Ser His Thr Gly
210          215          220
Glu Lys Pro Phe Arg Cys Thr His Ala Gly Cys Gly Lys Ala Phe Ser
225          230          235          240
Val Arg Ser Asn Met Lys Arg His Glu Arg Gly Cys His Thr Gly Arg
245          250          255
Pro Val Ala Thr Ala Met Val Gln
260

```

&lt;210&gt; 40622

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40622

```

Met Ser Leu Asp Ala Thr Asp Trp Val Asp His Arg Glu Gln Thr Ser
1           5           10           15
Val His Ser Pro Lys Lys Pro Lys Phe Ser Leu Gln Ser Thr Trp Ser
20           25           30
Trp Asn Ser Lys Lys Thr Thr Thr Glu Tyr Val Arg Lys Thr Val Pro
35           40           45
Leu Thr Ala Gly Arg Thr Pro Phe Ser Leu Gln Leu
50           55           60

```

&lt;210&gt; 40623

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40623

Pro Gly Glu Thr Ser Ile Glu Leu Leu Lys Leu Ile Ala Thr Thr Thr

## 17801

```

1           5           10           15
Lys Ile Ser Arg Ser Pro Trp Ala Tyr Ser Thr Arg Thr Lys Tyr Leu
                20           25           30
Arg Asn Val Cys Ile Leu Tyr Ser Ala Ser Gly Thr Asp Phe Thr Pro
                35           40           45
Thr Ile Val Gln Thr Phe Gln Asn Ile Leu Arg Asn Val Lys Lys Glu
                50           55           60
Leu Ser His Asn Ser Ile Glu Thr Glu Leu
65           70

```

&lt;210&gt; 40624

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40624

```

Gln Ala Leu Lys Thr Leu Lys Leu Leu Val Tyr Leu Val Gln Met
1           5           10           15
Gly Thr Val Ser Phe Gln Asn Arg Asp Ile Lys Thr Val Cys Gly Ile
                20           25           30
Phe Leu Tyr Gln Gly Met Ser His Trp Ser Leu Arg Tyr Ile Gly Gln
                35           40           45
Ser Arg Thr His Glu Leu Cys Phe Lys Leu Thr Gly Gln Phe Tyr Leu
                50           55           60
Arg Ile Val Ser Arg Ile Lys Asp Asp Thr Tyr Leu Gln Arg Leu Phe
65           70           75           80
Asn Arg Gly Arg Ile Ile Asn Gly Ser Arg Glu Asn
                85           90

```

&lt;210&gt; 40625

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40625

```

Val Ala Ser Cys Tyr Ile Gly Ile Leu Tyr Leu Arg Thr Val Ser Arg
1           5           10           15
Glu Ser Ala Lys Tyr Leu Lys Thr Leu Gly Cys Thr Trp Asp Leu Leu
                20           25           30
Ser Asn Cys Arg Leu Lys Ser His Ser Ala Cys Ile Lys Met Ala Tyr
                35           40           45
Asp Asp Leu Gln Thr Ser Tyr Lys Ser Pro Asn Leu Ile Pro Thr
50           55           60

```

&lt;210&gt; 40626

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40626

```

Arg Arg Tyr Cys Ala Gly Gly Leu Ser Lys Gln Ser Ala Leu Lys Val
1           5           10           15
Ser Tyr Tyr Arg Gly Phe Leu Ala Ala Lys Leu Glu Lys Leu Ser Ser
                20           25           30
Met Lys Gly Ser Met Leu Ala Val Gly Leu Ser Lys Lys Asp Thr Glu
                35           40           45

```

## 17802

Glu Tyr Ile Asn Arg Ile Gln Asp Ser Thr Leu Val Val Ala Cys Ile  
 50 55 60  
 Asn Ser Pro Lys Ser Val Thr Val Ser Gly Glu Ala Glu Gln Ile Asp  
 65 70 75 80  
 Thr Leu His Asp Leu Leu Gln Gln Asp Glu Val Phe Ser Arg Lys Leu  
 85 90 95  
 Met Val Asn Val Ala Tyr His Ser Ser Gln Met Gln Lys Leu Ala Asp  
 100 105 110  
 Glu Tyr Gln Ser Ala Met Gly Thr Leu Glu Lys Pro Ser Cys Glu Lys  
 115 120 125  
 Lys Lys Ile Pro Val Met Leu Ser Ser Val Thr Gly Asp Trp Val Ser  
 130 135 140  
 Ser Leu Glu Leu Met Asp Pro Ala Tyr Trp Val Arg Asn Met Val Ser  
 145 150 155 160  
 Pro Val Leu Phe Ser Asp Ala Val Ser Arg Ile Cys Ser Ser Ser Arg  
 165 170 175  
 Lys Gln Thr Arg Lys Ile Asp Arg Ser His Arg Tyr His Met Ala Ile  
 180 185 190  
 Asn His Leu Leu Glu Ile Gly Pro His Ala Ala Leu Gln Gly Pro Cys  
 195 200 205  
 Arg Asp Ile Leu Lys Ser Ile Asn Lys Gln Ala Asp Ile Pro Tyr Leu  
 210 215 220  
 Ser Val Leu Val Arg Asn Lys Ser Ala Val Lys Thr Ala Leu Asp Cys  
 225 230 235 240  
 Ala Gly Arg Leu His Cys Tyr Gly Tyr Pro Ile Asn Leu Ala Leu Val  
 245 250 255  
 Asn Lys Thr Ala Tyr Ser Gly Thr Asn Gln Arg His Val Leu Ser Asn  
 260 265 270  
 Leu Pro Glu Tyr Pro Phe Asn His Ser Ala Ser Tyr Trp Arg Glu Ser  
 275 280 285  
 Arg Lys Ser Lys Gly Tyr Arg Cys Arg Arg Phe Gly Arg Leu Asp Leu  
 290 295 300  
 Val Gly Ile Pro Asp Pro Asp Gly Asn Pro Met Glu Ala Thr Trp Arg  
 305 310 315 320  
 Asn Ile Ile Arg Val Ser Glu Met Pro Trp Val His Asp His Lys Ile  
 325 330 335  
 Asn Asn Thr Ile Leu Tyr Pro Ala Ala Arg His Val Gly His Gly Gly  
 340 345 350  
 Gly Ser Asp Gln Ala Ala Cys  
 355

&lt;210&gt; 40627

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40627

Lys Thr Val Pro Gly Arg Glu Val Gln Arg Ser Arg Glu Pro Tyr Leu  
 1 5 10 15  
 Leu Glu Ser Lys His Ala Ile Arg Gln Arg Asn Gln Ala Ser Ser Gln  
 20 25 30  
 Thr Thr Lys Gly Val Asp Val Val Leu Asn Ser Leu Ser Ser Glu Gly  
 35 40 45  
 Leu Ile Ala Ser Trp Glu Ser Ile Ala Pro Tyr Gly Arg Phe Ile Glu  
 50 55 60  
 Ile Gly Lys Thr Asp Ile Leu Ser Asn Ala Lys Leu Pro Met Leu Gln

## 17803

65		70		75		80									
Phe	Glu	Gln	Asn	Ile	Thr	Phe	Ala	Ala	Val	Asp	Leu	Gly	Arg	Asp	Asp
				85					90					95	
Asn	Gly	Ser	Pro	Thr	Arg	Cys	Asp	Ser	Gly	Thr	Gly	Asn	Tyr	Ile	Val
			100					105					110		
Ile	Val	Lys	Gly	Gly	Glu	Asp	Leu	Pro	Ser	Gly	Ser	Thr	Ser	Ser	Leu
		115					120					125			
Trp	His	Ile	Arg	His											
		130													

&lt;210&gt; 40628

&lt;211&gt; 286

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40628

Asp	Ala	His	Leu	Glu	Gly	Ile	Ser	Phe	Glu	Ser	Trp	Lys	Ala	Ser	Thr
1			5						10				15		
Thr	Pro	Lys	Ala	Gln	Gly	Ser	Trp	Asn	Leu	His	Glu	Leu	Leu	Pro	Arg
		20						25				30			
Arg	Met	Asn	Phe	Phe	Val	Leu	Met	Ser	Ser	Val	Ala	Gly	Ile	Tyr	Gly
		35					40					45			
Ala	Arg	Gly	Ala	Ser	Gly	Tyr	Ala	Ala	Gly	Asn	Thr	Phe	Glu	Asp	Gly
		50				55				60					
Leu	Ala	Arg	Tyr	Arg	Val	Ala	Met	Gly	Glu	Lys	Ala	Val	Ser	Phe	Asp
65					70				75					80	
Leu	Gly	Met	Phe	Leu	Asn	Val	Gly	Val	Leu	Lys	Asp	Asn	Leu	Ala	Leu
				85					90				95		
Arg	Glu	Arg	Thr	Leu	Ala	Ser	Thr	Val	Phe	Gln	Gln	Ile	Thr	Glu	Ser
			100					105				110			
Asp	Leu	His	Ala	Leu	Leu	Asp	Ile	Tyr	Cys	Asn	Pro	Ser	Leu	Asp	Glu
		115					120					125			
Ile	Pro	Leu	Leu	Lys	Ser	Gln	Val	Val	Val	Gly	Met	Thr	Pro	Lys	Leu
	130					135					140				
Arg	Glu	Lys	Gly	Met	Thr	Thr	Glu	Trp	Ile	Arg	Arg	Pro	Phe	Tyr	
145					150				155					160	
Gln	His	Met	Thr	Leu	Ala	Glu	Gly	Thr	Asp	Ala	Gly	Ile	Leu	Gly	Lys
				165					170					175	
Ala	Glu	His	Thr	Asn	Phe	Ala	Ala	Leu	Phe	Ala	Ser	Ala	Gly	Ser	Val
			180					185					190		
Ala	Asp	Ile	Thr	Ala	Ala	Val	Thr	Glu	Gln	Leu	Lys	Ile	Lys	Leu	Ser
		195					200					205			
Lys	Met	Leu	Ser	Leu	Pro	Leu	Thr	Glu	Ile	Asp	Val	Asp	Lys	Pro	Ile
	210					215					220				
His	Gln	Tyr	Gly	Val	Asp	Ser	Leu	Ala	Ala	Val	Glu	Leu	Arg	Asn	Trp
225					230					235					240
Phe	Ser	Arg	Glu	Leu	Arg	Ala	Asp	Ile	Ala	Ile	Phe	Asp	Ile	Leu	Gly
				245					250					255	
Gly	Ala	Asn	Ile	Ala	Ser	Ala	Val	Gly	Leu	Ala	Val	Arg	Lys	Ser	Asp
		260						265				270			
Tyr	Arg	Arg	Ala	Glu	Trp	Asp	Leu	Asp	Arg	Ala	Gln	Leu	Lys		
		275					280					285			

&lt;210&gt; 40629

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40629

Lys Lys Ile Ser Lys Gly Lys Met Thr Ser Lys Tyr Arg Val Leu His  
 1 5 10 15  
 Ile Gly Asp Asn Ile Lys Tyr Asn His Asp Val Tyr Glu Arg Phe Ala  
 20 25 30  
 Ser Glu Phe Glu Ile Ile Gln Pro Thr Ala Ala Glu Arg Glu Arg Gly  
 35 40 45  
 Glu Phe Met Arg Ala Leu Lys Glu Arg Arg Trp Gly Asp Phe His Ala  
 50 55 60  
 Ile Phe Arg Pro Phe Trp Asn Thr Gly Gly Glu Met Gly Arg Trp Asp  
 65 70 75 80  
 Ala Glu Leu Ile Pro Leu Leu Pro Pro Ser Val Arg Ile Met Ala Ser  
 85 90 95  
 Ala Gly Ala Gly Tyr Asp Trp Ala Asp Val Tyr Ile Phe Ala Gln His  
 100 105 110  
 Gly Ala Cys Ala Pro Asn Pro Ala Arg Arg Gln Asn His Leu Ala Asn  
 115 120 125  
 Ser Asp Asp Lys Glu Ser Tyr Thr Ala Thr Ala Pro Pro Pro Pro Gln  
 130 135 140  
 Asn Gln Ser Pro Thr  
 145

&lt;210&gt; 40630

&lt;211&gt; 565

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40630

Arg Leu Pro Trp Thr Ala Gln Val Ala Cys Ile Ala Thr Asp Thr Gln  
 1 5 10 15  
 Ser Ile Trp His Trp Ser Thr Lys Leu Pro Thr Val Glu Leu Thr Lys  
 20 25 30  
 Asp Met Cys Ser Val Thr Phe Pro Asn Thr Arg Ser Thr Ile Leu His  
 35 40 45  
 His Thr Gly Ala Arg Ala Glu Lys Ala Arg Ala Thr Asp Ala Gly Asp  
 50 55 60  
 Ser Ala Val Trp Thr Leu Ser Val Ser Gln Ile Gln Met Ala Thr Pro  
 65 70 75 80  
 Trp Lys Leu Pro Gly Gly Thr Ser Ser Glu Ser Leu Arg Cys Arg Gly  
 85 90 95  
 Phe Met Ile Thr Arg Ser Ile Ile Gln Phe Ser Thr Arg Arg Pro Gly  
 100 105 110  
 Met Leu Val Met Ala Val Glu Ala Ile Lys Gln Leu Val Glu Pro Asp  
 115 120 125  
 Lys Val Ile Val Gly Phe Asn Ile Lys Asp Ala Val Phe Ser Ser Ala  
 130 135 140  
 Leu His Ile Pro Thr His Ala Asp Gly Ile Glu Thr Asn Leu His Met  
 145 150 155 160  
 Lys Arg Val Arg Glu Gly Lys Ala Asp Ser Ser Gly Trp Tyr Glu Phe  
 165 170 175  
 Arg Ile Cys Ser Tyr Asp Asn Asn Thr Trp Ile Glu Asn Ser Thr Gly  
 180 185 190  
 Ser Ile Gln Ala Ala Phe Glu Ser Gly Glu Met Gly Leu Asn Thr Asn  
 195 200 205

## 17805

Gly Arg Val Glu His Glu Trp Gln Lys Gly Leu Val Gln Ser Tyr Gln  
 210 215 220  
 Asn Ala Ala Tyr Lys Cys Ser Glu Pro Ile Asp Ala Ser Gln Phe Tyr  
 225 230 235 240  
 Glu Asp Ile Phe Ala Cys Gly Tyr His Tyr Gly Pro Asn Phe Lys Ala  
 245 250 255  
 Ile Thr Ala Leu Arg Cys Asp Gly Lys Pro Asn Gly Gln Phe Val Ser  
 260 265 270  
 Asp Val Arg Thr Tyr Arg Trp Val Glu Asp Ala Ser Ser Ala Val Ala  
 275 280 285  
 Gln Pro His Thr Ile His Pro Thr Thr Leu Asp Ala Val Ile His Met  
 290 295 300  
 Met Ala Gly Ile Val Thr Tyr Gly Ser Gln Lys Lys Pro Val Ala Val  
 305 310 315 320  
 Pro Thr Arg Ile Asp Gln Ala Trp Ile Ser Asn Ser Gly Leu Ser His  
 325 330 335  
 Pro Thr Ala Asp Ser Ile Lys Val His Ala Ser Ser His Arg Ser Ala  
 340 345 350  
 Thr Gly Asp Ala Arg Tyr Ser Met Thr Ala Val Asp Cys Glu Met Thr  
 355 360 365  
 Arg Ala Leu Leu Thr Ile Arg Asn Leu Arg Val Thr Ala Leu Glu Ser  
 370 375 380  
 Ser Glu Gly Val Ser Glu Asp Asp Gln Leu Gln Thr Glu Asn Leu Cys  
 385 390 395 400  
 His His Ile Glu Trp Lys Pro Asp Leu Asp Leu Leu Glu Asn Glu Glu  
 405 410 415  
 Ile Arg Ala Phe Cys Gly Ser Gly Glu Ser Ile Ser Glu Asp Pro Val  
 420 425 430  
 Gln Tyr Phe Thr Glu Leu Asp Phe Leu Val Thr Thr Tyr Val Asp Lys  
 435 440 445  
 Val Leu Lys Ser Ile Pro Asp Val Lys Ile Asp His Pro Pro His Met  
 450 455 460  
 Gln Arg Tyr Met Glu Trp Met Val Asp Gln Gln Arg Ala Leu Glu Leu  
 465 470 475 480  
 Gly Tyr Ser Pro Phe Ser Ser Ala Thr Trp Arg Asn Arg Met Lys Asp  
 485 490 495  
 Glu Ser Phe Val Asn Asp Ile His Ala Lys Leu Glu Ser Thr Asn Lys  
 500 505 510  
 Arg Gly Leu Leu Val Ser Thr Val Cys Arg Asn Leu Phe Lys Phe Val  
 515 520 525  
 Lys Gly Glu Ile Asp Pro Met Val Leu Leu Phe Gln Glu Asn Leu Leu  
 530 535 540  
 Asp Asp Ser Tyr Tyr Glu Met Val Ser Gln Gly Ala Thr Met Thr Phe  
 545 550 555 560  
 Arg Met Thr Ala Arg  
 565

&lt;210&gt; 40631

&lt;211&gt; 523

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40631

Leu Ile Ser Ser Pro Thr Val Gly Glu Ser Leu Tyr Ser Ser Lys Ser  
 1 5 10 15  
 Pro Gly Arg Ala Leu Ser Gly Arg Arg Leu Ser Leu Ala Cys Leu Lys

			20				25				30				
Asp	Gly	Gly	Glu	Val	Arg	Leu	Ser	Leu	Leu	Cys	Pro	Lys	Ala	Glu	Ile
			35				40				45				
Ala	Gln	Ala	Ser	Leu	Thr	Leu	Ser	Gly	Leu	Glu	Pro	Tyr	Arg	Gln	Lys
			50				55				60				
Asn	Pro	Cys	Ala	Asp	Pro	Ala	Gln	Trp	Asp	Arg	His	Leu	Lys	Glu	Ala
65							70				75				
Gly	Phe	Ser	Gly	Cys	Asp	Val	Val	Met	Asp	Asp	Tyr	Ser	His	Gly	Asp
						85				90					
Cys	Gln	Glu	Ala	Ser	Leu	Ile	Leu	Ser	Thr	Ala	Val	Asp	Asp	Thr	Pro
						100				105					
Ala	Val	Glu	Lys	Ser	Leu	Lys	Ile	Ser	Ile	Ile	Leu	Asp	Pro	Ala	Asn
						115				120					
Tyr	Ala	Gln	Val	Glu	Leu	Ala	Gly	Glu	Leu	Glu	Ala	Gln	Leu	Val	Arg
						130				135					
Ala	Gly	Leu	Ala	Asn	Val	Thr	Gln	Arg	Pro	Val	Gly	His	Ser	Leu	Ile
145							150				155				
Gln	Glu	Asp	Pro	Thr	Asn	Ser	Leu	Asp	Ile	Thr	Val	Leu	Glu	Gly	Tyr
						165				170					
Ser	Pro	His	Leu	Tyr	Glu	Ile	Asn	Glu	Gln	Glu	Phe	Lys	Arg	Leu	Gln
						180				185					
Ser	Leu	Leu	Ser	Ser	Thr	Arg	Asn	Leu	Ile	Trp	Val	Asn	Gly	Gly	Gly
						195				200					
Gly	Gln	Glu	Pro	Cys	Pro	Lys	Tyr	Arg	Leu	Val	Asp	Gly	Leu	Phe	Arg
						210				215					
Val	Leu	Arg	Glu	Glu	Asn	His	Arg	Thr	Arg	Leu	Thr	Ile	Leu	Ser	Leu
225							230				235				
Asp	Gln	Lys	Ala	Ser	Ile	Lys	His	Gln	Ala	Gln	Gln	Ile	Ala	Lys	Leu
						245				250					
Ala	Ile	Ser	Ala	Val	Thr	His	Asp	Thr	Ser	Ile	Asp	Thr	Asp	Tyr	Thr
						260				265					
Glu	Leu	Asp	Gly	Met	Leu	His	Val	Gly	Arg	Leu	Val	His	Ala	Thr	Gly
						275				280					
Val	Asn	Gln	Glu	Ile	Ser	Ala	Lys	Lys	Leu	Pro	Gln	Gln	Lys	Ala	Leu
						290				295					
Arg	Gln	Phe	Gly	Ala	Gly	Pro	Arg	Leu	Arg	Leu	Glu	Ile	Gly	Ser	Pro
305							310				315				
Gly	Leu	Leu	Asn	Thr	Leu	His	Phe	Val	Glu	Asp	Thr	Ser	His	Arg	Lys
						325				330					
Pro	Leu	Lys	Pro	Thr	Glu	Phe	Glu	Val	Gln	Val	Lys	Ser	Val	Gly	Leu
						340				345					
Asn	Phe	Arg	Asp	Val	Leu	Ile	Ala	Leu	Gly	Arg	Leu	Asp	Ser	Glu	Ala
						355				360					
Leu	Gly	Ala	Glu	Phe	Ala	Gly	Ile	Val	Thr	Lys	Val	Gly	Pro	Ser	Cys
						370				375					
Arg	Lys	Phe	Gln	Pro	Gly	Asp	Arg	Val	Leu	Ala	Cys	Tyr	Pro	Ser	Arg
385							390				395				
His	Ala	Asn	Tyr	Val	Arg	Leu	Lys	Glu	Asn	Met	Ala	Val	Ile	Lys	Ile
						405				410					
Pro	Asp	Thr	Met	Leu	Ser	Phe	Ser	Glu	Ala	Ala	Ala	Leu	Pro	Val	Ala
						420				425					
Tyr	Ala	Thr	Ala	Trp	Ile	Ala	Leu	Asn	Gln	Ile	Ala	Arg	Leu	Gln	Gln
						435				440					
Gly	Glu	Thr	Ile	Le											



[illegible]

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<210> 40632
<211> 69
<212> PRT
<213> A.fumigatus
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[illegible]

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<210> 40633
<211> 123
<212> PRT
<213> A.fumigatus
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Gln	Pro	Asp	Asp	His	Asp	Leu	Gln	Val	His	Ser	Leu	Pro	Arg	Ile	Arg
1				5					10					15	
Gln	Phe	Ala	Arg	Tyr	Leu	Asp	Ala	Gln	Ala	His	Lys	Asn	Pro	His	Met
			20					25					30		
Lys	Ile	Leu	Glu	Val	Gly	Ala	Gly	Ser	Gly	Ala	Met	Thr	Gln	Phe	Cys
		35					40					45			
Leu	Lys	Val	Leu	Ser	Thr	Asn	Ser	Glu	Asn	Asp	Ala	Thr	Val	Pro	Arg
	50					55					60				
Tyr	Gly	Gln	Trp	Asn	Phe	Thr	Asp	Ile	Ser	Gly	Ser	Phe	Phe	Pro	Lys
65					70				75					80	
Ala	Gln	Asp	Leu	Phe	Ala	Ser	Gln	Gly	Thr	Arg	Met	Arg	Phe	Lys	Met
				85					90					95	
Leu	Asp	Ile	Glu	Gln	Asp	Pro	Gly	Leu	Glu	Gly	Phe	Glu	Cys	Gly	Thr
			100					105					110		
Tyr	Asp	Met	Val	Val	Ala	Phe	Leu	Val	Ser	Ser					
		115					120								

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<210> 40634
<211> 143
<212> PRT
<213> A.fumigatus
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Thr Val Leu Glu Thr Arg Pro Glu Tyr Leu Phe Ser Pro Asn Glu Thr  
1 5 10 15

Year	Country	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)	Population growth rate (%)	Urban population growth rate (%)	Population growth rate (per 1,000)	Urban population growth rate (per 1,000)	Population growth rate (per 1,000)	Urban population growth rate (per 1,000)
1950	Algeria	2.5	0.5	20	100	200	1.5	2.5	15	25	15	25
1955	Algeria	2.8	0.6	21	110	220	1.6	2.6	16	26	16	26
1960	Algeria	3.1	0.7	23	120	240	1.7	2.7	17	27	17	27
1965	Algeria	3.4	0.8	24	130	260	1.8	2.8	18	28	18	28
1970	Algeria	3.7	0.9	24	140	280	1.9	2.9	19	29	19	29
1975	Algeria	4.0	1.0	25	150	300	2.0	3.0	20	30	20	30
1980	Algeria	4.3	1.1	26	160	320	2.1	3.1	21	31	21	31
1985	Algeria	4.6	1.2	26	170	340	2.2	3.2	22	32	22	32
1990	Algeria	4.9	1.3	27	180	360	2.3	3.3	23	33	23	33
1995	Algeria	5.2	1.4	27	190	380	2.4	3.4	24	34	24	34
2000	Algeria	5.5	1.5	27	200	400	2.5	3.5	25	35	25	35
2005	Algeria	5.8	1.6	28	210	420	2.6	3.6	26	36	26	36
2010	Algeria	6.1	1.7	28	220	440	2.7	3.7	27	37	27	37
2015	Algeria	6.4	1.8	28	230	460	2.8	3.8	28	38	28	38
2020	Algeria	6.7	1.9	28	240	480	2.9	3.9	29	39	29	39
2025	Algeria	7.0	2.0	29	250	500	3.0	4.0	30	40	30	40
2030	Algeria	7.3	2.1	29	260	520	3.1	4.1	31	41	31	41
2035	Algeria	7.6	2.2	29	270	540	3.2	4.2	32	42	32	42
2040	Algeria	7.9	2.3	29	280	560	3.3	4.3	33	43	33	43
2045	Algeria	8.2	2.4	29	290	580	3.4	4.4	34	44	34	44
2050	Algeria	8.5	2.5	30	300	600	3.5	4.5	35	45	35	45
2055	Algeria	8.8	2.6	30	310	620	3.6	4.6	36	46	36	46
2060	Algeria	9.1	2.7	30	320	640	3.7	4.7	37	47	37	47
2065	Algeria	9.4	2.8	30	330	660	3.8	4.8	38	48	38	48
2070	Algeria	9.7	2.9	30	340	680	3.9	4.9	39	49	39	49
2075	Algeria	10.0	3.0	30	350	700	4.0	5.0	40	50	40	50
2080	Algeria	10.3	3.1	30	360	720	4.1	5.1	41	51	41	51
2085	Algeria	10.6	3.2	30	370	740	4.2	5.2	42	52	42	52
2090	Algeria	10.9	3.3	30	380	760	4.3	5.3	43	53	43	53
2095	Algeria	11.2	3.4	30	390	780	4.4	5.4	44	54	44	54
2100	Algeria	11.5	3.5	30	400	800	4.5	5.5	45	55	45	55

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<210> 40635
<211> 179
<212> PRT
<213> A.fumigatus
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[illegible]

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<210> 40636
<211> 517
<212> PRT
<213> A.fumigatus
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Asn Ile Gln Ser Asn Gln Lys Ser Ile Gly Glu Phe Met Asp Cys Gln  
1 5 10 15

Arg Ser Asn Ile Asn Leu Leu Pro Leu Cys Tyr Ala Gly Ser Asn Lys  
 20 25 30  
 Glu Ile Gly Thr Val Val Ala Pro Thr Met Ala Gly Phe Glu Gly Glu  
 35 40 45  
 Ala Pro Gln Ala Ser Lys Ile Pro Tyr Trp Arg Leu Val Phe Asp Pro  
 50 55 60  
 Lys Val Val Thr Asp Glu Val Ile Asn His Pro Tyr Ala Gly Arg Gly  
 65 70 75 80  
 Thr Asp Asp Asp Pro Phe Val Val Val Trp Ile Ser Gly Asp Ser Arg  
 85 90 95  
 Asn Pro Met Asn Phe Ser Ser Phe Leu Lys Trp Ser Leu Thr Ile Leu  
 100 105 110  
 Val Ser Leu Thr Thr Leu Ala Ile Ala Leu Ile Ser Ser Ala Tyr Ser  
 115 120 125  
 Gly Gly Met Ala Glu Val Met Lys Glu Leu Asp Ser Ser Arg Glu Val  
 130 135 140  
 Thr Thr Leu Gly Ile Ser Leu Phe Val Leu Gly Phe Ala Phe Gly Pro  
 145 150 155 160  
 Leu Ile Trp Ala Pro Met Ser Glu Val Phe Gly Arg Arg Asn Val Phe  
 165 170 175  
 Thr Ile Thr Phe Cys Leu Leu Thr Asp Phe Asn Ala Gly Cys Ala Gly  
 180 185 190  
 Ser Gly Asn Ile Gln Thr Leu Ile Ile Leu Arg Phe Leu Ala Gly Phe  
 195 200 205  
 Phe Gly Ser Ser Pro Phe Gly Asn Ala Gly Gly Ser Ile Ala Asp Met  
 210 215 220  
 Phe Pro Ala Ala Lys Arg Gly Ile Ala Ile Ser Leu Phe Ser Ala Ala  
 225 230 235 240  
 Pro Leu Cys Gly Pro Ala Ile Gly Pro Ile Ile Gly Gly Phe Leu Gly  
 245 250 255  
 Ser Gly Ala Gly Trp Arg Trp Val Glu Gly Phe Leu Ala Ile Phe Ser  
 260 265 270  
 Gly Val Ile Trp Ile Cys Leu Cys Val Phe Leu Pro Glu Thr Tyr Ala  
 275 280 285  
 Pro Val Leu Leu Arg Lys Arg Ala Glu Lys Leu Ser Glu Leu Ser Gly  
 290 295 300  
 Lys Val Tyr Arg Ser Lys Leu Asp Ile Glu Arg Gly Lys Leu Ser Leu  
 305 310 315 320  
 Gln Gln Thr Leu Thr Thr Ala Leu Ser Arg Pro Trp Arg Leu Leu Phe  
 325 330 335  
 Arg Glu Pro Ile Val Phe Leu Phe Cys Ile Tyr Met Ala Ile Ile Tyr  
 340 345 350  
 Gly Ile Leu Tyr Leu Cys Phe Ala Ala Phe Pro Ile Val Phe Gln Glu  
 355 360 365  
 Ala Arg Gly Trp Asn Glu Gly Ile Gly Gly Leu Ala Phe Leu Gly Ile  
 370 375 380  
 Leu Val Gly Met Val Ile Ala Val Ile Tyr Thr Phe Pro Glu Asn Met  
 385 390 395 400  
 His Tyr Ala Lys Leu Cys Arg Gln Thr Thr Gly Arg Leu Pro Pro Glu  
 405 410 415  
 Val Arg Leu Ala Pro Ser Ile Val Gly Ala Ile Ala Leu Pro Ile Gly  
 420 425 430  
 Leu Phe Trp Phe Ala Trp Thr Asn Ser Pro Ser Ile His Trp Met Val  
 435 440 445  
 Ser Ile Ala Ala Gly Ala Pro Phe Gly Phe Gly Leu Val Leu Val Phe  
 450 455 460

## 17810

Leu Ser Val Phe Asn Tyr Leu Ile Asp Ala Tyr Thr Ile Tyr Ser Ala  
 465 470 475 480  
 Ser Val Leu Ala Ala Asn Ser Ala Leu Arg Ser Leu Phe Gly Ala Ala  
 485 490 495  
 Phe Pro Leu Phe Thr Ser Tyr Leu Tyr Ser Gly Leu Gly Gly Ser Arg  
 500 505 510  
 Asp Ile Thr Val Cys  
 515

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<400> 40637  
 Pro Leu Ala Asn Cys Phe Val Gly Ile His Trp Ala Ser Ser Ile Pro  
 1 5 10 15  
 Ala Phe Leu Ala Leu Ala Cys Val Pro Ile Pro Ile Val Phe Tyr Leu  
 20 25 30  
 Tyr Gly Ala Arg Ile Arg Lys Arg Cys Arg Tyr Ala Ala Glu Ala Asp  
 35 40 45  
 Ala Phe Met Gln Arg Leu Val Gln Ser Asn Gln Gln Glu Ala Gln Arg  
 50 55 60  
 Glu Glu Pro Val Ile Glu Lys Ala Asn Ala Ala Val Glu Pro Ala Thr  
 65 70 75 80  
 Val Asp Val Glu Arg Asp Ser Glu Thr Gly Ser Leu Ser Thr Val Pro  
 85 90 95  
 Ser Ala Ile Asp Met Ser Arg Lys Ala Ser Cys Val Ser Lys Ile Ser  
 100 105 110  
 Gly Arg Trp Leu Gly Arg Thr Ala Thr Gln Tyr Glu Glu Asn Pro Tyr  
 115 120 125  
 Asp Ile Asp Arg Ile Asn Thr Arg Asn Ser Ala Ile Ser Gly His Tyr  
 130 135 140  
 Gln Arg Asp  
 145

<210> 40638  
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 <213> A.fumigatus

<400> 40638  
 Lys Asn Ile Tyr Gln Leu Leu Leu Cys Ser Leu Ala Ser Ile Gln Tyr  
 1 5 10 15  
 Val His Val Lys Ala Thr Pro Tyr Phe Gln Gln His Thr Val Leu Thr  
 20 25 30  
 Val Ser His Gln Leu His Trp Leu Tyr Ser His Tyr Thr Asp Asp Tyr  
 35 40 45  
 Ser Pro Ile Leu Asn Asn Asp Asp Leu Ser Ser Glu Leu Gln His Cys  
 50 55 60  
 Ser Leu Ser Glu His Val Ile His Thr Ile Ala His Asn Ala Cys Val  
 65 70 75 80  
 Glu Tyr Ser Phe His Pro Phe Arg Gly Ser  
 85 90

<210> 40639

<211> 426  
 <212> PRT  
 <213> A.fumigatus

<400> 40639

Gly	Gly	Ala	Glu	Pro	Cys	Ser	Arg	Leu	Asp	Gly	Phe	Glu	Ala	Lys	Gly
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Ser	Gly	Ser	Phe	Gly	Glu	Val	Ala	Trp	Phe	Asp	Gly	Gly	Ala	Thr	Thr
		20						25					30		
Ser	Gly	Arg	Ser	Arg	Gly	Ser	Thr	Arg	Val	Gln	Asp	Arg	Ala	Lys	Arg
		35					40					45			
Ser	Ser	Leu	Val	Asp	Val	Ala	Ser	Leu	Arg	Ser	Lys	Thr	Ile	Ser	Glu
	50					55					60				
Arg	Asp	Gly	Thr	Asp	Gly	Trp	Leu	Asp	Asn	Val	Leu	Ser	Met	Ala	Tyr
65					70					75					80
Ile	Gly	Pro	Ile	Gly	Glu	Ser	Lys	Glu	Glu	Tyr	Tyr	Ile	Asp	Ile	Ser
				85					90					95	
Asp	Gln	Ser	Gly	Trp	Ala	His	Leu	Trp	Leu	Phe	Pro	Val	Ala	Gly	Gly
			100					105					110		
Glu	Pro	Ile	Ala	Leu	Thr	Lys	Gly	Glu	Trp	Glu	Val	Thr	Asn	Ile	Leu
		115					120					125			
Ser	Ile	Asp	Lys	Pro	Arg	Gln	Leu	Val	Tyr	Phe	Leu	Ser	Thr	Lys	His
	130					135					140				
His	Ser	Thr	Glu	Arg	His	Leu	Tyr	Ser	Val	Ser	Trp	Lys	Thr	Lys	Glu
145					150					155					160
Ile	Thr	Pro	Leu	Val	Asp	Asp	Thr	Val	Pro	Ala	Val	Trp	Ser	Ala	Ser
				165				170						175	
Phe	Ser	Ser	Gln	Gly	Gly	Tyr	Tyr	Ile	Leu	Ser	Tyr	Arg	Gly	Pro	Asp
			180					185					190		
Val	Pro	Tyr	Gln	Asp	Leu	Tyr	Ala	Ile	Asn	Ser	Thr	Ala	Pro	Leu	Arg
		195					200					205			
Thr	Ile	Thr	Ser	Asn	Ala	Ala	Val	Leu	Asn	Ala	Leu	Lys	Glu	Tyr	Thr
	210					215					220				
Leu	Pro	Asn	Ile	Thr	Tyr	Phe	Glu	Leu	Ala	Leu	Pro	Ser	Gly	Glu	Thr
225					230					235					240
Leu	Asn	Val	Met	Gln	Arg	Leu	Pro	Val	Lys	Phe	Ser	Pro	Lys	Lys	Lys
				245					250					255	
Tyr	Pro	Val	Leu	Phe	Thr	Pro	Tyr	Gly	Gly	Pro	Gly	Ala	Gln	Glu	Val
			260					265					270		
Ser	Lys	Ala	Trp	Gln	Ala	Leu	Asp	Phe	Lys	Ala	Tyr	Ile	Ala	Ser	Asp
		275					280					285			
Pro	Glu	Leu	Glu	Tyr	Ile	Thr	Trp	Thr	Val	Asp	Asn	Arg	Gly	Thr	Gly
	290					295					300				
Tyr	Lys	Gly	Arg	Ala	Phe	Arg	Cys	Gln	Val	Ala	Ser	Arg	Leu	Gly	Glu
305					310					315					320
Leu	Glu	Ala	Ala	Asp	Gln	Val	Phe	Ala	Ala	Gln	Gln	Ala	Ala	Lys	Leu
				325					330					335	
Pro	Tyr	Val	Asp	Ala	Gln	His	Ile	Ala	Ile	Trp	Gly	Trp	Ser	Tyr	Gly
		340						345					350		
Gly	Tyr	Leu	Thr	Gly	Lys	Val	Ile	Glu	Thr	Asp	Ser	Gly	Ala	Phe	Ser
		355					360					365			
Leu	Gly	Val	Gln	Thr	Ala	Pro	Val	Ser	Asp	Trp	Arg	Phe	Tyr	Asp	Ser
	370					375					380				
Met	Tyr	Thr	Glu	Arg	Tyr	Met	Lys	Thr	Leu	Glu	Ser	Asn	Ala	Ala	Gly
385					390					395					400
Tyr	Asn	Ala	Ser	Ala	Asp	Pro	Glu	Gly	Ser	Arg	Leu	Gln	Glu	Cys	Ala

Variable	Mean	SD	Min	Max	Median	Q1	Q3	Mode	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	32	28	38	35	0.15	3.2	Normal
Gender	1.2	0.4	1	2	1	1	2	1	-0.2	1.8	Normal
Education	12.5	2.1	9	16	12	11	13	12	0.05	2.5	Normal
Income	4500	1500	2000	8000	4000	3500	5000	4500	0.1	3.5	Normal
Marital Status	1.5	0.5	1	2	1	1	2	1	-0.1	1.5	Normal
Occupation	2.5	1.2	1	4	2	1	3	2	0.2	2.8	Normal
Health Status	1.8	0.6	1	2	1	1	2	1	-0.05	1.2	Normal
Stress Level	3.2	1.5	1	5	3	2	4	3	0.15	3.0	Normal
Life Satisfaction	4.5	1.0	3	5	4	4	5	4	-0.1	1.5	Normal
Work-Life Balance	3.8	1.2	2	5	3	3	4	3	0.05	2.2	Normal
Family Support	4.2	0.8	3	5	4	4	5	4	-0.05	1.2	Normal
Community Involvement	2.8	1.0	1	4	2	2	3	2	0.1	2.5	Normal
Personal Growth	3.5	1.1	2	4	3	3	4	3	0.05	2.0	Normal
Overall Well-being	4.0	0.9	3	5	4	4	5	4	-0.05	1.2	Normal

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<210> 40640
<211> 134
<212> PRT
<213> A.fumigatus
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<400>	40640
Arg Asn Thr Pro Cys Arg Thr Leu Pro Thr Ser Ser Ser Pro Phe Pro	
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Ala Ala Lys Pro Ser Thr Ser Cys Ser Ala Ser Pro Ser Ser Ser Pro	
20                       25                       30	
Pro Arg Arg Ser Thr Pro Phe Ser Ser Pro Pro Thr Ala Val Pro Ala	
35                       40                       45	
His Lys Lys Ser Pro Lys Pro Gly Lys Pro Ser Thr Ser Arg Pro Thr	
50                       55                       60	
Leu Pro Gln Thr Pro Asn Ser Ser Ile Ser Pro Gly Arg Leu Thr Thr	
65                       70                       75                       80	
Ala Ala Arg Ala Thr Arg Ala Ala His Ser Gly Ala Lys Ser Pro Ala	
85                       90                       95	
Gly Trp Ala Ser Ser Lys Pro Pro Thr Arg Ser Ser Pro Arg Ser Arg	
100                       105                       110	
Pro Pro Ser Ser Leu Met Ser Thr His Ser Thr Ser Pro Tyr Gly Asp	
115                       120                       125	
Gly Val Thr Ala Ala Ile	
130	

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<212> PRT
<213> A.fumigatus
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<400> 40641															
Arg	Arg	Trp	Arg	Ala	Thr	Arg	Gln	Gly	Thr	Met	Pro	Val	Pro	Ile	Arg
1				5					10					15	
Lys	Val	Ala	Gly	Tyr	Lys	Asn	Val	Arg	Gly	Gly	Val	Leu	Ile	Gln	His
			20					25					30		
Gly	Thr	Gly	Asp	Asp	Asn	Val	His	Phe	Gln	Asn	Ala	Ala	Ala	Leu	Val
			35				40						45		
Asp	Thr	Leu	Val	Gly	Ala	Gly	Val	Thr	Pro	Glu	Lys	Leu	Gln	Val	Gln
						55					60				
Trp	Phe	Thr	Asp	Ser	Asp	His	Gly	Ile	Arg	Tyr	His	Gly	Gly	Asn	Val
65					70					75				80	
Phe	Leu	Tyr	Leu	Gln	Leu	Ser	Lys	Arg	Leu	Tyr	Glu	Glu	Lys	Lys	Arg
				85					90					95	
Lys	Glu	Lys	Gly	Glu	Ala	His	Gln	Trp	Ser	Lys	Lys	Ser	Val	Leu	
			100					105					110		

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<210> 40642
<211> 736
<212> PRT
<213> A.fumigatus
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Phe Val Gln Pro Gly Gln Asn Glu Ile Thr Ile Ile Gly Leu Asp Pro  
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 Arg Val Asp Pro Asp Ser Ile Arg Val Asp Gly Ser Gly Ser Ala Thr  
 20 25 30  
 Ile Thr Asp Ile Gln Thr Asp Lys Val Pro Arg Arg Glu Ser Phe Glu  
 35 40 45  
 Asp Val Tyr Pro Glu Glu Ser Asp Ser Glu Leu Ser Asp Ala Leu Val  
 50 55 60  
 Thr Asp Ser Asp Glu Asp Ile Gly Val Asp Asp Ser Glu Leu Gln Ala  
 65 70 75 80  
 Val Arg Lys Glu Ile Ala Glu Val Glu Ala Ala Leu Ala Lys Ala Arg  
 85 90 95  
 Gly Asn Gln Val Met Ser Val Ala Val Ser Asp Phe Met Asp Gly Tyr  
 100 105 110  
 Gly Lys Lys Leu Ser Met Glu Asn Ala Asp Ala Ala Lys Leu Asn Asp  
 115 120 125  
 Phe Leu Gln Leu Tyr Val Gln Gln His Ser Val Glu Cys Asp Arg Tyr  
 130 135 140  
 His Gln Ser Leu Val Gln Ile Lys Glu Ala Glu Lys Ser Leu Asp Arg  
 145 150 155 160  
 Leu Asn Arg Lys Arg Ala Arg Leu Glu Ile Ala Tyr Ser Lys Ala Lys  
 165 170 175  
 Glu Ala Ala Leu Lys Asp Val Arg Lys Glu Arg Lys Lys Arg Leu Arg  
 180 185 190  
 Glu Arg Glu Glu Lys Lys Lys Lys Lys Gln Gln Leu Arg Ser Glu Arg  
 195 200 205  
 Lys Gln Phe Trp Thr Gln Thr Val Ser Gln Val Ile Val His Leu Asp  
 210 215 220  
 Ser His Ser Ile Met Thr Pro Gly Ser Ser Arg Arg Ser Ser Ile Val  
 225 230 235 240  
 Gly Lys Ala Gly Ser Asp Ala Asp Ala Ile Asp Val Thr Leu Arg Leu  
 245 250 255  
 Thr Tyr Val Ile Pro Gly Pro Cys Trp Val Ser Arg Tyr Asp Leu Arg  
 260 265 270  
 Ile Ser Thr Pro Ser Ser Ser Ala Arg Leu Thr Tyr Arg Ala Glu Phe  
 275 280 285  
 His Asn Ser Cys Ser Glu Thr Trp Arg Asp Thr Gln Val Ile Leu Ser  
 290 295 300  
 Thr Ser Gln Ala Ser Phe Ser Gly Leu Glu Glu Arg Ile Pro Gln Leu  
 305 310 315 320  
 Gln Gly Trp His Ile Lys Leu Asp Pro Asn Ser Thr Gly Leu Pro Ser  
 325 330 335  
 Trp Asn Asn Ile Leu Arg Ser Leu Asp Glu Ser Gly Gln Pro His Ala  
 340 345 350  
 Gln Ala Lys Phe Leu Arg Gln Gln Leu Ala Glu Met Gln Lys Ala Asn  
 355 360 365  
 Gln Gln Arg Leu Asn Asn Ile Pro Arg Val Pro Met Gln Ala Gln Gln  
 370 375 380  
 Ala Ala Pro Ala Ser Leu Phe Gly Gly Ala Pro Ala Lys Pro Ala Phe  
 385 390 395 400  
 Gly Gln Pro Ser Phe Gly Gln Ala Pro Ala Ala Ser Ala Phe Gly Ala  
 405 410 415  
 Pro Pro Arg Ala Ala Ala Glu Ser Ser Leu Phe Gly Leu Asp Ala Pro  
 420 425 430  
 Gln Gln Gln Ala Gln Ser Gln Gln Gln Pro Gln Thr Met Pro Val Ile  
 435 440 445

Glu Arg Gly Glu Arg Leu Asp Ser Leu Pro Ala Ser Gly Phe Gly Met  
 450 455 460  
 Ala Met Gln Ser Gln Ala Ala Pro Ser Gly Ser Ser Asn Leu Asn Pro  
 465 470 475 480  
 Gly Asn Gln Asp Asp Arg Glu Asp Glu Asp Glu Asp Glu Asp Thr Gln  
 485 490 495  
 Thr Ile Ala Ala Ala Ser Leu Glu His Gln Asp Ser Val Lys Gln Asp  
 500 505 510  
 Tyr Gly Leu Thr Thr Thr Tyr Asp Leu Pro Gly Arg Arg Thr Leu Val  
 515 520 525  
 Pro Ser Lys Val His Arg Arg His Val Leu Ala Glu Leu Asp Leu Lys  
 530 535 540  
 Ser Met Thr Leu Thr His Ile Ile Val Pro Lys Ile Arg Ala Ala Ala  
 545 550 555 560  
 Phe Leu Arg Ala Arg Ile Gln Asn Thr Ser Ser Val Thr Ile Leu Arg  
 565 570 575  
 Gly Arg Ala Gly Met Thr Val Asp Gly Thr Phe Leu Gly Thr Thr Asn  
 580 585 590  
 Leu Pro Asn Cys Ser Pro Asn Asp Ala Phe Asn Ile Ser Leu Gly Val  
 595 600 605  
 Asp Pro Ser Ile Leu Val Thr Tyr Ala Lys Pro Ser Val Arg Arg Val  
 610 615 620  
 Gly Gly Gly Phe Phe Ser Lys Glu His Thr Ala Val Phe Arg Arg Ala  
 625 630 635 640  
 Cys Trp Val Lys Asn Thr Lys Ser Ile Ala Val Asn Leu Ile Val Ser  
 645 650 655  
 Glu Gln Val Pro Leu Ser Glu Asp Glu Lys Leu Arg Val Gln Ile Leu  
 660 665 670  
 Glu Pro Arg Glu Leu Glu Lys Glu Gly Asp Gln Ala Lys Met Ala Met  
 675 680 685  
 Glu Gly Lys Gly Ser Gly Ser Val Ser Leu Ala Lys Asn Gly Glu Val  
 690 695 700  
 Lys Trp Thr Phe Lys Leu Gln Pro Gly Lys Asp Ile Arg Leu Thr Leu  
 705 710 715 720  
 Glu Tyr Glu Ala Arg Val Pro Pro Gly Asn Glu Val Glu Val Val Arg  
 725 730 735

&lt;210&gt; 40643

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40643

Thr Pro Phe Gln Thr Ile Lys Arg Gln Gln Pro Ser Phe Ile Gln Ala  
 1 5 10 15  
 Asn Ala Arg Gln Val Phe Ala Asn Val Gln Ser Arg Arg Gln Tyr Ser  
 20 25 30  
 Ser Glu Ile Ala Asp Ala Met Val Gln Val Ser Gln Asn Met Gly Met  
 35 40 45  
 Gly Ser Ala Ala Ile Gly Leu Gly Gly Ala Gly Ile Gly Ile Gly Leu  
 50 55 60  
 Val Phe Gly Ala Leu Leu Gly Val Ser Arg Asn Pro Ala Leu Arg  
 65 70 75 80  
 Gly Gln Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Phe Val Glu Ala  
 85 90 95  
 Ile Gly Leu Phe Asp Leu Met Val Ala Met Met Cys Lys Tyr Val



## 17815

100

105

110

<210> 40644  
 <211> 213  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40644

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Leu Asp Asn Val Phe Ile Cys Arg Arg Gly Pro Ser Cys Ser Gln Ser
1          5          10          15
Cys Asn Gly Ser Pro Gly Cys Leu Ser Pro Thr Val Arg Ile Pro Trp
          20          25          30
Tyr Val Thr Ser Pro Ser His Val Asn Asn Phe Leu Leu Phe Val Ser
          35          40          45
Gly Lys Ala Leu Thr Asn Ile Pro Gly Ser Gly Arg Pro Gly Gln Leu
          50          55          60
Pro Pro Pro Pro Phe Gly Ile Pro Pro Pro Gly Gly Pro Asn Gly Ala
65          70          75          80
Pro Pro Gly Met Pro Ile Arg Thr Ser Ser Pro Ser Ile Ile Leu Phe
          85          90          95
Leu Phe Phe Arg Ser Asn Thr Asp Thr Pro Thr Ala Pro Pro Gly Gly
          100          105          110
Arg Gly Leu Pro Phe Pro Pro Pro Phe Pro Pro Ala Pro Gly Gly Ala
          115          120          125
Pro Gly Gly Leu Pro Pro Pro Pro Leu Gly Asn Met Pro Pro Gly Gln
          130          135          140
Gly Phe Pro Pro Val Pro Pro Pro Gly Gly Phe Pro Pro Asn Phe Gln
145          150          155          160
Ile Pro Pro Pro Gly Ala Gly Gly Phe Pro Pro Val Pro Pro Pro Gly
          165          170          175
Gln Pro Gly Phe Ser Pro Ser Pro Gly Pro Gly Met Ser Gly Pro Pro
          180          185          190
Ala Pro Pro Gly Thr Gly Ser Ser Ser Leu Pro Gly Pro Pro Pro Gly
          195          200          205
Leu Ser Glu Lys Arg
          210

```

<210> 40645  
 <211> 106  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40645

```

Leu Trp Ile Leu Cys Thr Gly Asp Tyr Cys Asp Val Tyr Leu Thr His
1          5          10          15
Asp Ser Met Ser Val Arg Lys Ala His Asn Ala Gly Arg Asn' His Leu
          20          25          30
Arg Asn Val Val Glu Tyr Tyr Gln Arg Thr Gln Pro Leu Pro Phe Arg
          35          40          45
Ser His Ser Leu Ser Leu Thr Val Leu Thr Ile Gly Thr Glu Ile Gly
          50          55          60
Gln Glu Lys Ala Gln Ser Val Ile Asp Ser Ile Thr Ser Ser Tyr Ala
65          70          75          80
Ala Glu Gly Gln Ala Val Pro Asn Pro Ala Met Ala Pro Pro Gly Ala
          85          90          95
Phe Pro Pro Pro Phe Gly Phe Pro Gly Met

```

## 17816

100

105

<210> 40646  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 40646  
 Arg Ser Thr Asp Met Lys Ala Arg Ile Thr Ser Gln Val Ile Arg His  
 1 5 10 15  
 Asn Asp Gln Pro Glu Leu Asn His Arg Phe Ser Leu Ser Pro Gly Gly  
 20 25 30  
 Gly Pro Gly Lys Leu Glu Glu Pro Val Pro Gly Gly Ala Gly Gly Pro  
 35 40 45  
 Asp Ile Pro Gly Pro Gly Leu Gly Leu Lys Pro Gly Trp Pro Gly Gly  
 50 55 60  
 Gly Thr Gly Gly Asn Pro Pro Ala Pro Gly Gly Gly Ile  
 65 70 75

<210> 40647  
 <211> 193  
 <212> PRT  
 <213> A.fumigatus

<400> 40647  
 Ser Leu Leu Ala Pro Tyr Gln Trp Ile Arg Arg Val Ser Lys Arg Phe  
 1 5 10 15  
 Ser Ala Cys Ile Glu Leu Ala Leu Met Met Tyr Arg Tyr Val Asp Arg  
 20 25 30  
 Lys Gln Ala Glu Ser Leu Asn Leu Ile His Ser Thr Gly Ser Ser Val  
 35 40 45  
 Ser Ile Arg Val Asp Asn Lys Thr Arg Val Gly Tyr Ala Pro Arg Gly  
 50 55 60  
 Arg Lys Ser Val Arg Leu Glu Ser Lys Lys Gly Tyr Asp Met Gly Leu  
 65 70 75 80  
 Phe Ile Phe Asp Ile Ile His Thr Pro Tyr Gly Cys Gly Thr Trp Pro  
 85 90 95  
 Ala Leu Trp Leu Ala Asp Thr Tyr Asn Trp Pro Leu Asn Gly Glu Ile  
 100 105 110  
 Asp Val Leu Glu Thr Thr Asn Arg Ala Thr Glu Gly Asn Val Val Ser  
 115 120 125  
 Leu His Thr Asp Lys Gly Cys Thr Val Lys Glu Arg Arg Lys Gln Leu  
 130 135 140  
 Gly Asn Ala Gln Tyr Ser Thr Cys Asp Asp Lys His Gly Asn Ala Gly  
 145 150 155 160  
 Cys Thr Val Gln Ala Arg Arg Ala Thr Tyr Gly Gln Glu Leu Asn Glu  
 165 170 175  
 Asp Gly Gly Ala Val Trp Leu Pro Ser Ser Ala Phe Leu Gly Gln Lys  
 180 185 190  
 Tyr

<210> 40648  
 <211> 376  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40648

Val Met Val Ile Val Ala Leu Phe Lys Ala Gly Cys Glu Ile Leu Ala  
 1 5 10 15  
 Lys Asn Gly Arg Met Lys Ser Asp Lys Phe Ser Asp Phe Arg Asn Gly  
 20 25 30  
 Trp Lys Val Val Ala Arg Gly Ile Leu Phe Arg Leu Thr Leu Ile Gly  
 35 40 45  
 Phe Pro Gln Met Cys Val Leu Cys Leu Trp Glu Phe Thr Gln His Asn  
 50 55 60  
 Ser Ala Ala Glu Met Val Leu Ala Val Ile Met Phe Leu Ser Val Leu  
 65 70 75 80  
 Gly Ala Leu Gly Trp Ala Ala Phe Lys Val Ile Leu Leu Ala Lys Arg  
 85 90 95  
 Ser Val Val Met His Lys Asn Pro Ala Tyr Ile Leu Tyr Ser Asp Pro  
 100 105 110  
 Thr Cys Leu Asn Lys Trp Gly Phe Leu Tyr Val Gln Tyr Arg Ala Thr  
 115 120 125  
 Ala Tyr Tyr Phe Val Val Pro Val Leu Leu Tyr Leu Leu Ile Lys Ala  
 130 135 140  
 Met Phe Ile Gly Leu Gly Gln Pro Ser Pro Val Val Gln Thr Val Ala  
 145 150 155 160  
 Leu Val Ile Ile Glu Ala Ala Met Leu Val Ala Val Ser Val Leu Arg  
 165 170 175  
 Pro Trp Met Asp Lys Lys Thr Asn Ile Tyr Asn Ile Thr Ile Ala Ala  
 180 185 190  
 Ile Asn Phe Val Asn Ala Val Phe Leu Leu Phe Phe Ser Glu Val Phe  
 195 200 205  
 Asn Gln Pro Gly Ile Val Thr Gly Val Met Gly Val Val Phe Phe Val  
 210 215 220  
 Tyr Asn Ala Val Phe Ser Leu Val Leu Leu Ile Leu Val Leu Ile Ala  
 225 230 235 240  
 Ser Ile Tyr Ala Ile Val Ser Lys Asn Pro Asp Thr Arg Tyr Gln Pro  
 245 250 255  
 Met Arg Asp Asp Arg Gly Ser Phe Ile Lys Ser Gln Ser Gln Leu Thr  
 260 265 270  
 Thr Glu Leu Asp Ala Leu Gly Ala Thr Ala Arg Gly Asp Val Lys Asp  
 275 280 285  
 Thr Ser Tyr Lys Ser Ser Pro Phe Asp Asp Asp Asn Gly Ser Phe Ser  
 290 295 300  
 Ser Gly Asn Gly Ala Ser Ile Gly Arg Gln Asn Leu Gln Ala Ser His  
 305 310 315 320  
 Asp Thr Thr Pro His Arg Gln Ala Pro Val Ser Pro Val Asp Pro Ser  
 325 330 335  
 Val Pro Leu Phe Pro Ser Asp Gly Arg Gly Pro Pro His Tyr Gly Arg  
 340 345 350  
 Ser Pro Ser Pro Ile Pro Tyr Arg Ala Gln His Asn Ala Ser Pro Trp  
 355 360 365  
 Gln Arg Gly Ala Gly Tyr Asp His  
 370 375

&lt;210&gt; 40649

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

17818

<400> 40649

```

Ser Arg Arg Arg Pro Arg Gln Thr Arg Gly Ala Arg Pro Arg Trp Arg
1          5          10          15
Arg Gly Thr Arg His Thr Gly Pro Arg Ala Arg Ala Glu Thr Arg Leu
          20          25          30
Ala Gly Arg Arg Asp Arg Arg Glu Ser Pro Ser Ala Gly Arg Arg Asn
          35          40          45
Leu Lys Ile Arg Arg Glu Ser Ala Arg Trp Arg Asp Arg Arg Lys Ser
          50          55          60
Leu Thr Arg Gly His Val Ala Glu Gly Arg Arg Arg Lys Ala Ser Arg
65          70          75          80
Gly Ala Ala Trp Cys Trp Gly Glu Arg Arg Trp Lys Gly Glu Ala Ser
          85          90          95
Thr Ala Arg Trp Cys Cys Trp Ser Val Ser Val Arg Ala Glu Lys
          100          105          110

```

<210> 40650

<211> 130

<212> PRT

<213> A.fumigatus

<400> 40650

```

Ala Thr Arg Pro Glu Ala Glu Ser Pro Ser Asp Ser Ser Pro Arg Lys
1          5          10          15
Ala Thr Thr Trp Ala Tyr Ser Ser Ser Thr Leu Ser Thr His Pro Thr
          20          25          30
Ala Ala Glu Pro Gly Pro Pro Cys Gly Ser Leu Thr His Thr Thr Gly
          35          40          45
Arg Ser Thr Gly Lys Ser Thr Ser Ser Lys Pro Gln Thr Glu Leu Gln
          50          55          60
Lys Ala Thr Trp Ser Pro Cys Thr Pro Ile Arg Ala Ala Pro Ser Arg
65          70          75          80
Lys Asp Gly Ser Ser Trp Ala Thr Arg Ser Thr Arg Arg Ala Met Ile
          85          90          95
Ser Thr Gly Thr Arg Ala Val Leu Phe Lys Leu Ala Gly Pro His Thr
          100          105          110
Gly Arg Ser Ser Met Lys Met Ala Val Leu Tyr Gly Phe Arg Pro Leu
          115          120          125
Pro Phe
          130

```

<210> 40651

<211> 122

<212> PRT

<213> A.fumigatus

<400> 40651

```

Val Lys Asn Thr Asp Pro Phe Gln Ile Tyr Ala Val Glu Leu Arg Glu
1          5          10          15
Ala Gly Ile Arg Val Trp Gly Phe Pro Arg Asp Ser Ile Pro Asp Asp
          20          25          30
Ile Ser Ser Met Glu Arg Arg Pro Asp Pro Ser Ser Trp Gly Pro Ala
          35          40          45
Leu Ala Asp Phe Pro Ser Thr His Cys Asp Ile Pro Ser His Phe Ser
          50          55          60
Asn Gln Ser Ile Ile Val Asn Ile Asp Leu Cys Gly Glu Met Gly Ala

```



## 17820

Asn Arg Glu Val Asp Asp Ala Leu Pro Leu Asp Asn Ile Leu Lys Pro  
 50 55 60  
 Asp Pro Lys Leu Arg Lys Leu Leu Glu Asp Ile Asp Lys Ser Lys Val  
 65 70 75 80  
 Lys Leu Trp Leu Leu Thr Asn Ala Tyr Ile Ser His Ala Gln Arg Val  
 85 90 95  
 Ile Lys Leu Leu Lys Val Asp Asp Leu Phe Glu Gly Ile Thr Phe Cys  
 100 105 110  
 Asp Tyr Ser Arg Pro Pro Leu Ile Cys Lys Pro Ser Gln Asp Met Tyr  
 115 120 125  
 Glu Lys Ala Glu Ile Glu Ala Gly Val Pro Ser Thr Glu Gln Cys Tyr  
 130 135 140  
 Phe Val Gly Met Leu Phe Ser Phe Ala Leu  
 145 150

&lt;210&gt; 40655

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40655

Ala Leu Ser Gly Lys Leu Val Arg Thr Gln Val Pro Leu Gly Trp Arg  
 1 5 10 15  
 Asn Val Lys Thr Leu Tyr His Gln Tyr Met Asp Gly Ile Lys Pro Pro  
 20 25 30  
 Thr Leu Val Ser Glu Glu Tyr Arg Gln Met Tyr Leu Glu Thr Val Gln  
 35 40 45  
 Ser Met Cys Asn Glu Ala Ala Val Ser Asp Glu Gly Asp Glu Lys Phe  
 50 55 60

&lt;210&gt; 40656

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40656

Cys Tyr Gly Leu Ile Ala Tyr Ala Arg Glu Ser Asn Leu Asp Leu His  
 1 5 10 15  
 Phe Pro His Leu Phe Leu Ile Asp Ser Ser Thr Leu Thr Val Ile Ser  
 20 25 30  
 Phe Thr Leu Gly Glu Gln Trp Arg Leu Arg Asn Val Pro Leu Gly Gln  
 35 40 45  
 Tyr Leu Ile Leu Thr His Gly Gln Phe Ser Ser Leu Thr  
 50 55 60

&lt;210&gt; 40657

&lt;211&gt; 342

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40657

Leu Leu Asn Pro Pro His Gln Ile Ala Lys Arg Gln Leu Leu His Pro  
 1 5 10 15  
 Asn Tyr Ser Ser Ala Pro Gly Val Leu Ser Thr Thr Met Thr Gly Ser  
 20 25 30  
 Thr Ser Tyr Leu Asp Ala Leu Gln Arg Asp Gly Phe Val Val Ile Pro

## 17821

```

      35              40              45
Ser Leu Leu Thr Ala Glu Glu Val Glu His Phe Arg Ala Ile Ala Thr
  50              55              60
Glu Ala Thr Thr Leu Ala Arg Thr Gly Gln Trp Pro His Phe Arg Thr
  65              70              75              80
Val Pro Lys Gln Phe Pro Pro Trp Pro Lys Thr Ala Pro Pro Ala Ser
      85              90              95
Glu Gly Gly Ile Trp Gly Val Gln His Leu Leu His Pro Gln Met Pro
      100              105              110
Asn Arg Thr Glu Phe Ala Arg Phe Tyr Phe Ser Glu Lys Val Leu Ala
      115              120              125
Val Ala Glu Glu Leu Leu Gly Val Lys Gly Thr Ser Thr Glu Ala Thr
      130              135              140
Glu Pro Leu Val Met Glu Leu Phe Asn Leu Leu Val Ala Pro Glu Thr
      145              150              155              160
Lys Asp Phe Glu Leu Arg Trp His Arg Asp Asp Ile Pro Glu Thr Val
      165              170              175
Ser Pro Glu Glu Met Arg Leu Leu Gln Ala Lys Ser Pro Gln Gly
      180              185              190
Arg Gln Ser His Ala Gln Tyr Asn Leu Ala Leu Cys Pro Asp Ser Ser
      195              200              205
Leu Ile Val Val Pro Gly Ser His Arg Arg Val Arg Thr Glu Thr Glu
      210              215              220
Arg Ser Ala Gly Pro Tyr Glu Pro Glu Leu Pro Gly Gln Leu Val Val
      225              230              235              240
Glu Leu Arg Pro Gly Asp Ala Val Phe Tyr Asp Ser Asn Ile Leu His
      245              250              255
Arg Gly Val Tyr Lys Ala Lys Ser Gln Glu Gly Glu Glu Thr Arg Leu
      260              265              270
Thr Leu His Gly Ser Ile Gly Leu Lys Val Ser Ala Ser Gly Ser Asp
      275              280              285
Ala Asp Glu Lys Val Arg Ala Thr Ala Val Leu Gln His Gly Val Gly
      290              295              300
Ser Trp Val His His Glu Asp Ala Ala Phe Gly Ile Gly Glu Arg Ala
      305              310              315              320
Lys Lys Met Arg Ala Asn Leu Ile Ala Leu Gly Thr Gly Glu Gly Val
      325              330              335
Gly Tyr Ser Leu Gln Gly
      340

```

&lt;210&gt; 40658

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (50)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40658

```

Arg Ser Asp Ile Arg Thr Asp Phe Phe Trp Thr Ile Tyr Asn Arg Ala
  1              5              10              15
Ala Val Ile Ile Met Thr Ile Thr Arg Pro Ser Ser Ala Val Arg Arg
      20              25              30
Ser Ser Ser Val His Val Met Val His Asn Val Tyr Met Tyr Ile Gly

```





17823

```

Pro Gln Leu Leu Arg Ala Val Ala Gln Arg Leu Ala Thr Ala Gln Gln
      355                      360                      365
Ala Gln Phe Ile Gln Ser Leu Ile Leu Val Phe Ala Arg Leu Thr Leu
      370                      375                      380
Ile Asn Ala Arg Glu Val Val Asp Phe Leu Ala Gln Val Asp Ile Asn
385                      390                      395                      400
Gly Gln Ser Gly Leu Pro Ile Val Leu Ser Lys Trp Leu Glu Asn Ser
      405                      410                      415
Val Asn Phe Ala Gly Tyr Asp Glu Ile Lys Gln Asn Ile Ile Ala Leu
      420                      425                      430
Ala Thr Leu Tyr Asn Leu Glu Asp Pro Arg Leu Ala Gln Val Gln Val
      435                      440                      445
Lys Gly Asp Leu Ile Ile Gln Asp Thr Gly Arg Ile Lys Thr Arg Ser
      450                      455                      460
Gln Thr Arg Asn Asn Pro Asp Arg Tyr Thr Thr Val Ser Ala Pro Leu
465                      470                      475                      480
Lys Ile Ile Lys Val Leu Val Glu Glu Leu Ala Ala Ser Gly Asn
      485                      490                      495
Lys Glu Ile Asp Ala Ala Thr Ala Ala Leu Glu Glu Glu Asp Ser
      500                      505                      510
Asp Asp Asp Gly Glu Trp Glu Asp Ile Pro Ser Asn Thr Leu Asp Leu
      515                      520                      525
Ser Leu Gly Ile Thr Lys Gln Glu Leu Met Ala Phe Gly Glu Gly Gly
      530                      535                      540
Ser Glu Gly Val Phe Gly Val Arg Lys Arg Asp Asp Glu Thr Gln Ala
545                      550                      555                      560
Phe Leu Leu Asp Phe Phe His Asn Ala Ser Ser Lys Pro Gly Phe Asp
      565                      570                      575
Gln Leu Phe Ala Ala Leu Thr Pro Asp Glu Gln Glu Lys Leu Arg Ser
      580                      585                      590
Leu Gly

```

<210> 40660

<211> 89

<212> PRT

<213> A.fumigatus

<400> 40660

```

Pro Trp Lys Arg Asn Ser Met Ala Ala Glu Cys Trp Leu His Asn Val
1      5      10      15
Gln Glu Gly Val Gly Thr Tyr Val Ala Ser Ala Cys Lys Ser Phe Tyr
      20      25      30
Cys Leu Cys Ser Ser Leu Ala Trp Arg Arg Ile Ile Met Phe Cys Ile
      35      40      45
Val Arg Glu Arg Asp Gly Ala Ala Asp Arg Asp Glu Gly Tyr Ser Val
      50      55      60
Ala Leu Leu Asn Gly Tyr Ser Pro Arg Asp Ala Asp Gly Thr Val Leu
65      70      75      80
Gly Thr Ser Glu Thr Asn Ile Trp Ile
      85

```

<210> 40661

<211> 333

<212> PRT

<213> A.fumigatus

&lt;400&gt; 40661

Tyr Asn Ser Cys Ile Ile Thr Pro His Pro Ser Arg Phe Pro Leu Phe  
 1 5 10 15  
 Asn Ser Pro Lys Thr His Glu Leu Lys Leu Thr Thr Asn Arg Gln Thr  
 20 25 30  
 Ser Asp Glu Asp Ser Leu Cys Asp Ala Gln Ser Ile Ile Asp Ser Asn  
 35 40 45  
 Phe Ser Leu Ala Ser Thr Thr Arg Asp Tyr Leu Tyr Glu Asn Gly Arg  
 50 55 60  
 Arg Tyr His Ala Tyr Arg Leu Gly His Tyr Pro Met Pro Asn Asp Glu  
 65 70 75 80  
 Glu Glu Gln Asp Arg Leu Ala Phe Met His His Leu Phe Lys Leu Leu  
 85 90 95  
 Val Gly Gly Asp Leu Tyr Arg Ala Pro Ile Leu Asn Asp Gly Arg Pro  
 100 105 110  
 Lys Arg Ile Leu Asp Val Gly Thr Gly Thr Gly Ile Trp Ala Leu Glu  
 115 120 125  
 Met Ala Asp Asp Phe Pro Asp Ala Glu Ile Val Gly Thr Asp Leu Ser  
 130 135 140  
 Pro Ile Gln Pro Asn Trp Ala Pro Pro Asn Cys Thr Phe Asn Val Asp  
 145 150 155 160  
 Asp Ala Glu Ser Asp Trp Thr Phe Thr Pro Ala Glu Ala Phe Asp Tyr  
 165 170 175  
 Ile His Ala Arg Ser Leu Gly Gly Gly Ile Gly Asp Trp Asn Arg Phe  
 180 185 190  
 Leu Arg Gln Ala Tyr Arg His Thr Lys Pro Gly Gly Trp Val Glu Ile  
 195 200 205  
 Gln Glu Tyr Glu Thr Trp Ile Arg Ser Asp Asp Gly Thr Ile Gln Arg  
 210 215 220  
 Ala Pro Met Leu Leu Asp Trp Gln Gln Lys Ile Asp Glu Ala Ser Thr  
 225 230 235 240  
 Arg Phe Gly Arg Pro Met Asn Val Ala Ser Ser Leu Ala Gly Trp Met  
 245 250 255  
 Gln Glu Val Gly Phe Val Asn Val Thr Asp Asp Ser Tyr Lys Val Pro  
 260 265 270  
 Leu Tyr Ser Leu Ser Leu Ser Met Trp Leu Arg Ser Cys Glu Arg Leu  
 275 280 285  
 Val Val Val Pro Ser Gly Leu Met Ala Gln Glu Ser Pro Val Glu Arg  
 290 295 300  
 Asn Arg Glu Ser Gly Gln Asp His Thr Val Arg Gly Arg Gly Ala Val  
 305 310 315 320  
 Tyr Phe Ser Val Val Tyr Ser Arg Ala Arg Leu Glu Trp  
 325 330

&lt;210&gt; 40662

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40662

Pro Glu Pro Ser Arg Pro Arg Arg Thr Leu Thr Pro Thr Pro Ser Ala  
 1 5 10 15  
 Gln Cys Ser His Ala Ala Ser Ala Ser Phe Pro His Pro Pro Gly Thr  
 20 25 30  
 Ser Pro Cys Thr Leu Pro Asp Gly Glu Tyr Tyr Tyr His Arg Thr Pro

## 17825

35	40	45
His Pro Pro Val Glu Ala Pro Pro Pro Thr Asp Pro Ala Thr Gln Ala		
50	55	60
His Thr Ala Arg His Cys Ala Pro Ser Pro Tyr Ala Pro Ala Asp Ala		
65	70	75
Thr Arg Gly Pro Gln Ser Ala Arg Asn Pro Asp Thr Ala Pro Asp Tyr		
85	90	95
Thr Ala His Ala Thr Ala Asp Pro Ala Gly Ser Trp Pro Ala Ala Thr		
100	105	110
Ala Ser Pro Pro Pro Ala Thr Pro Ser Arg Glu Tyr His Arg Gly Ala		
115	120	125
Ser Gly Ala Arg Ser Pro Ser Phe Pro Ala Arg Gln Ala Asp		
130	135	140

&lt;210&gt; 40663

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3), (4), (5), (7), (8), (10), (11), (12), (13), (14), (15)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40663

Trp Asn Xaa Xaa Xaa Gly Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Met		
1	5	10
Ser Gly Thr Phe Gln Pro Arg Gly Glu Asp Ile Ala Ser Ala Asp Phe		
20	25	30
Pro Asp Glu Trp Pro Glu Leu Leu Pro Ser Leu Leu Gln Val Ile Asn		
35	40	45
Asp Val Asn Ser Ser Ala Gly Thr Leu His Gly Ala Leu Lys Val Leu		
50	55	60
Leu Asp Leu Val Asp Thr Gly Phe Ser Glu Glu Gln Phe Phe Gly Val		
65	70	75
Ala Arg Asp Leu Val Thr Thr Leu Phe Asn Ile Ala Thr Asn Glu Ser		
85	90	95
Arg Lys Pro Met Leu Arg Ala Leu Ala Val Ala Val Phe Arg Ser Cys		
100	105	110
Phe Asp Thr Leu Glu Met Val Leu Glu Gln His Lys Val Ala Val Lys		
115	120	125
Gln Phe Met Asp Glu Val Leu Ser Gly Trp Ser Pro Phe Phe Ile Glu		
130	135	140
Thr Leu Lys Ala Pro Leu Pro Gln Ala Pro Ser Glu Gln Glu Glu Ser		
145	150	155
Lys Glu Gly Glu Val Pro Ser Gln Trp Arg Gly Ile Ile Gly Leu Lys		
165	170	175
Leu Gln Val Val Lys Val Gly Cys Leu Asn Asn Leu Glu Thr Ser Pro		
180	185	190
Thr Arg Thr Asn Gly Ile Ile Leu His Cys		
195	200	

&lt;210&gt; 40664

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40664

Thr Leu Met Lys Ile Arg Met Val Phe Pro Gly Leu Met Thr Ala Gln  
 1 5 10 15  
 Ser Pro Val Tyr Phe Ser Thr Val Trp Thr Glu Leu Ser Asn Ile Gln  
 20 25 30  
 Ser Ala Tyr His Asp Phe Tyr Ile Gln Asp Glu Arg Gln Gly Arg Leu  
 35 40 45  
 Glu Asp Val Asp Gly Leu Pro Tyr Thr Leu Asp Phe Leu Val Leu Glu  
 50 55 60  
 Glu Leu Asp Leu Ile Gln Ala Leu Leu Lys Ala Pro Pro Val Lys Ala  
 65 70 75 80  
 Glu Leu Gln Gln Gln Leu Gln Asn Ala Gly Gln Ala Ala Ala Thr Ala  
 85 90 95  
 Ser Trp Leu Pro Glu Ile Leu Lys Leu Ala Ser Ser Tyr Ala Gln Ile  
 100 105 110  
 Thr Thr Glu Glu Gly Leu Trp Asp Ile Asp Val Asn Leu Phe Leu  
 115 120 125  
 Ser Glu Glu Thr Ser Val Thr Ala Asn Tyr Thr Pro Arg Thr Cys Ser  
 130 135 140  
 Gly Asp Leu Val Ile Lys Leu Gly Glu Trp Leu Lys Val Thr Thr Val  
 145 150 155 160  
 Glu Gly Leu Leu Ala Tyr Met Asn Asn Leu Phe Ala Asp Ser Thr Ser  
 165 170 175  
 Thr Tyr Val Phe  
 180

&lt;210&gt; 40665

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40665

Asn Pro Thr Tyr Glu Asp Met Ile Leu Leu Ser Ser Leu Leu Gly Pro  
 1 5 10 15  
 Ala Lys Pro Pro Val Ala Thr Gln Asp Asp Ile Asp Leu Ala Gly Gly  
 20 25 30  
 Leu Tyr Arg Leu Val Glu Leu Ala Gly Ser Leu Val Ala Glu Ala Leu  
 35 40 45  
 Asp Gly Ala Gly Thr Ile Gln Ile Pro Asp Gly Glu Arg Cys Leu Ile  
 50 55 60  
 Cys Leu Gly Asp Tyr Glu Ala Ala Glu Glu Leu Arg Gln Leu Thr Lys  
 65 70 75 80  
 Cys Lys His Val Phe His Arg Asp Cys Ile Asp Gln Val Arg Pro His  
 85 90 95  
 Leu Arg Met Arg Leu Ser Val Gln Pro Ala  
 100 105

&lt;210&gt; 40666

&lt;211&gt; 802

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40666

Thr Ile Ile Ala Thr Ser His Ser His Ile Phe Val Ala Met Gly Gln  
 1 5 10 15

Ser Ser Ser Thr Gln Arg Asn Gln His His Thr Thr Pro Ser Asp Gln  
 20 25 30  
 Ser Thr Phe Leu Arg Thr Asp Arg Asp Gln Leu Asn Leu Asn Glu Asp  
 35 40 45  
 Met Asn His Arg Ser Asn Ser Asp Gln Ala Glu Asp Thr Ala Leu Pro  
 50 55 60  
 Ser Gly Ala Glu Pro Asn Asp Gly Ile Ser His Thr Ser His Leu Ala  
 65 70 75 80  
 Gln Gly Asn Pro Gly Ala Ala Thr Trp Gln Ala Thr Gly Thr Pro Asn  
 85 90 95  
 Ala Glu Gln Pro His Leu Thr Arg Met Glu Ser Ile His Glu Glu Asp  
 100 105 110  
 Gly Ser Arg His Glu Pro Asp Gln Gln Glu Tyr Arg Ser Ala Ile Leu  
 115 120 125  
 Ala Arg Met Ala Ala Arg Arg Gln Ser Thr Met Ser Arg Leu Gly Ser  
 130 135 140  
 Arg Ile Leu Pro Asn Ser Val Ile Arg Gly Leu Leu Asn Ser Glu Glu  
 145 150 155 160  
 Glu Thr Pro Ala Glu Gly Gln Ala His Arg His Gly Ile Val Ala Arg  
 165 170 175  
 Ser Val Pro Arg Ser Asp Ser Tyr Ser Ser Ser Arg Phe Ser Pro Phe  
 180 185 190  
 Thr Ser Leu Ser Ser Arg Ser Ile Ala Arg Arg Arg Leu Ile Arg Val  
 195 200 205  
 Pro Tyr Phe Ile Pro Arg Ala Asp Pro Ser Leu Thr Pro Asp Thr His  
 210 215 220  
 Thr Ser Leu Ala Ser Leu Asp Ser Ser Ser Glu Gln Ala Thr Gln Pro  
 225 230 235 240  
 Ala Arg Gly Ser Trp Arg Arg Ser Ala Arg Leu Asn Arg Val Arg Asn  
 245 250 255  
 Ser Leu Ser Ala Pro Ile Thr Gln Ile Phe Gly His Pro Ser Ile Ala  
 260 265 270  
 Asp Ser Glu Met Thr Glu His Pro His Phe Arg Glu Asp Leu Gly Asp  
 275 280 285  
 His Pro Glu Ile Arg Leu Pro Pro Leu Ser Ala Met Asp Thr Ser Met  
 290 295 300  
 Asp Phe Gly His Ala His Glu Leu Asp Ser Val Glu Ala Ala Ala Gly  
 305 310 315 320  
 Asp Asn His Leu Pro Met Pro Pro Leu Phe Ser Gln Ser Thr Gln Asn  
 325 330 335  
 Ala Ser Ala Ser Arg Gln Leu Pro Gly Thr Leu Ser Ala Arg Pro Ser  
 340 345 350  
 Arg Val Leu Arg Arg Asp Glu His Thr Pro Leu Ser Arg Val Leu Gln  
 355 360 365  
 Leu Ala Ala Ala Ala Ile Ala Ala Gln Leu Ser Gly Ala Ala Gly Pro  
 370 375 380  
 Val Leu Pro Asn Ile Gln Ser Leu Gly Asn Asp Gly Ile Glu Gly Ser  
 385 390 395 400  
 Leu Glu Asn Phe Ile Gln Ser Leu Gln His Ala Thr Ser Ala Gln Thr  
 405 410 415  
 Ala Ser Asn Asp Thr Pro Ser Ala Ser Gly Glu Asn Ser Pro Pro Gln  
 420 425 430  
 Pro Val Asn Phe Leu Arg Val Phe Arg Phe Ala Asn Ser Asp Asn Pro  
 435 440 445  
 Ser Pro Ala Ala Ser Ser Asn His Ser Thr Thr Glu Pro Asp Ser Ala  
 450 455 460

17828

```

Ser Ser Arg Gly Asp Gly Met Asp Val Asp Asn Pro Ala Gly Asn Asn
465                               470           475           480
Glu Gly Arg Thr Val Thr Leu Val Val Val Gly Val Arg Ser Val Pro
                               485           490           495
Thr Gly Ser Gly Pro Phe Gly Asp Gln Gln Ser Asn Ala Ala Pro Gly
                               500           505           510
Leu Asp Ala Leu Leu Arg Leu Pro Phe Leu Ala Pro Gly Asn Pro Pro
                               515           520           525
Arg Ala Gln Asp Asn Ser Pro Ala Val Pro Leu Ala Asp Asn Arg Pro
                               530           535           540
Gln Phe Val Pro Asn Arg Gln Gln His Gly Ala Pro Gly Pro Leu Ser
545                               550           555           560
Thr Asn Ile Glu Thr Ser His Gln Gly Leu Arg Ser Ala Arg Arg Phe
                               565           570           575
Ser Asp Ala Gly Ser Arg Val Pro Phe Pro Pro Leu Pro Ser Thr Leu
                               580           585           590
Ser Glu Ser Pro Pro Gly Pro His Pro Pro Pro Ser Thr Pro Ala Glu
                               595           600           605
Pro Gly Leu Ser Ala Val Ser Ser Gly Ala Ser Thr Pro Asn Arg Arg
                               610           615           620
Leu Ser Ser Ala Ser Ala Leu Pro Ser Asn Pro Leu Pro Gln Val Asp
625                               630           635           640
Glu His Pro Leu Met Gln Pro Ser Val Glu Pro Ala Pro Glu Ser Thr
                               645           650           655
Ala Asp Arg Ile Pro Phe Gln Pro Ser His Gln Arg Arg Arg Ser Asp
                               660           665           670
Ser Glu Tyr Ala Arg His Arg Glu Leu Gly Ser Gly Ala Val Arg Arg
                               675           680           685
Asn Gly Val Val Glu Pro Asp Thr Pro Pro Pro Ala Gly Arg Ser Trp
690                               695           700
Leu Ile Tyr Val Val Gly Thr Asn Leu Ser Glu Asn His Pro Ala Phe
705                               710           715           720
Ala Thr Pro Ser Leu Phe Thr Asp Val Ser Cys Val Phe Gly Met Pro
                               725           730           735
Arg Asp Ser Lys Leu Ile Gln Phe Ile Glu Pro His Leu Arg Arg Tyr
740                               745           750
Asp Ser Pro Phe Val Ala Ser Trp Thr Arg Glu Ala Thr Gly Cys His
755                               760           765
Pro Gly Arg His Arg Ser Arg Trp Arg Thr Ile Ser Thr Cys Arg Ala
770                               775           780
Cys Arg Ile Ala Arg Arg Arg Gly Phe Gly Trp Arg Trp His Asp Pro
785                               790           795           800
Asn Pro

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<210> 40667  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 40667  
 Glu Trp Lys Ser Gln Gln Cys Val Gln Ala Gly Arg Ser Ile Arg Leu  
 1 5 10 15  
 Leu Ile Ala Lys Arg Pro Thr Ala Cys Gly Asn Arg Ser Asn Ala His  
 20 25 30  
 Asn Tyr Gln Ser Asn Gly Ala Ala Leu Val Ile Pro Gly Gly Ile Val

## 17829

	35		40		45										
Asn	Val	His	Thr	Ile	Ala	Thr	Thr	Thr	Cys	Arg	Ile	Arg	Leu	Arg	Ser
	50					55					60				

<210> 40668  
 <211> 188  
 <212> PRT  
 <213> A.fumigatus

<400> 40668

Pro	Ala	Pro	Ser	Phe	Ala	Arg	Ala	Leu	Cys	Ser	Ser	Pro	Pro	Ser	Cys
1				5					10					15	
Leu	Asn	Asp	Asp	Ala	Asn	Asn	Ala	Lys	Lys	Gly	Pro	Val	Tyr	Leu	Thr
		20						25					30		
Pro	Asp	Gln	Leu	Ala	Leu	Tyr	Asn	Gly	Thr	Asp	Pro	Ser	Leu	Pro	Ile
		35					40					45			
Tyr	Val	Ala	Val	Asn	Gly	Thr	Ile	Phe	Asp	Val	Ser	Ala	Asn	Arg	Leu
	50					55					60				
Val	Tyr	Gly	Pro	Gly	Gly	Ser	Tyr	Asn	Phe	Phe	Ala	Gly	Arg	Asp	Ala
65				70					75						80
Thr	Arg	Ala	Phe	Val	Thr	Gly	Cys	Phe	Gln	Glu	Asp	Leu	Thr	His	Asp
				85					90					95	
Leu	Thr	Gly	Val	Glu	Glu	Met	Phe	Ile	Pro	Leu	Glu	Asn	Glu	Glu	Glu
			100					105					110		
Asp	Lys	Lys	Leu	Ser	Ser	Gly	Glu	Arg	Lys	Ile	Arg	Arg	Glu	Gln	Asp
	115						120					125			
Arg	Arg	Val	Ala	Leu	Gly	Lys	Val	Arg	Lys	Gln	Val	Ala	His	Trp	Glu
	130					135					140				
Asn	Phe	Phe	Arg	Asn	His	Lys	Lys	Tyr	Phe	Ala	Val	Gly	Lys	Val	Val
145				150					155						160
Gly	Leu	Glu	Asn	Leu	Pro	Lys	Glu	Lys	Arg	Glu	Leu	Cys	Lys	Ala	Ala
			165						170					175	
Arg	Gln	Gln	Arg	Pro	Lys	Lys	Arg	Glu	Val	Val	Gly				
			180					185							

<210> 40669  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 40669

Thr	Ala	Leu	Thr	Ser	Asp	Gly	Ala	Ser	Pro	Val	Ser	Tyr	Pro	Cys	Leu
1				5					10					15	
Asn	Asp	Phe	Asp	Val	Ser	Leu	Thr	Leu	Ser	Arg	Ser	Gly	Lys	Ser	Ser
		20						25					30		
Ile	Ala	Ser	Val	Val	Phe	His	Lys	Met	Pro	Pro	Asn	Glu	Thr	Leu	Phe
		35					40					45			
Leu	Glu	Ser	Thr	Thr	Arg	Ile	Gln	Lys	Asp	Ser	Ile	Gln			
	50					55					60				

<210> 40670  
 <211> 243  
 <212> PRT  
 <213> A.fumigatus

<400> 40670

17830

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Val Leu Pro Cys Thr Ala Val Ser Cys Ser Tyr Thr Val Phe Ser Ser
1      5      10      15
Phe Met Asp Phe Gln Val Trp Asp Phe Pro Gly Gln Leu Glu Tyr Leu
      20      25      30
Glu Pro Ser Phe Asp Leu Glu Ala Ile Phe Gly Ser Leu Gly Ala Leu
      35      40      45
Val Trp Val Ile Asp Ala Gln Asp Asp Tyr Leu Asp Ser Val Ala Arg
      50      55      60
Leu Asn Arg Thr Ile Leu Thr Val Gln Gln Tyr Tyr Pro Asn Ile Asn
      65      70      75      80
Ile Glu Val Phe Ile His Lys Val Asp Gly Leu Ser Asp Glu Tyr Arg
      85      90      95
Thr Asp Thr Phe Gln Asp Ile Val Gln Arg Ile Ser Asp Glu Leu Ser
      100     105     110
Asp Ala Gly Tyr Glu Asn Ala Pro Val His Tyr Tyr Leu Thr Ser Ile
      115     120     125
Tyr Asp Tyr Ser Val Phe Glu Ala Phe Ser Lys Val Ile Gln Lys Leu
      130     135     140
Ile Pro Asn Leu Ser Thr Leu Glu Asn Leu Ile Asn Thr Leu Ala Asn
      145     150     155     160
Asn Cys Gly Phe Glu Lys Thr Tyr Leu Phe Asp Val Leu Ser Lys Ile
      165     170     175
Tyr Ile Ala Ser Asp Thr Arg Pro Val Asp Met Ser Cys Tyr Glu Met
      180     185     190
Cys Ser Asp Tyr Ile Asp Val Ile Val Asp Val Ser Glu Leu Tyr Ser
      195     200     205
Trp Asp His Pro Asp Arg Lys Pro Lys Gly Asp Gln Ile Gln Glu Ala
      210     215     220
Glu Ser His Val Val Leu His Asp Glu Thr Met Ile His Leu Met Glu
      225     230     235     240
Met Asn Lys

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<210> 40671

<211> 245

<212> PRT

<213> A.fumigatus

<400> 40671

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Trp Gln Val Ser Pro Met Ser Thr His Pro Lys Ser Arg Gln Leu His
1      5      10      15
Asn Met Met Ala Gly Ser Ser Thr Ala Phe Leu Ser Asp Asp Gly Ala
      20      25      30
Phe Ala Ala Gln Leu Asn Gly Lys Asp Leu Ile Ile His Leu Ser Pro
      35      40      45
Leu Cys Ser Asp Phe Gln Glu Val Glu Ile Val Lys Leu Lys Glu Thr
      50      55      60
Pro Ile Arg Phe Leu Arg Phe Ser Arg Pro Asn Gln Leu Ala Gln Ser
      65      70      75      80
Asp Thr Ile Asn Arg Gln Lys Glu Ser Ala Glu Arg Arg Ile Leu Cys
      85      90      95
Ala Thr Asp Thr Arg Ile Leu Val Trp Asp Leu His Pro Leu Gln Leu
      100     105     110
His Ala Glu Ile Glu Asn Val Glu Tyr Gly Ala Leu Asn Ile Asp Phe
      115     120     125
Gly Ala Asp Glu Asn Glu Ile Ile Val Phe His Ala Trp Asn Thr Lys

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## 17831

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      130              135              140
Phe Thr Ile His Ser Leu Asp Ser Gly Arg Ser Gln Val Ile Lys Ser
145              150              155              160
Pro Lys Val Ser His Tyr Asn Gly Phe Gly Phe Arg Pro Arg Thr Arg
      165              170              175
Gln Leu Ala Ile Leu Leu Lys Pro Glu Thr Ser Asp Val Leu Thr Ile
      180              185              190
His Glu Tyr Arg Ser Tyr Glu Leu Val Asn Arg Val Asn Leu Pro Thr
      195              200              205
Ser Asp Ala Gln Gly Leu Lys Trp Ser Pro Asp Gly Asn Trp Ile Ala
      210              215              220
Val Trp Asp Ala Ala Ser Ala Gly Tyr Lys Thr Leu Asn Ile Tyr Ser
225              230              235              240
Arg Trp Lys Pro Phe
      245

```

<210> 40672  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40672
Phe His Cys Thr Val Lys Asp Lys Ala Gln His Ala Val Val Leu Glu
1              5              10              15
Lys Gln Thr Ala Glu Arg Leu Gln Lys Glu Val Gln Ser Tyr Arg Leu
      20              25              30
Ile Thr Val Ala Thr Leu Val Asp Arg Leu Lys Ile Asn Gly Ser Leu
      35              40              45
Ala Arg Lys Ala Leu Ala Asp Leu Glu Glu Lys Gly Gln Ile Lys Lys
      50              55              60
Val Val Gly His Ser Lys Met Thr Ile Tyr Ser Met Cys Pro His Cys
65              70              75              80
Leu His Phe Tyr Lys Cys Gly Cys Arg Cys
      85              90

```

<210> 40673  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40673
Pro Asp Arg Asn His His Thr Arg Gln Phe Cys Tyr Asn Ile Asn Pro
1              5              10              15
Pro Pro Pro Ser Ser Ser Ala Ala Ala Ser Pro Pro Tyr Arg Ala
      20              25              30
Pro Ser Ser Pro Trp Ala Asn Phe Pro Gly Arg Pro Pro Phe Pro Pro
      35              40              45
Gln Ser Thr Ser Cys Gly Tyr Gly Arg Asn Ser Pro Ser Glu Pro Pro
      50              55              60
Ala Ser Ala Pro Cys Pro Ala Pro Pro Ser Tyr Pro Ala Pro Ala Glu
65              70              75              80
Ser Ser Ser Pro His Cys Ser Ala Ser Cys Leu Pro Pro His Ser Gln
      85              90              95
Gly Gly

```

<210> 40674  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 40674  
 Asp Arg Ile Ser Asp Phe Ser Thr Ser Tyr Leu Leu Gly Asp Gly Phe  
 1 5 10 15  
 Thr Ile Met Glu Arg Asp Val Gln Leu Val Tyr Asn Leu Asn Ser Phe  
 20 25 30  
 Arg Ala Ala Ala Ser Ala Phe Arg Tyr Ile Ile Tyr Met Val Thr Leu  
 35 40 45  
 Leu Val Val Leu Phe Ile Ala Ser Leu Tyr Tyr Val His Leu Ala Leu  
 50 55 60  
 Asn Ser Leu Ser Arg His Ser Thr Leu Gln Asp  
 65 70 75

<210> 40675  
 <211> 133  
 <212> PRT  
 <213> A.fumigatus

<400> 40675  
 Gln Gly Val Gly Arg Arg Val Gly Met Ala Leu Gly Ala Ala Phe Ile  
 1 5 10 15  
 Ile Leu Gly Thr Ile Val Gln Ala Thr Cys Thr Asn Leu Ala Gly Phe  
 20 25 30  
 Met Ala Gly Arg Phe Leu Leu Gly Phe Gly Val Ala Thr Ser Ala Thr  
 35 40 45  
 Ala Gly Pro Ala Tyr Val Ser Glu Ile Ala His Pro Ser Trp Arg Gly  
 50 55 60  
 Ser Leu Thr Gly Leu Tyr Asn Val Leu Trp Phe Ala Gly Gly Ile Pro  
 65 70 75 80  
 Gly Thr Phe Ile Pro Trp Arg Thr Ser Gln Ile Glu Gly Thr Met Ser  
 85 90 95  
 Trp Arg Ile Pro Ile Trp Val Gln Met Val Phe Ala Gly Leu Val Leu  
 100 105 110  
 Val Leu Cys Trp Thr Ile Pro Glu Val Cys Pro Ser Leu Leu Phe Phe  
 115 120 125  
 Phe Phe Ile Tyr Leu  
 130

<210> 40676  
 <211> 246  
 <212> PRT  
 <213> A.fumigatus

<400> 40676  
 Ala Phe Phe Gly Gln Trp Ser Gly Asn Gly Pro Val Ser Tyr Tyr Tyr  
 1 5 10 15  
 Pro Gln Met Leu Ala Gly Ala Gly Ile Thr Ser Asn Thr Thr Arg Leu  
 20 25 30  
 Leu Leu Gln Gly Leu Gln Asn Val Cys Gln Phe Val Gly Ala Ile Phe  
 35 40 45  
 Gly Ala Leu Leu Thr Asp Arg Ile Gly Arg Arg Ala Gln Leu Leu Thr  
 50 55 60

## 17833

Ser Thr Ala Leu Met Val Leu Leu Phe Ser Ile Ile Thr Ala Leu Asn  
65 70 75 80  
Ala Thr Asn Val Asp Pro Pro Asp Asp Glu Thr Gly Gly Val Val Val  
85 90 95  
Val Val Ala Lys Ser Ala Val Val Ala Arg Ala Gln Ile Ala Met Ile  
100 105 110  
Phe Ile Phe Gly Phe Val Phe Ser Ala Gly Trp Thr Pro Asn Gln Ala  
115 120 125  
Met Tyr Pro Val Glu Cys Leu Arg Tyr Glu Ser Arg Ala Lys Gly Met  
130 135 140  
Gly Met Asn Asn Phe Phe Ile Asn Val Ala Asn Phe Tyr Asn Thr Phe  
145 150 155 160  
Val Thr Gly Ile Ala Phe Thr Arg Ala Gly Trp Arg Tyr Tyr Leu Leu  
165 170 175  
Phe Ile Phe Trp Asp Val Leu Glu Leu Ala Val Ile Trp Phe Leu Phe  
180 185 190  
Val Glu Thr Ser Arg Arg Thr Leu Glu Glu Leu Thr Ala Ile Phe Gln  
195 200 205  
Ser Arg Asn Pro Val Lys Ala Ser Leu Ala Arg Asp Glu Val Leu Ile  
210 215 220  
Pro Gln Val Glu Gln Glu Val Glu Met Arg Arg Lys Asp Tyr Asp Arg  
225 230 235 240  
Arg Lys Val Asp Leu Thr  
245

&lt;210&gt; 40677

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40677

Ser Asp Ser Ala His Arg Leu Phe Met Ile Gly Arg Ser Phe Tyr Arg  
1 5 10 15  
Leu Pro Phe Glu Arg Tyr Cys Pro Ser Ala Ser Gly Lys Arg Pro  
20 25 30  
His Ser Leu Arg Arg Trp Phe Gln Arg Asn Leu Phe Phe Arg Ser Ser  
35 40 45  
Val Thr Ile Asp Arg Val Gln Val Ala His Ser Leu Ala Thr Ala Pro  
50 55 60  
Ser Thr Ala Arg Ala Gln Leu Pro Gln Tyr Gly Arg Arg Pro Leu Pro  
65 70 75 80  
Pro Thr Pro Leu Ala His Ala His Leu Ser Gly Ala Ala Glu His Lys  
85 90 95  
His His Glu Asn His Ala Gln Leu Arg Arg Leu His Pro Arg Arg Arg  
100 105 110  
Arg Arg Arg His Ser His Arg Arg Pro Asp Arg His His His Arg Arg  
115 120 125  
Arg Arg Pro Ala Gln Thr Asp Gln Asn Asp Ala Arg Arg Ile Pro His  
130 135 140  
Leu Leu Arg Leu Asp Asp Arg Leu Gly Glu Leu Pro Leu Arg Ala Arg  
145 150 155 160  
Pro Arg Leu Leu His Thr Leu Pro Gly Asp Ala Ala Pro Asp Ala Arg  
165 170 175  
Gln Glu Gln His Leu Gln Ser Ala Arg Gly Ala Gly Gly Gly Trp Gly  
180 185 190  
Arg Asp Arg Arg Ala Thr Arg Val Pro Asp Ser Ala Gly Arg Gly Arg

17834

195 200 205  
Gln Leu Ala Arg Ala Arg Ala Gly Gly Arg Ala Ala Tyr Pro Arg Gly  
210 215 220  
Gly Leu  
225

<210> 40678  
<211> 101  
<212> PRT  
<213> A.fumigatus

<400> 40678  
Ser Pro Arg Trp Leu Val Ser Arg Asp Lys His Glu Glu Ala Ile Arg  
1 5 10 15  
Val Leu Ala Thr Tyr His Gly Asp Gly Asp Arg Asn Ala Pro Leu Val  
20 25 30  
Gln Leu Glu Tyr Arg Glu Met Val Glu Asp Ile Ser Asn Thr Gly Ala  
35 40 45  
Asp Lys Arg Trp Trp Asp Tyr Arg Glu Leu Phe Asn Ser Arg Glu Thr  
50 55 60  
Arg Tyr Arg Ser Met Leu Val Ile Leu Met Gly Asn Pro Arg Pro Ser  
65 70 75 80  
Gln Ser Met Ser Phe Met Ser Phe His Val Asn Ser Cys Gln Phe Arg  
85 90 95  
Gln Thr Glu Arg Tyr  
100

<210> 40679  
<211> 241  
<212> PRT  
<213> A.fumigatus

<400> 40679  
Arg Ser Val Ser Leu Leu Arg Thr Met Val Arg Gln Arg Pro Arg Leu  
1 5 10 15  
Leu Leu Leu Pro Thr Asp Ala Gly Arg Arg Arg His His Leu Gln His  
20 25 30  
His Pro Ala Pro Pro Ala Arg Pro Ala Glu Arg Leu Pro Val Arg Arg  
35 40 45  
Arg His Leu Arg Arg Ala Pro Asp Arg Pro Asp Arg Thr Ala Arg Ala  
50 55 60  
Ala Pro His Leu His Gly Ala Asp Gly Pro Pro Leu Gln His His His  
65 70 75 80  
Gly Ala Glu Arg His Gln Arg Arg Pro Ala Arg Arg Arg Asp Arg Arg  
85 90 95  
Arg Arg Arg Arg Arg Arg Gln Glu Arg Arg Arg Gly Ala Arg Ala Asn  
100 105 110  
Arg His Asp Leu His Leu Trp Leu Arg Val Leu Gly Arg Leu Asp Ala  
115 120 125  
Gln Pro Gly His Val Pro Arg Val Ser Ala Val Arg Val Ala Arg  
130 135 140  
Gln Arg His Gly Asp Glu Gln Phe Leu His Gln Arg Gly Gln Leu Leu  
145 150 155 160  
Gln Tyr Val Cys Asp Gly His Arg Leu His Pro Arg Arg Leu Ala Val  
165 170 175  
Leu Pro Ala Val Tyr Leu Leu Gly Cys Ala Gly Ala Gly Gly Asp Leu

## 17835

180 185 190  
 Val Phe Val Cys Gly Asp Val Ala Thr His Ala Arg Gly Ala Asp Cys  
 195 200 205  
 His Leu Pro Val Glu Glu Ser Arg Gln Gly Val Val Gly Ala Arg Arg  
 210 215 220  
 Gly Val Asp Pro Ala Gly Gly Ala Gly Gly Arg Asp Glu Ala Glu Gly  
 225 230 235 240  
 Leu

<210> 40680  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 40680  
 Tyr Thr Val Gln Ser Ser Ala Ser His Arg Val Lys Asp Leu Pro Pro  
 1 5 10 15  
 Leu Leu Arg Arg Asn Gly Gln Thr Gln Arg Ile Ile Pro Pro Pro Glu  
 20 25 30  
 Ser Thr Pro Thr Leu Pro Trp Asp Ser Pro Gln Ala Pro Thr Trp Cys  
 35 40 45  
 Pro Gln His Thr Ala Pro Gln Thr Lys Pro Ala Pro Arg Ala Asp Pro  
 50 55 60  
 Pro Phe Pro Ser Thr Pro Cys Tyr Thr Thr Cys Tyr Ser His Thr Ala  
 65 70 75 80  
 Thr Asp

<210> 40681  
 <211> 240  
 <212> PRT  
 <213> A.fumigatus

<400> 40681  
 Pro Gly Leu Glu His Gln Lys Gln Pro Gln Arg Lys Tyr Thr Ser Cys  
 1 5 10 15  
 Ser Ile Arg Leu His Arg Asp Pro Cys Ser Pro Arg Asp Pro Val Asp  
 20 25 30  
 Ile Ser Thr Tyr Val Arg Val Pro Phe His Trp Arg Ser Ser Met Gln  
 35 40 45  
 Phe Glu Val Arg Ser Thr Glu Asp Ser Val Lys His Glu Gly Ile Pro  
 50 55 60  
 Asn Phe Pro Ile Lys Ser Pro Arg Ser Thr Leu Ser Tyr Pro Pro Ser  
 65 70 75 80  
 Pro Leu Leu Val Pro Ser Phe Pro Leu Pro Leu Leu Cys Ser Leu Leu  
 85 90 95  
 Tyr Arg Ser Leu Pro Ser Leu Cys Leu Leu Arg Phe Pro Ser Phe Phe  
 100 105 110  
 Leu Ile Val Pro Pro Pro Cys Ser Leu Ser Ser Pro Ser Leu Leu Leu  
 115 120 125  
 Leu Pro Pro Arg Phe Leu Phe Ser Pro Pro Leu Ser Thr Arg Asp Leu  
 130 135 140  
 Ser Leu Leu Leu Ile Ser Ser Leu Leu Ser Leu Ser His Tyr Pro Cys  
 145 150 155 160  
 Leu Thr Ser Pro Ser Leu Leu Gly Leu Tyr His Leu Phe Leu Leu Leu

## 17836

165 170 175  
 Ser Asn Ser Ser Ala Ser Ser Ser Ser Ser Leu Pro Pro Leu Leu Pro  
 180 185 190  
 Leu Tyr Ser Pro Leu Leu Pro Leu Leu Phe Ser Pro Ser Pro Ser Ser  
 195 200 205  
 Phe Pro Arg Ala Asn Asn Leu Ser Phe Leu Ser Pro Ser His Pro Pro  
 210 215 220  
 Pro Leu Cys Phe Leu Pro Arg Leu Ala Phe His Ser Thr Ser Leu Pro  
 225 230 235 240

&lt;210&gt; 40682

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40682

Ser Phe Arg Leu Ile Ser Thr Ser Cys Ser Thr Cys Gly Ile Asn Thr  
 1 5 10 15  
 Ser Ser Arg Ala Asn Asp Ala Leu Thr Gly Phe Leu Asp Trp Lys Met  
 20 25 30  
 Ala Val Ser Ser Ser Val Arg Arg Asp Val Ser Thr Asn Lys Asn  
 35 40 45  
 Gln Ile Thr Ala Ser Ser Ser Thr Ser Gln Lys Ile Asn Ser Arg  
 50 55 60

&lt;210&gt; 40683

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40683

Asn Pro Pro Glu Val Pro Phe Leu Thr Pro Pro Pro Pro Phe Leu Cys  
 1 5 10 15  
 Pro Leu Phe Leu Ser Leu Ser Ser Ala Arg Tyr Ser Thr Gly Leu Phe  
 20 25 30  
 Leu Pro Phe Val Phe Ser Ala Phe Leu Leu Ser Phe Ser Ser Phe His  
 35 40 45  
 Leu Pro Val Leu Tyr Leu Leu Pro Leu Phe Ser Ser Ser Pro Leu Ala  
 50 55 60  
 Ser Phe Phe Leu Leu Leu Phe Pro Leu Ala Ile Ser Leu Ser Phe Ser  
 65 70 75 80  
 Leu Ala Leu Phe Ser Pro Phe Leu Thr Thr Pro Ala  
 85 90

&lt;210&gt; 40684

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40684

Ile Asn Ser Asp Ala Pro Leu Gly Phe Pro Ala Ser Thr Asn Leu Val  
 1 5 10 15  
 Pro Pro Ala Tyr Gly Thr Ala Asn Gln Thr Gly Ser Pro Arg Arg Ser  
 20 25 30  
 Ala Leu Ser Gln Tyr Ser Met Leu His Asp Met Leu Leu Pro Tyr Ser  
 35 40 45

## 17837

Asn Gly Leu Asn Pro Leu Gln Thr Ala Ser Gly Ile Cys Ser Thr Ser  
 50 55 60  
 Ser Ser Thr Ser Thr Cys Glu Leu Ala Pro Pro Ser Arg Thr Val Arg  
 65 70 75 80  
 His Thr Arg Ser Ser Thr Val Pro Thr Pro Ala Thr Ser Ser Ser Ser  
 85 90 95  
 Cys Gly Leu Lys Met Leu Phe Leu Thr Ser Val Arg Arg Gly Ile Ala  
 100 105 110  
 Arg

<210> 40685  
 <211> 104  
 <212> PRT  
 <213> A.fumigatus

<400> 40685  
 Ile Leu Asn Pro Thr Leu Glu Pro Asn Pro Ser Glu Leu Ala Arg Phe  
 1 5 10 15  
 Tyr Asn Ser Ser Met Tyr Leu Gln Gln Phe Val Arg Thr Met Ala Leu  
 20 25 30  
 Leu Ala Arg Ser Pro Val Ala Ser Thr Ala Ile Lys Gln Cys Ile Lys  
 35 40 45  
 Leu Asn Cys Tyr Met Pro Ile Ser Thr Leu Tyr Leu Ser Leu Asp Pro  
 50 55 60  
 Cys Gln Ile Phe Gln Tyr Ser Ser Pro Ile Ser Gln Gln Val Tyr Ser  
 65 70 75 80  
 Ser Ile Ser Phe Ser Thr Ser Met Ser Leu Ile Tyr Ile Tyr Cys His  
 85 90 95  
 Cys Pro Ile Phe Tyr Gly Ile Pro  
 100

<210> 40686  
 <211> 207  
 <212> PRT  
 <213> A.fumigatus

<400> 40686  
 Gln Ala Arg Lys Ile Pro Tyr Ser Val Thr Arg Gln Glu Ile Ile Gln  
 1 5 10 15  
 Phe Leu Gly Arg Gln Ala Arg Leu Ile Thr Pro Gln Gln Gly Cys Ala  
 20 25 30  
 Ile His Ile Ile Met Glu Arg Ser Thr Ala Lys Thr Met Asp Cys Tyr  
 35 40 45  
 Ala Glu Phe Gln Ser Ala Asn Asp Ala Glu Glu Thr Ala Thr Arg Ile  
 50 55 60  
 Asn Arg Ile Tyr Glu Thr Gly Arg Ala Pro Arg Leu Gly Asn Arg Ser  
 65 70 75 80  
 Val Asp Val Glu Phe Ser Asn Gln Asp Ala Leu Leu Lys Asp Leu Phe  
 85 90 95  
 Pro Arg Ala Lys Cys Ile Ile Trp Lys Asp Ala Met Pro Thr Ala Val  
 100 105 110  
 Pro Asn Asp Asp Pro Phe Ser Thr Gly Phe Ser Gly Phe Phe Thr Ser  
 115 120 125  
 Glu Glu Ile Val Asn Ala Ile Arg His Ala Glu Ile Pro His Arg Val  
 130 135 140

17838

Ser Asn Leu Pro Ser Ile Gln Ser Pro Val Cys Leu Leu Val Cys Ser  
 145 150 155 160  
 Lys Leu Thr Arg Leu Ser Val Ser Ile Leu Cys Glu Val Ser Ser Ala  
 165 170 175  
 His Leu Arg Val His His Gln His Thr Leu Gln Gly Lys Pro Leu Ser  
 180 185 190  
 Ala Asp Ala Ile Val Arg Arg Thr Tyr Met Arg Glu Thr Ile Cys  
 195 200 205

<210> 40687  
 <211> 193  
 <212> PRT  
 <213> A.fumigatus

<400> 40687  
 Pro Ser Asp Leu Thr Met Glu Gly Lys Asp Thr Asn Gly Gln Ala Ser  
 1 5 10 15  
 Gly His Glu Ser Gly Tyr Ala Phe Thr Ser Pro Tyr Pro Gln Ser Tyr  
 20 25 30  
 Asn Met Leu Pro Phe Gly Ala Pro Gly Met Pro Gly Phe Ala Pro Gln  
 35 40 45  
 Gln Gly Gln Tyr Met Met Ala Pro Gly Asn Pro Asn Pro Ser Gln Pro  
 50 55 60  
 Leu Gln Arg Arg Gly Pro Phe Met Tyr Ser Pro Phe Tyr Gly Met Gln  
 65 70 75 80  
 Ser Met Ala His Ala Leu Pro Gly Val Ile Gly Gln Val His Gly Met  
 85 90 95  
 His Ser Pro Met Pro Ala Ser Asn Thr Lys Leu Gln Leu Ser Val Arg  
 100 105 110  
 Pro Lys Gln Thr Gly Phe Thr Pro Thr Gly Ser His Trp Ala Pro Gly  
 115 120 125  
 Ser Ser Leu His Gln Leu Leu Glu His Asp Ser Ala Ser Arg Asp Ile  
 130 135 140  
 Ala Thr Gln Ala Val Asp Cys Glu Lys Ser Phe Asp Thr Val Ala Leu  
 145 150 155 160  
 Pro Ala Glu Met Pro Ile Gly Ser Gln Val His Asn Arg Met Pro Ser  
 165 170 175  
 Gln Trp Gly Val Val Lys Ile Ala Asn Val Ser Gln Ala Phe Thr Cys  
 180 185 190  
 Leu

<210> 40688  
 <211> 238  
 <212> PRT  
 <213> A.fumigatus

<400> 40688  
 Leu Ala Leu Lys Arg Lys Thr Val His Ser Arg Ala Ile Ser Cys Leu  
 1 5 10 15  
 Phe Ser Gly Pro Met Pro Arg Arg Ser Ser Arg Ala Val Pro Ala Pro  
 20 25 30  
 Ala Ala Ala Pro Ala Pro Ile Pro Lys Arg Arg Ala Ser Asp Arg Thr  
 35 40 45  
 Ser Ala Ala Ser Glu Thr Asp Leu Lys Arg Gln Lys His Asn Ser Thr  
 50 55 60



## 17839

Thr Ala Lys Lys Val Val Arg Ser Thr Ala Arg Lys Ser Lys Tyr Phe  
 65 70 75 80  
 Glu Asp Glu Gly Asn Glu Glu Ser Asp Pro Glu Ser Ser His Ala Ser  
 85 90 95  
 Glu Val Gly Glu Asp Ser Asp Pro Ala Tyr Glu Asp Lys Asn Leu Ser  
 100 105 110  
 Tyr Pro Ser Thr Glu Ser Asp Ser Glu Glu Pro Glu Val Leu Ser Thr  
 115 120 125  
 Gly Glu Glu Arg Thr Lys Arg Ser Thr Arg Lys Thr Ala Asn Pro Ser  
 130 135 140  
 Gly Gly Arg Lys Ile Pro Ala Arg Arg Gly Gly Gly Asn Glu Ala Glu  
 145 150 155 160  
 Glu His Pro Asn Glu Asp Ile Ala Ala Ser Leu Lys Asp Lys Glu Leu  
 165 170 175  
 Trp Arg Glu Gly Val Ser Thr Gly Leu Gly Pro Gly Lys Glu Val Phe  
 180 185 190  
 Ile Arg Lys Pro Lys Ala Arg Asp Pro Gly Asp Ile Pro Tyr Gln Asp  
 195 200 205  
 His Thr Leu His Pro Asn Thr Met Leu Phe Leu Gln Asp Leu Ala Lys  
 210 215 220  
 His Asn Asp Arg Gln Trp Leu Lys Gly Ile Asp Asp Arg Ile  
 225 230 235

&lt;210&gt; 40689

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40689

Asn Arg Thr Arg Tyr Phe Lys Val Ile Gln Leu Gln Ile Lys Arg Val  
 1 5 10 15  
 Ile Thr Gln Arg Arg Val Met Ser Asn Pro Glu Val Cys Thr Ile Pro  
 20 25 30  
 Glu Val Phe Glu Ser Arg Lys Arg Lys Ile Leu Ala Asp Leu Ser Val  
 35 40 45  
 Pro Asp Thr Glu Tyr Thr Asp Leu Ser Pro Lys Gly Ser Val Asp Glu  
 50 55 60  
 Gly Ile Arg Asp Leu Ile Arg Asp Ile Asn Ala Leu Pro Gly Leu Val  
 65 70 75 80  
 Thr Thr Ser Ser Cys Ser Gly Arg Ile Ser Val Phe Leu Glu Gly Arg  
 85 90 95  
 Lys Lys Gln Asn Asp His Gln Gln Asp Gln Arg Gln Phe Ala Pro Ser  
 100 105 110  
 Gly Gly Lys Gly Ala Gly Lys Trp Leu Tyr Val Ser His Asp Pro Leu  
 115 120 125  
 Asn Gly Arg Trp Thr Gly Arg Asp Asn Asp Asp Phe Asn Ser Thr Gln  
 130 135 140  
 Gly Lys Asp Cys Pro Arg Ser Leu His Glu Leu Phe Gly Met Val Pro  
 145 150 155 160  
 Gly Asn Gly Lys Pro Pro Gly Leu Lys Gly Gly His Ala Pro Arg Leu  
 165 170 175  
 Val Arg Phe His Tyr Asp Pro Met Val Gly  
 180 185

&lt;210&gt; 40690

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40690

```

Pro Glu Ser Thr Asp Asp Leu Gln Pro Asn Cys Gly Val Leu Val Cys
1           5           10           15
Gln Ser Ser Ala Gln Cys Pro Val Phe Phe Arg Ser Gly Glu Gly Asn
      20           25           30
Glu Arg Ile Gly Asp Val Asp Leu Glu Ser Ser Met Arg Gly Val Asn
      35           40           45
Lys Val Ala Ala Lys Lys Ser Ser Ile Asp Phe Ala Leu Leu Glu Met
      50           55           60
Cys Phe Asp
65

```

&lt;210&gt; 40691

&lt;211&gt; 414

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40691

```

Pro His Thr Gly Ile Ser Lys Asn Ala Ala Ile His Thr Leu Gln His
1           5           10           15
Phe His Gly Val Gln Asn Trp Asn Tyr Ile Ser Arg Thr Ile Cys Leu
      20           25           30
Arg Ser Lys Leu Pro Tyr Glu Pro Arg Asn Phe Leu Pro Ile Ser His
      35           40           45
Thr Ser Ser Leu Ser Ser Tyr Pro Pro Leu Ser Tyr Cys His His Pro
      50           55           60
His Asn Arg Met Lys Leu His His Phe Leu Leu Pro Val Ala Leu Thr
      65           70           75           80
Ala Thr Ala Gly Ala Gln Thr Leu Asn Ile Val Ala His Glu Asp Asp
      85           90           95
Asp Leu Leu Phe Leu Ser Pro Lys Leu Leu Asp Glu Ile Arg Ser Gly
      100          105          110
Arg Arg Val Arg Thr Ile Phe Val Thr Ala Gly Asp Ala Gly Asn Gly
      115          120          125
Ala Asp Tyr Trp Ile Ser Arg Gln Glu Gly Ser Lys Ala Ala Tyr Ala
      130          135          140
Gln Met Ser Gly Asp Glu Asn Ala Trp Thr Gln Ser Asp Ala Gly Ile
      145          150          155          160
Pro Gly Phe Asn Ile Pro Leu Phe Thr Leu Asn Asn Asp Pro Asn Ile
      165          170          175
Ser Leu Val Phe Leu Gln Leu Pro Asp Gly Asn Asn Gly Gly Glu Gly
      180          185          190
Phe Gly Ser Gly Ser Leu Gln Gln Leu Trp Gln Gly Thr Ile Pro Glu
      195          200          205
Leu Thr Ser Trp Gly Gly Ser Ser Tyr Ser Arg Asp Asp Leu Val Asn
      210          215          220
Val Leu Arg Asn Leu Ala Asp Asp Phe Gly Tyr Asp His Ile Asn Thr
      225          230          235          240
Gln Asp Phe Val His Asp Tyr Gly Asp Gly Asp His Ser Asp His His
      245          250          255
Thr Thr Ala Tyr Phe Val His Glu Ala Phe Ala Asp Cys Ala Ser Ser
      260          265          270
Ala Ser Ile Thr Gly Tyr Met Gly Tyr Pro Val Val Ser Gln Pro Ala

```

17841

```

      275              280              285
Asn Val Asp Gly Glu Leu Leu Gln Glu Lys Lys Ala Val Phe Tyr Asn
 290              295              300
Tyr Ala Ser His Asp Arg Asn Thr Cys Ser Ser Asp Glu Ala Cys Arg
305              310              315              320
Gly Arg Asp Glu Ala Leu Trp Ile Glu Arg Glu Tyr Ile Val Ser Glu
      325              330              335
Ile Asp Gln Ser Pro Cys Arg Lys Ala Ala Ser Lys Ala Pro Ala Ser
      340              345              350
Thr Thr Ser Lys Ala Ser Val Ser Thr Thr Ser Lys Ala Ser Val Pro
      355              360              365
Thr Ala Ser Lys Gly Ser Ala Ser Pro Ala Ser Lys Gly Ser Ala Ser
      370              375              380
Pro Ala Ile Lys Gly Ser Val Ser Thr Ala Val Thr Pro Ser Ala Ser
385              390              395              400
Pro Thr Arg Pro His Lys Val Ile Ser Arg Pro Leu Gln Ala
      405              410

```

<210> 40692

<211> 298

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (27)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40692

```

Gly Glu Pro Arg Phe Phe Cys Pro Ser Trp Trp Pro Pro Val Leu Val
1              5              10              15
Gln Asn Arg Ser Pro Gly Arg Asp Val Tyr Xaa Cys Thr Trp Gly Gly
      20              25              30
Asn Met Thr Val Glu Ile Ser Gln Asn Phe Gln Arg Ser Gly Ser Arg
      35              40              45
Thr Arg Ile Ala Phe Glu Pro Phe Arg Tyr Gln Ala Ser Val Ala His
      50              55              60
Asp Arg Phe Asn Arg Thr Ser Val Asn Ala Phe Phe Ser Gln Leu Gln
      65              70              75              80
Leu Leu Val Lys Ser Val Asn Ile Glu Leu His His Leu Leu Ser Glu
      85              90              95
His Leu Thr Leu Thr Ala Lys Asp Glu Arg Asn Leu Asn Glu Glu Gln
      100              105              110
Leu Thr Lys Tyr Leu Thr Asn Phe Gln Val Lys Thr Gln Tyr Val Val
      115              120              125
Ala Leu Asp Leu Arg Lys Thr Gly Ile Val Ala Lys Glu Tyr Phe Phe
      130              135              140
Pro Gly Ile Lys Cys Ala Ala Thr Gly Gln Thr Gly Ser Asn Ala Cys
      145              150              155              160
Phe Gly Ala Ile Arg Ala Val Asp Lys Asp Gly His Leu Asp Ser Leu
      165              170              175
Cys Gln Leu Ile Glu Ala His Phe Gln Gln Ser Lys Ile Asp Ala Ala
      180              185              190
Phe Leu Cys Cys Asp Leu Val Asp Pro Ala His Thr Arg Phe Lys Val
      195              200              205
Tyr Ile Ala Asp Pro Leu Val Thr Leu Ala Arg Ala Glu Glu His Trp

```

## 17842

210		215		220
Thr Leu Gly Gly Arg Leu Thr Asp Glu Asp Thr Ala Val Gly Leu Glu				
225		230		240
Ile Ile Arg Gly Leu Trp Ser Glu Leu Gly Ile Ile Gln Gly Pro Leu				
	245		250	255
Glu Pro Ser Ala Met Met Glu Lys Gly Leu Leu Pro Ile Met Leu Asn				
	260		265	270
Tyr Glu Met Lys Ala Gly Gln Arg Leu Pro Lys Pro Lys Leu Tyr Met				
	275	280		285
Pro Leu Asn Arg Asp Ser Pro Lys Pro Arg				
290		295		

&lt;210&gt; 40693

&lt;211&gt; 384

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40693

Glu Glu Ser Leu Ser Ser Cys Pro Leu Pro Phe Lys Met Ile Tyr Ser				
1	5		10	15
Arg Pro Cys Ser Ser Tyr Thr Phe Leu Val Ala Ala Ala Ile Phe Ala				
	20		25	30
Val Val Ile Leu Trp Arg Glu Tyr Ala Trp Lys Phe Lys Ser Gln Leu				
	35		40	45
Leu Leu Asn Cys Ser Ala Pro Pro Thr Ser Ile Asn Val Thr Gly Ser				
	50		55	60
Ala Ile Pro Asn Gln Val His Tyr Val Tyr Ile Leu Arg Asp Val Asp				
	65	70		80
Ala Asp Phe Ala Phe Gln Phe Lys His Phe Leu Ser Leu Tyr Ser Val				
	85		90	95
Leu Gln His Trp His Pro Asp Thr Ile Tyr Leu His Thr Asn Ala Asn				
	100		105	110
Pro Lys Thr Ile Glu Asn Ala Arg Ala Gly Lys Thr Gly Lys Trp Asn				
	115		120	125
Gln Leu Ile Phe Asn Thr Pro Asn Leu Arg Ile Asn His Val Glu Pro				
	130		135	140
Pro Thr Val Ala Gly Asn Gly Lys Pro Ile Asp Gln Ile Glu His Lys				
	145	150		160
Ser Asp Phe Val Arg Val Ser Thr Val Cys Glu Phe Gly Gly Ile Tyr				
	165		170	175
Leu Asp Trp Asp Ala His Pro Val Arg Asp Ile Lys Ala Leu Arg Glu				
	180		185	190
Ser Gly Phe Asn Ser Ile Thr Gly Arg Gln Ala Asn Gly Glu Ile Met				
	195		200	205
Ser Gly Thr Phe Met Ala Lys Lys Asp Ala Leu Leu Leu Gln Met Trp				
	210		215	220
Lys Ala Glu Met His Lys Val Tyr Asp Gly Gly Trp Thr Thr His Ser				
	225	230		240
Asn Ser Val Val Thr Arg Leu Gly Gln Arg Leu Ala Arg Leu Pro Gly				
	245		250	255
Glu Val Leu Ile Met Glu Gln Asp Ala Phe Gly Pro Gly Ser Trp Thr				
	260		265	270
Thr Pro Glu Asn Ile Val Leu Tyr Gly Ile His Asn Glu Thr Val Ser				
	275		280	285
Asn Leu Glu Asn Ala Thr Asp Cys Arg Ser Leu Pro Ser Tyr Asp Glu				
290		295		300

## 17843

Gly Val Thr Asp Arg Trp Asp Arg Pro Gln Asp Phe Pro Ser Trp Glu  
 305 310 315 320  
 Arg Asp Tyr Ser His Thr Tyr Ile Leu His Ala Phe Ser Pro Ala Arg  
 325 330 335  
 Asn Gly Asn Pro Val Lys Asp Phe Lys His Ile Thr Pro Lys Tyr Val  
 340 345 350  
 Leu Glu Arg Gln Ser Asn Phe Ala Arg Leu Leu Tyr Pro Val Thr Arg  
 355 360 365  
 Asp Met Cys Arg Ala Gly Phe Val Glu Val Asn Asp Ser Tyr Ala Gly  
 370 375 380

&lt;210&gt; 40694

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40694

Asn Asp Phe Met Trp Thr Gly Trp Gly Cys Arg Arg Gly Asp Cys Ser  
 1 5 10 15  
 Arg Asp Arg Ala Leu Asp Arg Arg Arg Gly Arg Ala Phe Thr Arg Arg  
 20 25 30  
 Arg Gly Arg Ala Phe Thr Arg Ser Arg Asp Arg Gly Leu Ala Arg Ser  
 35 40 45  
 Arg Asp Arg Arg Leu Thr Arg Ser Arg Gly Trp Gly Phe Ala Arg Ser  
 50 55 60  
 Phe Pro Ala Arg Gly Leu Val Tyr Phe Ala Asp Asp Val Phe Pro Phe  
 65 70 75 80  
 Asn Pro Glu Ser Phe Ile Thr Ser Ser Ala Gly Leu Ile Ala Thr Ala  
 85 90 95  
 Cys Val Pro Val Val Ala Ser Ile Ile Val Glu Tyr Ser Leu Leu Leu  
 100 105 110  
 Leu Lys Lys Leu Ser Ile Asp Val Ser Trp Leu Arg His Asp Arg Ile  
 115 120 125  
 Ala His Val Thr Ser Asp Gly Cys Ala Ala Gly Thr Ile Ser Glu Arg  
 130 135 140  
 Phe Met Asp Lys Ile Ser Gly Gly Val Val Val Ala Met Val Ser Val  
 145 150 155 160  
 Ser Ile Ile Met Asp Lys Val Leu Gly Val Asp Val Val Val Ser Lys  
 165 170 175  
 Val Ile Gly Gln Ile Pro Gln His Ile His Gln Ile Val Pro Gly Val  
 180 185 190

&lt;210&gt; 40695

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40695

Phe Met Thr Glu Ser Val Pro Thr Met Phe Pro Ala Asp Arg Val Gly  
 1 5 10 15  
 Val Pro Leu Ile Gly Gln Leu Ala Leu Ser Pro Ala Ala Gly Arg Met  
 20 25 30  
 Ser Val Arg Leu Arg Ile Tyr Thr Cys Thr Val Pro Glu Ser Gln Gly  
 35 40 45  
 Leu Tyr Asp Ser Ala Ala Ala Glu Ser Glu Thr Val Cys Phe Ser Met  
 50 55 60

## 17844

Ala Ser Ile Val Ser Gln Arg Leu Leu Leu Pro Gln Arg Cys Arg Thr  
 65 70 75 80  
 Arg His Ser Val Cys Glu Ile Cys Arg Ser Phe Ser Ser Arg Ala Pro  
 85 90 95  
 Leu Leu Ala Gly His Asn Arg Trp Ser Gln Ile Lys His Asp Lys Ala  
 100 105 110  
 Lys Asn Asp Lys Ala Lys Ser Arg Glu Arg Gln Thr Ile Ala Lys Glu  
 115 120 125  
 Ile Ser Ser Ala Thr Gln Ser Ala Cys Leu Thr Pro Ser Leu Pro Arg  
 130 135 140  
 Ser Ala His Ala Tyr Phe Phe Phe Cys Ser Val Gly Ser Arg Ser Gln  
 145 150 155 160  
 Val Gln Pro Pro Ile Asn Ser Cys Thr Leu  
 165 170

&lt;210&gt; 40696

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40696

Leu Arg Lys His Thr Leu Ser Gly Asp Cys Lys Asp Leu Ser Gln Thr  
 1 5 10 15  
 Val Ser Arg Gly Glu Leu Arg Leu Glu Leu Arg Leu Ile Phe Ala Cys  
 20 25 30  
 Ile Gln Tyr Ser Lys Lys Val Gly Tyr Cys Phe Glu Glu Tyr Pro Pro  
 35 40 45  
 Ile Pro Phe Ala Lys Tyr Ser Ala Lys Arg Ala Ala Lys Val Val Pro  
 50 55 60  
 Asp Asn Thr Ser Asp Arg Trp Arg Arg Glu Gly Gln Tyr Leu Glu  
 65 70 75

&lt;210&gt; 40697

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40697

Leu Arg Val Cys Arg Gly Gln Arg Met Leu Thr Phe Phe Phe Ala Val  
 1 5 10 15  
 Trp Gly Ala Asp Pro Lys Phe Asn Pro Arg Leu Thr Leu Ala Leu Ser  
 20 25 30  
 Asn Ala Lys Arg Ala Gly Ile Pro Lys Thr Val Ile Glu Ala Ala Ile  
 35 40 45  
 Ala Arg Gly Gln Gly Ile Ser Val Thr Gly Glu Ala Leu Glu Ser Val  
 50 55 60  
 Thr Ile Glu Ala Ile Leu Pro His Ser Val Ala Ala Val Ile Glu Cys  
 65 70 75 80  
 Gln Thr Asp Gln Lys Ala Arg Val Leu Gln Asp Leu Arg Tyr Ala Ile  
 85 90 95  
 Lys Asp Ala Gly Thr Val Thr Pro Thr Thr Tyr Leu Phe Glu Lys  
 100 105 110  
 Lys Gly Arg Ile Ile Phe Glu Lys Lys Asp Gly Val Asn Pro Asp Asp  
 115 120 125  
 Tyr Leu Asp Gln Val Ile Glu Ala Gly Ala Ile Asp Val Ala Thr Asp  
 130 135 140

## 17845

Asp Glu Asp Arg Leu Val Val Phe Thr Glu Pro Thr Glu Thr Lys Ser  
 145 150 155 160  
 Val Gly Glu Thr Leu Thr Lys Val Thr Gly Leu Ala Ile Lys Glu Leu  
 165 170 175  
 Asp Ile Ile Trp Asp Pro Asn Lys Asp Thr Met Val Glu Leu Asn Lys  
 180 185 190  
 Asp Glu Gln Val Arg Glu Ile Glu Asp Ile Leu Ser Thr Leu Arg Glu  
 195 200 205  
 Asp Pro Ser Val Gln Asp Ile Tyr Leu Asn Thr Ser Thr  
 210 215 220

&lt;210&gt; 40698

&lt;211&gt; 574

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (8)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40698

Asn Cys Thr Pro Gln Ile His Xaa Ser Gln Pro Phe Pro Ile Pro Lys  
 1 5 10 15  
 Lys Met Lys Arg Gln Phe Lys Lys Pro Ala Pro Arg Pro Gly Glu Asp  
 20 25 30  
 Asp Asp Glu Ala Glu Val Ser Glu Pro Ser Val Ser Lys Lys Ala Glu  
 35 40 45  
 Pro Gly Leu Tyr Phe Leu Leu Pro Asp Leu Leu Arg Gln Leu Ser Thr  
 50 55 60  
 Gln Tyr Met Lys Ser Thr Thr Ser Asn Arg Ala Arg Ala Gly Ile Ala  
 65 70 75 80  
 Ala Cys Tyr Lys Tyr Val Leu Arg Ser Leu Gly Asp Lys Leu Val Glu  
 85 90 95  
 Glu Arg Tyr Gly Gln Ile Ala Asn His Leu Leu Phe Glu Leu Leu Asn  
 100 105 110  
 His Pro Thr Val Thr Tyr Asn Arg Phe Arg Leu Leu Met Thr Arg Arg  
 115 120 125  
 Phe Val Lys Gly Ile Leu Glu Glu Thr Val Gly Arg Glu Thr Leu Arg  
 130 135 140  
 Glu Asn Ser Gln Leu Asn Ala Ala Lys Trp Leu Ile Asn Glu Ile Leu  
 145 150 155 160  
 Lys Asp Tyr Pro Gln Val Leu Gln Glu Arg Arg Glu Pro Ser Lys Tyr  
 165 170 175  
 Thr Leu Ala Ser Thr Leu Ser Ala Leu Ser Ser Leu Ile Ser Ser Leu  
 180 185 190  
 Gly Ser Ala Phe Gly Ala Met Ala Glu Ala Cys Arg Glu Ala Leu Leu  
 195 200 205  
 Gln Val Leu Pro His Pro Ser Tyr Thr Val Gln Ile His Ala Ala His  
 210 215 220  
 Cys Leu Arg Asn Phe Val Leu Ala Cys Pro His Gln Leu Ile Ser Cys  
 225 230 235 240  
 Val Thr Ile Cys Leu Asn Ser Leu Ser Arg Glu Ile Gly Gln Leu Ser  
 245 250 255  
 Thr Pro Arg Gln Ala Pro Arg Arg Cys Val Gly Tyr Ala Asn Gly Leu  
 260 265 270

## 17846

Ser Ala Met Leu Ser Thr Ser Arg Leu Gln Pro Leu Tyr Gly Ser Val  
 275 280 285  
 Asp Val Phe Ser Arg Val Phe Thr Gln Ala Thr Asp Leu Leu Lys Thr  
 290 295 300  
 Ser Gly Lys Ser Glu Leu Arg Ala Ala Ser Thr Gln Val Gln Val Ala  
 305 310 315 320  
 Trp Ile Leu Ile Gly Gly Leu Met Pro Leu Gly Pro Ser Phe Val Lys  
 325 330 335  
 Ile His Leu Ser Gln Leu Met Leu Leu Trp Lys Asn Ala Leu Pro Lys  
 340 345 350  
 His Leu Gly Lys Asp Asn Ile Ala Gln Arg Gly Tyr Leu Glu Met Ser  
 355 360 365  
 Phe Leu Ala His Val Arg Glu Cys Ala Leu Gly Ser Leu Leu Val Phe  
 370 375 380  
 Met Asp Phe Asn Ser Lys Leu Ile Thr Ala Asp Gly Ala Arg Arg Ile  
 385 390 395 400  
 Ala Ala Met Leu Gln Asn Thr Ile Glu Phe Leu Asp Asp Leu Pro Arg  
 405 410 415  
 Gln Lys Ser Val Ala Asp Leu Ser Gln Arg Leu Gln Pro Ser Leu Gln  
 420 425 430  
 Leu His Asp Leu Thr Thr Met Val Arg Arg Arg Val Leu Gln Cys Phe  
 435 440 445  
 Ser Lys Leu Ile Asp Val His Pro Leu Ser His Ala Asp Val Ile Ser  
 450 455 460  
 Gln Thr Thr Leu Leu Ser Leu Ser Ile Ser Ser Phe Ala Asp Pro Glu  
 465 470 475 480  
 Tyr Thr Gln Pro Ala Pro Leu Glu Ser Ser Ile Ala Ala Ala Thr Ala  
 485 490 495  
 Gln Phe Glu Thr Leu Trp Glu Leu Cys Asp Asn Phe Gly Phe Gly Val  
 500 505 510  
 Thr Gly Leu Ala Arg Gln Tyr Ile Arg Ala Thr Leu Ser Gly Lys Gln  
 515 520 525  
 Asp Asn Glu Asn Gly Pro Ala Trp Ser Ala Val Asp Leu Ser Asp Gln  
 530 535 540  
 Asp Ile Asp Asp Ala Val Ser Leu Ser Ser Thr Ser Trp His Ala Arg  
 545 550 555 560  
 Ser Ala Leu Thr Ile Ala Val Asp Phe Ser Tyr Leu Pro Ser  
 565 570

&lt;210&gt; 40699

&lt;211&gt; 445

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (376), (391), (406)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40699

Lys Phe Val Val Asp Ala Asp Pro Ile Val Arg Thr Ile Gly Ala Glu  
 1 5 10 15  
 Ala Leu Gly Arg Leu Cys Asp Gly Ala Gly Asn Thr Leu Met Thr Thr  
 20 25 30  
 Gln Val Asn Trp Leu Val Asp Thr Ile Val Asp Asn Arg Glu Pro Asn  
 35 40 45



Ala Arg Ala Gly Cys Ala Ala Ala Leu Gly Cys Ile His Ala Gln Val  
 50 55 60  
 Gly Gly Met Ala Ala Gly Leu His Leu Lys Thr Ile Val Gly Val Leu  
 65 70 75 80  
 Met Ser Leu Cys Asn Asp Pro His Pro Val Val His Phe Trp Ala Leu  
 85 90 95  
 Gly Gly Leu Glu Arg Val Ala Asn Ser Ala Gly Leu Thr Phe Ser Pro  
 100 105 110  
 Phe Val Ser Ser Ala Leu Gly Met Leu Ala Gln Leu Tyr Asn Ala Asp  
 115 120 125  
 Thr His Asn Glu Glu Ala Ala Ser Leu Ala Thr Ser Asn Ile Glu Met  
 130 135 140  
 Thr Phe Leu Thr Pro Val Val Ile Ser Arg Cys Val Asp Ser Leu Ile  
 145 150 155 160  
 Asn Val Leu Gly Pro Asp Leu Gln Asp Ile Thr Lys Thr Arg Asn Leu  
 165 170 175  
 Ile Leu Thr Leu Leu Arg Gln Phe Gln Leu Glu Asp Asn Pro Ala Leu  
 180 185 190  
 Val Thr Glu Ser Ser Lys Cys Leu Asp His Met Ser Leu Tyr Ala Pro  
 195 200 205  
 Gly Phe Val Asp Phe Ser Gly Phe Val Thr Arg Leu Gln Asn Glu Leu  
 210 215 220  
 Ser Ala Gly Asn Pro Leu Met Arg Asp Val Ala Ile Arg Ala Leu Ser  
 225 230 235 240  
 Asn Leu Met Lys Arg Asp Ala Thr Ser Val Leu Arg Ala Ala Thr Pro  
 245 250 255  
 Asp Leu Glu Glu Gln Ile Trp Leu Ala Tyr Asp Asp Thr Pro Asp Asn  
 260 265 270  
 Leu Val Leu Lys Asn Met Ile Leu Asp Trp Leu Gln His Thr Ala Leu  
 275 280 285  
 Thr Glu Thr Glu Gln Trp Ile Gln Arg Cys Gln Asn Thr Leu Thr Lys  
 290 295 300  
 Thr Arg Leu Lys Val Glu Asp Ile Pro Pro Thr Ser Ala Val Lys Thr  
 305 310 315 320  
 Ala Val Asn Asp Met Pro Asp Asp Glu Val Ala Gly Phe Ala Tyr Ala  
 325 330 335  
 Ile Ala Gly Ala Gly Gln Ser Glu Thr Val Asn Glu Thr Val Thr Gly  
 340 345 350  
 Gln Glu Leu Leu Lys Trp Gln Thr Arg Asn Phe Val Met Ser Cys Leu  
 355 360 365  
 Ser Gln Leu Leu Ala Thr Val Xaa Glu Ala Ile Leu Pro Asp Gln Thr  
 370 375 380  
 Ile Pro Ala Glu Leu Ala Xaa Gln His Lys Gly Gly Asp Ile Val Arg  
 385 390 395 400  
 Met Ala Phe Ser Ala Xaa Thr Ala Asn Val Val Lys Leu Lys Val Trp  
 405 410 415  
 Gly Leu Glu Asn Ile Glu Gln Val Leu Lys Glu Thr Gly Leu Ser Leu  
 420 425 430  
 Phe Phe Asn Arg Ala Met Ile Trp Leu Asp Phe Gly Thr  
 435 440 445

&lt;210&gt; 40700

&lt;211&gt; 367

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40700

```

Leu Leu Gln Asp Ile Pro Ala Pro Val Gln Ser Phe Leu Arg Gln Tyr
1      5      10      15
Leu Ser Ser Trp Asn Gly Arg Asp Asn Lys Glu Glu Val Leu Ser Leu
20      25      30
Leu Glu Tyr Leu Pro Val Gln Asp Phe Asp Ile Leu Arg Ala Asn Phe
35      40      45
Leu Thr Pro Leu Glu Ala Ala Ile Leu Gly Ser Gly Pro Phe Thr Met
50      55      60
Thr Val Ile Leu Asp Leu Tyr Ser Ser Leu Ile Arg Gln Trp Gly Val
65      70      75      80
Lys Leu Arg Ser Ser Pro Ser Val Ser Ala Glu Ser Arg Pro Leu Gly
85      90      95
His Leu Ile Thr His Ala Glu Leu Leu Ala Leu Ser Ile Leu Glu Ser
100     105     110
Leu Ser Val Ala Ser Asn Thr Gly Asn Lys Glu Pro Arg Lys Pro Ala
115     120     125
Ala Leu Ser Val Leu Glu Phe Tyr Cys Val Leu Ala Asn Leu Phe Ser
130     135     140
Tyr Ala Pro Val Asn Gly Gln Ile Arg Leu Thr Ile Pro Leu Ala Pro
145     150     155     160
Thr Val Tyr Thr Leu Val Phe Thr Pro Ile Leu Ser Ser Ile Ser Ile
165     170     175
Ile Ser Ser Val Leu Ala Ser Tyr Lys Met Ser Phe Glu Thr Ser Leu
180     185     190
Thr Ser Glu Ile Leu Gln Val Pro Gly Ser Thr Asn Ser Leu Tyr Pro
195     200     205
Thr Glu Leu Val Gly Gln Phe Asn Gly Tyr Val Met Asp Val Cys Asn
210     215     220
Leu Val Trp Arg Asn Arg Gly Leu Asn Gly Asp Asp Pro Asn Ala Leu
225     230     235     240
Gly Cys Leu Leu Pro Pro Ala Thr Thr Ser Ala Leu Thr Gln Tyr Ile
245     250     255
Arg Glu Leu Asn Glu Ala Ser Arg Asp Arg Lys Arg Glu Ala Ser Phe
260     265     270
Phe Phe Asn Leu Ser Ser Ile Phe Ser Leu Ser Tyr His Val Ala Leu
275     280     285
Cys Asn Met Ser Ala Gly Cys Phe Ala Asp Ile Glu Glu Glu Asn Asn
290     295     300
Ile Thr Glu Gly Lys Pro Arg Leu Arg Lys Pro Val Thr Gln Lys Ala
305     310     315     320
Leu Ser Ala Leu Glu Lys Asp Gly Gly Val Lys Leu Thr Trp Gln Glu
325     330     335
Tyr Arg Val Arg Met Leu Asp Trp Leu Asp Ala Thr Gly Ser Arg Gly
340     345     350
Ile Gly Asn Leu Met Arg Ser Thr Met Lys Ala Leu Arg Lys Asp
355     360     365

```

&lt;210&gt; 40701

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40701

```

Trp Ser Ser Lys Leu Gly Arg Cys Val Gln Ile Asn Ile Leu Asp Ala
1      5      10      15

```

## 17849

Gly Ile Leu Ser Lys Gly Thr Gln Asn Val Leu Asn Phe Pro Asp Leu  
 20 25 30  
 Leu Val Leu Val Gln Leu His His Ser Val Leu Val Arg Ile Pro Asp  
 35 40 45  
 Tyr Val Lys Phe Leu Tyr Ser Glu Ser Arg His Phe Cys Glu Arg Phe  
 50 55 60  
 Ala Asp Thr Leu Arg Phe Cys Trp Phe Cys Lys Asp His Lys Pro Val  
 65 70 75 80  
 Phe Ile Ile Arg Arg Tyr Ile Asn Gly Ser Arg Leu Asp Asp Leu Val  
 85 90 95

&lt;210&gt; 40702

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40702

Thr Asn Gln Gly Arg Arg Phe Gly Ile Leu Pro Val Arg Asn Ala Thr  
 1 5 10 15  
 Leu Ala Ile Thr Ser Ala Tyr Tyr Arg Gly Ala Val Gly Ala Leu Leu  
 20 25 30  
 Val Tyr Asp Ile Ser Lys His Gln Thr Tyr Asp Asn Val Asn Arg Trp  
 35 40 45  
 Leu Lys Glu Leu Arg Asp His Ala Asp Ser Asn Ile Val Ile Met Leu  
 50 55 60  
 Val Gly Asn Lys Ser Asp Leu Arg His Leu Arg Ala Val Pro Thr Asp  
 65 70 75 80  
 Glu Ala Lys Gln Phe Ala Ser Thr Phe Val Val Gln Ala Ala Pro Gln  
 85 90 95  
 Gly Leu Ile Tyr  
 100

&lt;210&gt; 40703

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40703

Val Asp Ser Pro Ala Asn Glu Phe Asn Leu Asp Ser Lys Phe Tyr Pro  
 1 5 10 15  
 Leu Val Ser Ile Ser Gln Pro Ala Gln Ser Lys Trp Thr Phe Arg Pro  
 20 25 30  
 Ile Lys Gly Ala Asp Leu Gly Tyr Cys Arg Ser Gly Thr Leu Pro Trp  
 35 40 45  
 Pro Leu His Leu Pro Ile Thr Val Ala Pro Ser Val Pro Phe Leu Cys  
 50 55 60  
 Thr Ile Ser Ala Asn Thr Arg Leu Thr Thr Met Ser Thr Ala Gly  
 65 70 75

&lt;210&gt; 40704

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40704

Ala Cys Phe Ser Lys His Pro His Arg Phe Ala Pro Ser Ile His Asp

## 17850

```

1             5             10             15
Pro Leu Ser Lys Trp Thr His Met Leu Leu Glu Ile Tyr Arg Ile Val
      20             25             30
Ser Ser Lys Ala Leu Asp Asn Gly Asp Ser Gly Gln Ala Pro Leu Ser
      35             40             45
Ser Gly Arg Thr Ile Glu Val Ser Lys Ala Pro Asp Thr Glu Ser Lys
      50             55             60
Gln Gly Cys Cys
65

```

<210> 40705  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40705
Ala Ile Cys Glu Tyr Val Cys Cys Pro Gly Ser Ser Ser Gly Ile Asp
1             5             10             15
Leu Leu Thr Ser Ala Arg Asn Thr Ile Gly Glu Asn Asn Leu Ser Phe
      20             25             30
Ile Glu Thr Ser Ala Leu Asp Ala Ser Asn Val Glu Leu Ala Phe Gln
      35             40             45
Asn Ile Leu Thr Gly Ser Leu Pro Leu Phe Met Thr Pro Cys Pro Asn
      50             55             60
Gly Leu Thr Cys Cys
65

```

<210> 40706  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40706
Cys Asn Pro Arg Ile Ile Asn Ser Thr Leu Trp Arg Arg Gln Phe Ala
1             5             10             15
Arg Gly Thr Pro Lys His Phe Ala Arg Ile Arg Ala Cys Glu Cys Ser
      20             25             30
Cys Thr Gly Pro Arg Thr Thr Asn Arg Arg Thr Ile Ile Asn Ile Ala
      35             40             45
Gly Ser Ile Ala Glu Thr Gln Asn Ser Ala Ser Ser Asn Arg Asp Phe
      50             55             60
Thr Tyr Asn Leu
65

```

<210> 40707  
 <211> 430  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40707
Thr Leu Phe Gln Ile Tyr Leu Leu Leu Cys Gly Leu Val Leu Phe
1             5             10             15
Thr Pro Val Glu Thr Leu Val Ala Asp Arg Asp Gln Arg Asn Asn His
      20             25             30
Lys Tyr Ser Asp Ala Trp Leu Glu Gly Phe Asp Asp Thr Glu Pro Ser
      35             40             45

```

## 17851

```

Ile Tyr Arg Ile Gly Glu Glu Leu Arg Arg Asn Glu Leu Val Ala Ile
 50                      55                      60
Ser Tyr Pro Ala Pro Asp Ser Arg Met Ser Asn Val Leu Leu Ala Tyr
65                      70                      75                      80
Ser Pro Lys Ser Ser Asp Phe Ala Phe Leu Asn Ala Asp Ser Ala His
                      85                      90                      95
Phe Arg Thr Ser Glu Asp Val Phe Leu Asn Val Ala Val Arg Ser Gln
                      100                      105                      110
Leu Arg Gly Phe Asp Thr Ile Thr Ala Arg Arg Glu Arg Lys Arg Leu
                      115                      120                      125
His Ala Gly Ser Arg Lys Pro Val Pro Phe Ala Leu Ile Asn Thr Ser
                      130                      135                      140
Asp Pro Pro Ser Arg Ala Thr Pro Thr Gly Ala Leu Ala Thr Arg Pro
145                      150                      155                      160
Arg Ser Val Gly Val Pro Asp Val Ser Ala Pro Glu Ala Ala Arg Pro
                      165                      170                      175
Val Asn Asp Met Ser Asn His Pro Ile His Ile Ser Arg Asp Ser Asp
                      180                      185                      190
Val Leu Leu Pro Lys Ala Ser Ala Ala Pro Asp Val Ala Lys Pro Ser
                      195                      200                      205
Asp Ala Ala Asn His Leu Gly Ser Thr Asn Thr Thr Ser Val Thr Pro
                      210                      215                      220
Glu Leu Ser Thr Gln His Ser Gly Ala Asp Asn Leu His Ala Ala Pro
225                      230                      235                      240
Gln Asn Thr Leu Arg Glu Leu Glu Leu Val Asn Val Ala Val Gln Asp
                      245                      250                      255
Pro Ala Gln Gln Thr Gly Glu Leu Leu Ser Thr Ser Gln Val Pro Leu
                      260                      265                      270
Pro Lys His Arg Thr Pro Gln Ala Ala Thr Glu Thr Ser Pro Ile Thr
                      275                      280                      285
Ser Glu Ala Arg Thr Ala Pro Glu Ala Ala Pro Gly Phe Pro Arg Leu
                      290                      295                      300
Gly Arg His Asp Ala Ser Met Ala Gln Ser Ile Ala Gly Asn Val Lys
305                      310                      315                      320
Ser Pro Ser Gln Pro Ser Glu Asn Ile Leu Asp Leu Asp Ala Val Phe
                      325                      330                      335
Lys Glu Gln Phe Gly Val Thr Tyr Asp Leu Leu Ala Thr Val Asn Asp
                      340                      345                      350
Ala Glu Lys Pro Thr Lys Ala Gln Val Phe Tyr Leu Met Phe Pro Ala
                      355                      360                      365
Gly Ser Glu Val Val Gln Glu Glu Tyr Glu Val Met His Glu Phe Leu
                      370                      375                      380
Arg Arg His Asn Ala Val Thr Tyr Ser Asn Arg Leu Pro Glu Asp Trp
385                      390                      395                      400
Glu Arg Phe Ala Arg Thr Ile His Lys Gly Val Val Leu Val Ser Gln
                      405                      410                      415
Glu Val Pro Phe Thr Asn Asn Pro Thr Ala Ala Leu Thr Gln
                      420                      425                      430

```

&lt;210&gt; 40708

&lt;211&gt; 598

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40708

Glu Arg Pro Phe Gln Pro Asp Val Asp Met Ser Asp Asp Asp Ile

1				5					10				15		
Ser	Ile	Thr	Ser	Thr	Ala	Pro	Ser	Glu	Gln	Glu	Ser	Glu	Tyr	Glu	Val
			20					25					30		
Glu	Thr	Ile	Leu	Ala	Glu	Leu	Glu	Phe	Asp	Asp	Gly	Ile	Lys	Tyr	Leu
		35				40						45			
Val	Lys	Trp	Ala	Asn	Tyr	Pro	Ile	Glu	Arg	Cys	Thr	Trp	Glu	Pro	Pro
	50					55					60				
Glu	Ser	Phe	Cys	Asn	Glu	Gln	Thr	Leu	Ile	Asp	Trp	Asn	Lys	Lys	Lys
65				70						75				80	
Asn	Ser	Ile	Ala	Gly	Lys	Arg	Pro	Ala	Phe	Asp	Leu	Val	Ser	Phe	
			85					90					95		
Glu	Asn	His	Leu	Ala	Ala	Leu	Glu	Arg	Ala	Lys	His	Asp	Arg	Lys	Gln
			100				105						110		
Arg	Arg	Ala	Ala	Lys	Arg	Arg	Arg	Leu	Gly	Leu	Asp	Gly	Ala	Pro	Gln
		115					120					125			
Ser	His	Pro	Ala	Ala	Glu	Ser	Pro	Ser	Ser	Asn	Asn	Val	Pro	Asp	Pro
	130					135					140				
Arg	Ile	Pro	Gly	Asp	Thr	Gly	Phe	Asn	Asp	Ile	Glu	Val	Asp	Arg	Ser
145				150					155						160
Lys	Ala	Ser	Ser	Gly	Gln	Thr	Pro	Arg	Thr	Asn	Ala	Ser	Thr	Gly	Ser
			165						170					175	
Ala	Gln	Leu	Gln	Thr	Gln	Gln	Leu	Pro	Lys	Arg	Pro	Pro	Pro	Pro	Val
			180					185					190		
Leu	Phe	Gly	Thr	Ala	Pro	Ala	Pro	Thr	Arg	Pro	Lys	Arg	Met	Asn	Ser
	195						200					205			
Ser	Glu	Thr	Pro	Lys	Leu	Phe	Asn	Leu	Ser	Thr	Arg	Trp	Lys	Tyr	Glu
	210					215					220				
Lys	Ala	Lys	Thr	Tyr	Glu	Pro	Pro	Pro	Asp	Val	Asn	Lys	Leu	Gln	Leu
225				230						235					240
Ile	Arg	Gln	Ser	Asp	Trp	Pro	Ala	Arg	Thr	Gly	Leu	Thr	Ala	Thr	Lys
			245						250					255	
Thr	Gly	Leu	Tyr	Ser	Val	Asn	Arg	Pro	Ser	Thr	Glu	Asn	Asp	Ala	Asn
		260					265						270		
Thr	Ala	Arg	Leu	Gly	Ser	His	Lys	Val	Val	Ser	Pro	Thr	Arg	Asp	Asp
	275						280					285			
Ser	Ser	Ser	Ala	Lys	Leu	Gly	Thr	Tyr	Asp	Ala	Ser	Ser	Pro	Asn	Glu
	290					295					300				
Ser	Asp	Leu	Ser	Ser	Val	Lys	Ala	Gly	Ser	His	Asp	Leu	Asn	Ser	Ser
305				310						315					320
Lys	Gln	Ser	Asn	Ala	Ser	Leu	Val	Asn	Leu	Gly	Leu	Tyr	Asn	Val	Ser
			325						330					335	
Ser	Pro	Lys	Ser	Val	Thr	Trp	Gly	Arg	Leu	Ala	Thr	Asn	Asn	Val	Asn
		340						345					350		
Gly	Ser	His	Gly	Ile	Ser	Asp	Ser	Ala	Leu	Asp	Pro	Gln	Ser	Gln	Asp
	355														

## 17853

```

      450              455              460
Arg Glu Pro Lys Pro Gly Ala Tyr Ile Val Lys Ser Gln Gln Gln Tyr
465              470              475              480
Phe Trp Asn Pro Gly Glu Leu Leu Val Tyr Leu Tyr Tyr Gly Leu Glu
      485              490              495
Lys Lys Glu Ile Gly Ser Ala Arg Leu Cys Gly Leu Ser Pro Glu Ser
      500              505              510
Arg Ser Arg Leu Met Ser Thr Lys Arg Gly Ser Arg Ile Asn Ile Trp
      515              520              525
Phe Gln His Thr Cys Asn Leu Glu Glu Tyr Asn Val Leu Cys Glu Asn
      530              535              540
Thr Val Ser Gln Phe Phe Pro Thr Phe Leu Pro Ile Arg Ser Ser Glu
545              550              555              560
His Ser Phe Lys Phe Thr Phe Phe Cys Phe Ala Val Trp Phe Cys Leu
      565              570              575
Leu Pro Leu Lys Arg Leu Leu Leu Ile Gly Ile Arg Glu Thr Ile Ile
      580              585              590
Ser Thr Pro Met Leu Gly
      595

```

&lt;210&gt; 40709

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40709

```

Ile Leu Ala Ala Ala Asn Leu Asn Asn Leu Ser Met Ser Thr Pro Ala
1              5              10              15
Phe Ser Phe Gly Thr Asp Asn Arg Thr Pro Glu Phe Leu Ala Lys Phe
      20              25              30
Pro Phe Gly Lys Val Pro Ala Phe Glu Gly Thr Asp Gly Thr Lys Leu
      35              40              45
Val Glu Ser Asp Ala Ile Ala Gln Tyr Val Ala Glu Ser Gly Pro Ala
      50              55              60
Ala Ala Gln Leu Leu Gly Thr Lys Pro Val Glu Arg Ala Ala Ile Arg
65              70              75              80
Gln Trp Ile Ala Phe Ala Asp Gly Glu Ile Gln Ser Pro Val Ile Pro
      85              90              95
Leu Val Leu Pro Arg Ile Gly Leu Ala Ala Phe Asp Glu Ala Val Glu
      100              105              110
Lys Lys Asn Leu Glu Lys Leu Glu Arg Ser Leu Ala Tyr Leu Glu Gly
      115              120              125
His Leu Ser Gly Arg Asn Trp Ile Ala Thr Glu Glu Lys Leu Ser Leu
      130              135              140
Ala Asp Ile Thr Val Val Ser Ala Leu Tyr Trp Ala Phe Ser Thr Val
145              150              155              160
Ile Asp Arg Glu Met Arg Gln Lys Tyr Pro Val Val Val Ser Trp Tyr
      165              170              175
Glu Lys Thr Ile Glu Ser Glu Gly Val Lys Gln Ala Phe Gly Glu Lys
      180              185              190
Lys Phe Ile Glu Lys Arg Glu Ile Pro Lys Ala
      195              200

```

&lt;210&gt; 40710

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40710

Tyr Ser Val Ser Ser Leu Gly Gln Val Phe Gly Ser Asn Thr Thr Thr  
 1 5 10 15  
 Ala Thr Ala Pro His Tyr His Asn Ile Arg Val Tyr Gly Phe Trp Phe  
 20 25 30  
 Gly Thr Arg Gly Lys Leu Gln Glu Leu Val Phe Glu Thr Ile Arg Arg  
 35 40 45  
 Phe Ala Val Asp Gly Asp Ala Gly Ala Ala Asn Asp  
 50 55 60

&lt;210&gt; 40711

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40711

Cys Leu Arg Thr Ser Pro Lys Pro Gly Ser Val Pro Pro Pro Ile Ile  
 1 5 10 15  
 Arg Phe Val Ile Gly Asp Ser Glu Trp Ala Asp Ser Val Ile Cys Gln  
 20 25 30  
 Pro Gln Val Leu Val Ile Val Leu Phe Ala Val Ser Asn Gln Val Cys  
 35 40 45  
 Phe Glu Ile Pro Val Glu Leu Glu Thr Glu Ala Val Thr Met Met Leu  
 50 55 60  
 Pro Glu Leu Gln Thr Leu Trp Val Glu Val Pro Arg Val  
 65 70 75

&lt;210&gt; 40712

&lt;211&gt; 370

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40712

Asn Pro Gly Met Ser Arg Asn Leu Ser Asn Cys Leu Arg Thr Pro Asn  
 1 5 10 15  
 Ser Thr His Val Arg Ser Pro Leu Leu Arg Pro Gln Glu Gln Gly Leu  
 20 25 30  
 Ile Leu Ala Val Pro Arg Leu Met Ser Gln Leu Phe Glu Ser Gln Ile  
 35 40 45  
 Phe Ile Gln Ile Gly Glu Arg His Phe Gln Ile Ser Arg Asp Ile Phe  
 50 55 60  
 Ser Gly Pro Gly Asp Ser Pro Asn Phe Phe Ser Leu Gly Phe Ala Ile  
 65 70 75 80  
 Phe Phe Ala Asn Pro Arg Glu Leu Phe Pro Gly Leu Asp Arg Arg Asn  
 85 90 95  
 Leu Leu Arg Pro Pro Ala Ile Val Pro Pro Arg Val Thr His Arg Ser  
 100 105 110  
 Gly Asp Val Phe Ala Glu Leu Leu His Leu Leu Arg Gly Tyr Pro Leu  
 115 120 125  
 Gln Ile Arg Asn Glu Glu His Arg Ala Glu Leu Leu Arg Asp Cys Arg  
 130 135 140  
 Tyr Phe His Leu Arg Gly Leu Glu Gln Lys Leu Ile Pro His His Ile  
 145 150 155 160  
 Ser Phe Asn Pro Ile Arg Gln Gln Ser Glu Ile Leu Ile Arg Leu Asp



## 17855

```

                165                170                175
Asp Val Arg Pro Ser Gly Ile Ser His Ala Arg Asp Asp Ser Ser Lys
                180                185                190
Tyr Pro Ser Ser Thr Thr Arg Asp Arg Val Thr Tyr Ala Arg Pro Phe
                195                200                205
Val Asp Glu Thr Pro His Asp Leu Ile Leu Glu Ile Gly Asp Glu Ser
                210                215                220
Thr Val Leu Asp Ala Arg Ala Met Arg Ala Gly Phe Leu Asn Leu Ala
225                230                235                240
Lys Ala Arg Met Ser Ser Leu Ala Gln Val Val Ala Lys Ser Val Gly
                245                250                255
Leu Glu Gly Pro Leu Tyr Arg Thr Gly Glu Ser Ala Asn Phe Ser Pro
                260                265                270
Gly Gly Asp Ser Phe Ser Ile Arg Phe Glu Arg Glu Thr Ala Leu Val
                275                280                285
Leu Asn Gly Gln Ser Val Asp Tyr Leu Asp Leu Pro Gly Gly Thr Ala
290                295                300
Glu Ser Ser Asp Arg Pro Pro Ala Lys Arg Lys Arg Ala Glu Asp Asp
305                310                315                320
Pro Glu Ser Gly Ser Met Val Val Lys Lys Gly Gln Trp Arg Leu Val
                325                330                335
Val Glu Ser Gly Pro Ala Ala Ser Ala Glu Leu Val Leu Ile Ala Val
                340                345                350
Lys Leu Asp Ile Tyr Thr Glu Glu Arg Ala Arg Asn Arg Ser Thr Gly
                355                360                365
Pro Leu
                370

```

&lt;210&gt; 40713

&lt;211&gt; 598

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (214)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40713

```

Thr Ser Ile Leu Ser Ser Tyr His Phe Trp Ala Glu Glu Gly Lys His
1                5                10                15
His Gln Asp Val Val Tyr His Pro Ala Ala Pro Leu Leu Phe Leu Val
                20                25                30
Phe Leu Leu His Ile Gln Leu Arg Ser Ile Leu Asp Gly Leu Asp Pro
                35                40                45
Arg Val Leu Val Asp Ser Gly Tyr Ser Leu Gln Ala Tyr Ser Thr Tyr
50                55                60
Ile Ile Leu Ile Leu Glu Ala Thr Thr Tyr Tyr Tyr Ser Ser Ala Val
65                70                75                80
Phe Ile Met Ala Glu Gln Ala Val Thr Ala Tyr Val Pro Leu Asp Val
                85                90                95
Pro Leu Pro Pro Ile Pro Glu Gly Gln Val Phe Ser Asp Leu Gln Trp
100                105                110
Arg Thr Leu Leu Ser Leu Ala Asp Thr Val Ile Pro Ser Ile Arg Ser
115                120                125
Thr Ser Leu Pro Lys Ser Val Ser Thr Lys Val Val Pro Glu Ser Thr

```

130 135 140  
 Phe Lys Asp Ala Val Ser Thr Leu Ala Ser His Ile His Asp Pro Asp  
 145 150 155 160  
 Ala Thr Gln Ile Ala Glu Gln Tyr Leu Glu Glu Asn Ala Ser Ala Asn  
 165 170 175  
 Pro Gln Phe Val Glu Gly Leu Arg Arg Leu Phe Ala Glu Tyr Ile His  
 180 185 190  
 Glu Glu Arg Lys Ser Gly Ile Asn Leu Ile Leu Asn Ala Leu Lys Tyr  
 195 200 205  
 Val Ala Pro Ala Ile Xaa Thr Leu Ser Thr Asp Leu Leu Thr Thr Ser  
 210 215 220  
 Ser Ser Lys Ala Gly Ser Leu Ile Leu Thr Gly Ser Thr Thr Pro Ile  
 225 230 235 240  
 Gln Asp Gln Pro Phe Glu Ile Arg Glu Lys Ile Phe Ser Ser Trp Glu  
 245 250 255  
 Thr Ser Arg Ile Lys Pro Leu Arg Ala Ile Tyr Arg Ala Phe Thr Ala  
 260 265 270  
 Ile Phe Lys Lys Thr Trp Ala Thr Val Ser Pro Thr Ile Arg Ser Val  
 275 280 285  
 Val Gly Cys Pro Arg Val Pro Ile His Gly Lys Pro Ala Asp Gly Phe  
 290 295 300  
 Glu Tyr Glu Phe Leu Gln Phe Pro Pro Gly Ala Glu Pro Glu Thr Ile  
 305 310 315 320  
 Asp Thr Asp Val Val Ile Val Gly Ser Gly Cys Gly Gly Ser Val Ala  
 325 330 335  
 Ala Lys Asn Leu Ala Glu Ala Gly Tyr Arg Val Leu Val Val Glu Lys  
 340 345 350  
 Ser Tyr His Tyr Pro Ser Lys Tyr Phe Pro Met Asp Phe Asn Glu Gly  
 355 360 365  
 Phe Val Ser Met Phe Glu Asn Gly Gly Ala Thr Thr Ser Asp Asp Gly  
 370 375 380  
 Ser Ile Ala Val Leu Ala Gly Ser Thr Trp Gly Gly Gly Gly Thr Val  
 385 390 395 400  
 Asn Trp Ser Ala Ser Leu Gln Thr Gln Gly Tyr Val Arg Arg Glu Trp  
 405 410 415  
 Ala Ser Lys Gly Leu Pro Phe Phe Glu Ser His Glu Tyr Gln Gln Ala  
 420 425 430  
 Leu Asp Arg Val Cys Asp Arg Met Gly Val Ser Asn Asp His Thr Glu  
 435 440 445  
 His Asn Tyr Ser Asn Arg Val Leu Leu Asp Gly Ala Arg Lys Leu Gly  
 450 455 460  
 Tyr Ala Ala Gln Pro Val Pro Gln Asn Thr Gly Gly Ser Asn His Tyr  
 465 470 475 480  
 Cys Gly Tyr Cys Thr Met Gly Cys His Ser Cys Gly Lys Lys Gly Pro  
 485 490 495  
 Arg Glu Thr Phe Leu Ala Asp Ala Ala Lys Ala Gly Thr Thr Phe Ile  
 500 505 510  
 Glu Gly Phe Arg Ala Asp Lys Ile Arg Phe Lys Asn Thr Lys Gly Gly  
 515 520 525  
 Arg Val Ala Cys Gly Val Glu Gly Thr Trp Thr Ser Arg Asp Ser Tyr  
 530 535 540  
 Leu Gly Thr Ala Gly Pro Asp Arg Thr Thr Arg Lys Val Ile Ile Asn  
 545 550 555 560  
 Ala Ser Lys Val Ile Val Ser Cys Gly Thr Leu His Ser Pro Leu Leu  
 565 570 575  
 Leu Leu Arg Ser Gly Leu Lys Asn Pro Gln Ile Gly Arg Asn Leu Tyr

580  
Leu His Pro Gly Glu Phe  
595

585

590

<210> 40714  
<211> 272  
<212> PRT  
<213> A.fumigatus

<400> 40714  
Asn Arg Tyr Cys Pro Pro Pro Arg Leu Ser Leu Thr Thr Ile Val Val  
1 5 10 15  
Leu Ser Cys Ala Val Phe Asp Glu Glu Ile Arg Pro Trp Glu Gly Ser  
20 25 30  
Ala Leu Thr Ile Val Val Asn Glu Phe Glu Asp Gln Asp Gly Gln Gly  
35 40 45  
His Gly Val Lys Ile Glu Asn Val Val Met Leu Pro Ala Leu Tyr Leu  
50 55 60  
Pro Thr Phe Pro Trp Arg Asp Gly Leu Asp Tyr Lys Leu Trp Ala Ala  
65 70 75 80  
Lys Leu Pro Arg Met Ser Gly Phe Ile Ala Leu Thr Lys Glu Arg Asp  
85 90 95  
Ala Gly Arg Val Tyr Pro Asp Pro Ala Asp Gly Arg Val Arg Ile Asp  
100 105 110  
Tyr Thr Val Ser Ala Tyr Asp Arg Lys His Ile Val Glu Ala Leu Ile  
115 120 125  
Ala Thr Ala Lys Ile Ala Tyr Ile Ser Gly Ala Thr Glu Phe His Thr  
130 135 140  
Ser Asn Arg Glu Met Pro Pro Phe Ile Arg Pro Thr Glu Ala Ser Asp  
145 150 155 160  
Pro Asn Ala Pro Glu Gly Val Thr Asn Gln Ala Leu Gln Ala Trp Ile  
165 170 175  
Ala Val Leu Arg Arg Lys Asn Pro Val Asp Pro Glu Arg Thr Gln Tyr  
180 185 190  
Ala Ser Ala His Gln Met Gly Thr Cys Arg Met Gly Ser Ser Pro Arg  
195 200 205  
Thr Ser Val Val Asp Pro Glu Cys Gln Val Trp Gly Thr Gln Gly Leu  
210 215 220  
Tyr Val Met Asp Ala Ser Val Phe Pro Ser Ala Ser Gly Val Asn Pro  
225 230 235 240  
Met Val Thr Asn Met Ala Ile Ala Asp Trp Ala Ser Arg Lys Val Val  
245 250 255  
Arg Ser Leu Glu Lys Ala Asn His Gly Lys Thr Val Leu Ala Arg Leu  
260 265 270

<210> 40715  
<211> 91  
<212> PRT  
<213> A.fumigatus

<400> 40715  
Phe Glu Pro His Leu His Lys Arg Pro Thr Ala Arg Pro Gly Pro Glu  
1 5 10 15  
Arg Arg Asp Asp Gly Leu Gly Asp Gly Asp His Val Pro Ile Arg Gln  
20 25 30  
Glu Ala Ala Pro His Tyr Arg Ala Ala Arg His Glu His Arg Pro Arg

17858

```

      35              40              45
His Gly His Arg Arg Arg Leu His Pro Gly Ala Val Ala Gly Arg Ala
  50              55              60
Pro His Arg Arg Ser Ala Pro Gly Arg Arg Gly Gly Asp Glu Ala Glu
  65              70              75              80
Arg Leu Ala Arg Lys Ala Arg Arg Gly Asp Pro
      85              90

```

<210> 40716  
 <211> 323  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40716
Val Gln Glu Gly Ala Ile Trp Asn Asp Val Asp Leu Asn Asp Glu Thr
  1              5              10              15
Pro Gly Arg Ile Ala Arg Arg Leu Gly Leu Thr Glu Leu Tyr Glu Met
      20              25              30
Ile Val Asp Ala Gly Val Arg Ala Glu Leu Phe Leu Asn Arg Leu Asp
      35              40              45
Gly Tyr Glu Pro Leu Ser Asp Asp Glu Asp Asp Gln Glu Thr Gly Gln
      50              55              60
Gly Glu Asp Ala Ala Asn Glu Pro Ala Ala Glu Glu Asp Gln Asp Glu
  65              70              75              80
Ala Pro Glu Leu Val Glu Thr Thr Ala Ala Asp Ala Ser Ala Ala Glu
      85              90              95
Ala Ser Thr Glu Gly Pro Gly Pro Asp Val Thr Ser Ser Arg Tyr Leu
      100              105              110
Asp Ser Asn Leu Thr Phe Thr Asn Asp Arg Leu Leu Asp Gln Asp Gln
      115              120              125
Asn Gly Val Met Met Ala Trp Glu Thr Glu Ile Met Ser Arg Ser Ala
      130              135              140
Lys Lys Leu Leu Pro Thr Thr Gly Leu Arg Val Met Asn Ile Gly His
  145              150              155              160
Gly Met Gly Ile Val Asp Gly Phe Ile Gln Glu Gln Ser Pro Ala Ala
      165              170              175
His His Ile Val Glu Ala His Pro Asp Val Val Ala Glu Met Lys Arg
      180              185              190
Lys Gly Trp His Glu Lys Pro Gly Val Val Ile His Glu Gly Arg Trp
      195              200              205
Gln Asp Ile Leu Pro Ala Leu Val Ala Gln Gly Glu Thr Phe Asp Ala
      210              215              220
Ile Tyr Tyr Asp Thr Phe Ala Glu Ser Tyr Ala Asp Phe Arg Glu Phe
  225              230              235              240
Phe Ser Glu Gln Val Ile Gly Leu Leu Glu Gln Asp Gly Lys Trp Gly
      245              250              255
Phe Phe Asn Gly Met Gly Ala Asp Arg Gln Ile Ser Tyr Asp Val Tyr
      260              265              270
Gln Lys Val Val Glu Met Asp Leu Phe Glu Ala Gly Phe Asp Val Glu
      275              280              285
Trp Glu Glu Ile Lys Val Pro Lys Leu Glu Gly Glu Trp Thr Gly Val
      290              295              300
Arg Arg Pro Tyr Trp Val Val Asp Asn Tyr Arg Leu Pro Leu Cys Lys
  305              310              315              320
Phe Met Asp

```

<210> 40717  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 40717  
 Leu Asn Pro Leu Thr Asp Cys Thr Leu Trp Leu Cys Tyr Glu Ser Gly  
 1 5 10 15  
 Thr Gln Thr His Gly Asn Asp Val Thr Pro His Asn Lys Asp Ser Gln  
 20 25 30  
 Ser Asn Val Ile Ala Arg Lys Glu Asn Asn Glu Ser Leu Pro Ser Leu  
 35 40 45  
 Glu Ala Thr Glu Pro Asp Gln Phe Arg Lys Cys Asn Lys Cys Asn Arg  
 50 55 60  
 Cys Asn Lys Gly Lys Asn Asn Gln Ser Thr Leu Lys Asn Ala Ser Gly  
 65 70 75 80  
 Ile Tyr Thr Leu

<210> 40718  
 <211> 1204  
 <212> PRT  
 <213> A.fumigatus

<400> 40718  
 Ile Leu Ala Val Phe Ala Ser Gln Arg Gln Thr His Ser Tyr Leu Val  
 1 5 10 15  
 Ser Val Thr Asp Asn Val Arg Ile Gly Thr Ser Ala Asn Ile Gly Leu  
 20 25 30  
 Leu His Ser Gln Pro Arg Thr Tyr Leu Val Pro Asp Arg Glu Arg Thr  
 35 40 45  
 Lys Pro Ser Pro Pro Gly Leu Phe Ser Trp Val Gly Pro Val Phe Arg  
 50 55 60  
 Thr Ser Ser Ser Glu Phe Ile Gln Lys Cys Gly Leu Asp Ala Tyr Phe  
 65 70 75 80  
 Phe Leu Arg Tyr Leu Arg Met Leu Leu Lys Ile Phe Val Pro Leu Gly  
 85 90 95  
 Cys Ile Val Leu Pro Val Leu Leu Pro Leu Asn Lys Val Asp Gly Lys  
 100 105 110  
 Asp Arg Asn Phe Lys Asn Ala Thr Gly Thr Gly Asp Thr Trp Asn Val  
 115 120 125  
 Thr Gly Leu Asp Gln Leu Ala Trp Gly Asn Val Ala Pro Glu His Val  
 130 135 140  
 Gln Arg Tyr Trp Ala His Leu Ile Met Ala Ile Ile Val Ile Val Tyr  
 145 150 155 160  
 Val Cys Ala Val Phe Phe Asp Glu Leu Lys Gly Tyr Ile Arg Leu Arg  
 165 170 175  
 Gln Ala Tyr Leu Thr Ser Pro Gln His Arg Leu Arg Ala Ser Ala Thr  
 180 185 190  
 Thr Val Leu Val Thr Ala Ile Pro Asp Ser Trp Leu Ser Val Glu Ala  
 195 200 205  
 Leu Glu Ser Leu Tyr Asp Val Phe Pro Gly Gly Ile Arg Asn Ile Trp  
 210 215 220  
 Ile Asn Arg Asn Phe Asp Asp Leu Asn Glu Lys Val Lys Gln Arg Asp  
 225 230 235 240

Ala Leu Ala Leu Lys Leu Glu Ser Ala Glu Thr Asp Leu Ile Ile Lys  
 245 250 255  
 Cys Lys Lys Ala Gln Leu Lys Gln Ala Lys Ala Ala Lys Lys Thr  
 260 265 270  
 Gly Met Ser Ala Lys Glu Val Glu Gly Lys Gln Lys Gln Ala Thr Asp  
 275 280 285  
 Glu His Ala Leu Gln Leu Ala Ala Gly Gly Gly Ile Ser Ser Gly Asp  
 290 295 300  
 Pro His Gln Ala His Thr Leu Asn Gln Ile Leu His Arg Asp Val His  
 305 310 315 320  
 Gly Lys His His Asp Glu Pro Gly Glu Pro Lys Arg Arg Lys Pro Phe  
 325 330 335  
 Asp Pro Ala Val Glu Ala Val Gly Met Val Gly Gln Gly Val Gly Lys  
 340 345 350  
 Leu Ser Arg Ser Val Leu Gly Thr Leu Lys Arg Val Glu Gly Asp Ile  
 355 360 365  
 Asp Ser Thr Leu Thr Arg Ser Gly Gly Tyr Ile Pro Asp Thr Gly Thr  
 370 375 380  
 Thr Ala Pro Leu Gln Gln Arg Ala Pro Asp Val Glu Thr Asn Asn Ala  
 385 390 395 400  
 Glu Gln Pro Asp Pro Trp Arg Pro Ser Asn Asp Ser Ile Ala Pro Ser  
 405 410 415  
 Ile Glu Asn Gly Asn Ala Ala Ser Met Asn Glu Asn Gly Ala Pro Ser  
 420 425 430  
 Asn Ala Pro Arg Ser Arg Ser Asp Ser Lys Pro Arg Arg Pro Phe Trp  
 435 440 445  
 Lys Ser Arg Val Ser Ser Ser Tyr Ser Lys Ala Ser Asn Arg Thr Glu  
 450 455 460  
 Pro Asp Glu Phe Pro Leu Thr Ala Pro Glu Asp Pro Ala Glu Gly Glu  
 465 470 475 480  
 Ala Ser Asn Glu Glu Arg Ser His Asn Asn Glu Lys Gln Lys Gly Lys  
 485 490 495  
 Glu Pro Arg Gly Arg Arg Glu Gly Asp Glu Val Asp Gly Glu Tyr  
 500 505 510  
 Pro Val Ala Tyr Asn Glu Asp Phe Asp Ser Glu Asp Tyr Gly Glu Pro  
 515 520 525  
 Leu Trp Lys Lys Tyr Ile Arg Glu Lys Asp Arg Asp Thr Met Arg Leu  
 530 535 540  
 Pro Ile Phe Gly Leu Ser Trp Met Pro Ser Leu Trp Leu Ile Gly Lys  
 545 550 555 560  
 Lys Val Asp Thr Ile Asp Tyr Cys Arg Lys Glu Val Ala Arg Leu Asn  
 565 570 575  
 Leu Glu Ile Glu Ile Asp Gln Gln His Pro Glu Arg Phe Pro Leu Met  
 580 585 590  
 Asn Ser Ala Phe Ile Gln Phe Asn His Gln Val Ala Ala His Met Ala  
 595 600 605  
 Cys Gln Ala Val Ser His His Leu Pro Lys Gln Met Ala Pro Arg Ile  
 610 615 620  
 Val Glu Ile Ser Pro Asp Asp Val Ile Trp Asp Asn Met Ser Ile Lys  
 625 630 635 640  
 Trp Trp Glu Arg Tyr Leu Arg Thr Phe Gly Ile Leu Ala Ile Val Cys  
 645 650 655  
 Ala Met Val Val Gly Trp Ala Phe Pro Val Ala Phe Thr Gly Leu Leu  
 660 665 670  
 Ser Gln Leu Ser Tyr Leu Glu Asn Ala Phe Thr Trp Leu Ser Trp Ile  
 675 680 685

## 17861

Ser Lys Leu Pro Asp Trp Leu Ile Ser Ala Ile Gln Gly Ile Leu Pro  
 690 695 700  
 Pro Leu Phe Leu Ala Ile Leu Met Ala Leu Leu Pro Leu Ile Leu Arg  
 705 710 715 720  
 Phe Leu Cys Arg Ala Gln Gly Leu His Thr Gly Met Ala Ile Glu Leu  
 725 730 735  
 Thr Val Gln Asn Tyr Phe Phe Ala Phe Leu Phe Val Gln Leu Phe Leu  
 740 745 750  
 Val Val Ala Ile Ser Ser Ser Phe Ser Thr Ile Ile Asp Asn Val Thr  
 755 760 765  
 Asn Val Thr Ser Trp Pro Glu Leu Leu Ala Gln Asn Ile Pro Ser Ser  
 770 775 780  
 Ser Asn Tyr Phe Phe Ser Tyr Met Ile Leu Gln Ala Leu Ser Val Ser  
 785 790 795 800  
 Ala Gly Ala Leu Val Gln Ile Val Ser Leu Phe Ser Trp Phe Ile Leu  
 805 810 815  
 Ala Pro Leu Leu Asp Asn Thr Ala Arg Lys Lys Trp Gly Arg Thr Thr  
 820 825 830  
 Asn Leu Asn Gln Met Gln Trp Gly Thr Phe Phe Pro Val Tyr Thr Thr  
 835 840 845  
 Leu Ala Ser Ile Gly Met Phe Asn Pro Thr Gly Thr Thr Ser Asp Val  
 850 855 860  
 Ala Asn Ala Arg Asn Thr Gly Leu Ile Tyr Cys Val Ile Ser Pro Leu  
 865 870 875 880  
 Ile Leu Val Phe Asn Val Ile Thr Phe Gly Leu Phe Trp Phe Val Tyr  
 885 890 895  
 Arg Tyr Asn Thr Leu Tyr Val Thr Lys Phe Arg Phe Asp Thr Gly Gly  
 900 905 910  
 Leu Leu Phe Pro Arg Ala Ile Asn Gln Leu Phe Thr Gly Leu Tyr Val  
 915 920 925  
 Met Glu Leu Ser Leu Ile Gly Leu Phe Phe Leu Val Arg Asp Val Asp  
 930 935 940  
 Gly Asn Val Ala Cys Glu Gly Gln Ala Ile Cys Met Ile Val Val Leu  
 945 950 955 960  
 Ile Leu Thr Val Gly Tyr Gln Ile Leu Leu Asn Glu Ala Phe Ser Pro  
 965 970 975  
 Leu Ile Arg Tyr Leu Pro Ile Thr Leu Glu Asp Asp Ala Val Arg Arg  
 980 985 990  
 Asp Glu Glu Phe Ser Arg Ala Gln Arg Ala Arg Leu Gly Phe Pro Glu  
 995 1000 1005  
 Glu Asp Gln Thr Asp Thr Ile Glu His Gln Leu Ala Glu Arg Glu His  
 1010 1015 1020  
 Gln Glu His Glu Ala Asp Arg Arg Ala His Glu Ile Glu Leu Lys Asn  
 1025 1030 1035 1040  
 Ile Glu Ala Cys Ser Gly Arg Arg Ala Ser Thr Gln Thr Gly Thr Leu  
 1045 1050 1055  
 Gln Asn Asn Arg His His Ser Trp Ala Asp Arg Ser Ser Lys Thr Arg  
 1060 1065 1070  
 Ser Lys Tyr Phe Gly Thr Pro Ser Ser Gly Ser Val Pro Thr Leu Gln  
 1075 1080 1085  
 Arg Val Arg Glu Lys Ile Ala His Asp Ala Glu Ala Gln Gly Ser Pro  
 1090 1095 1100  
 Pro Gly Asn Ile Gly His Ala Leu Phe Ala Gly Ile His Asp Glu Leu  
 1105 1110 1115 1120  
 Glu Asp Leu Thr Pro Asp Glu Arg Asp Gln Leu Thr Gln Arg Ala Phe  
 1125 1130 1135

## 17862

Gln His Asp Ala Leu Arg Ala Lys Arg Pro Val Ile Trp Ile Pro Arg  
 1140 1145 1150  
 Asp Asp Leu Gly Val Ser Asp Asp Glu Ile Tyr Arg Thr Gln Arg Phe  
 1155 1160 1165  
 Ser Lys His Ile Trp Ile Ser Asn Glu Tyr Gln Ala Leu Asp Gly Lys  
 1170 1175 1180  
 Cys Arg Thr Ile Phe Ser Arg Ser Pro Pro Asp Phe Ser Glu Val Asp  
 1185 1190 1195 1200  
 Leu Ile Gln Leu

<210> 40719  
 <211> 267  
 <212> PRT  
 <213> A.fumigatus

<400> 40719  
 Thr Gly His Pro Arg Pro Arg Arg Thr Asp Ala Cys Gly Pro Pro Ser  
 1 5 10 15  
 Ser Ala Pro Ser Thr Ile Pro Thr Pro Ser Met Lys Ser Pro Val Ser  
 20 25 30  
 Tyr Thr Ser Thr Ala Gly Ala Leu Pro Pro Glu Thr Ala Ser Trp Val  
 35 40 45  
 Ser Pro Cys Ser Thr Gly Ser Ser Pro Ser Gly Ala Val Cys Leu Thr  
 50 55 60  
 Ala Glu Tyr Arg Leu Ala Pro Glu His His Gln Pro Ala Gln Leu Glu  
 65 70 75 80  
 Asp Ser Tyr Ser Ala Leu Gln Trp Met Ser Asp Tyr Ala Ala Glu Leu  
 85 90 95  
 Gly Phe Asn Pro Arg Lys Leu Val Val Cys Gly Ser Ser Ala Gly Gly  
 100 105 110  
 Asn Leu Thr Ala Gly Val Thr Leu Leu Ala Arg Asp Arg Ser Gly Pro  
 115 120 125  
 Gln Ile Arg Gly Gln Val Leu Ile Tyr Pro Trp Val Asp Asp Gly Met  
 130 135 140  
 Asp Tyr Val Ser Met Arg Gln Tyr Ala Asp Ile Ala Pro Val Arg Asp  
 145 150 155 160  
 Val Asp Ala Ala Val Leu Ala Asn Tyr Ala Phe Gly Glu Arg Arg Glu  
 165 170 175  
 His Ala Asp Met Tyr Thr Val Pro Met Arg Ala Thr Asn Phe Ala Gly  
 180 185 190  
 Leu Pro Pro Thr Phe Ile Asp Val Gly Glu Ala Asp Val Phe Arg Asp  
 195 200 205  
 Gln Asp Ile Ala Tyr Ala Ser Ala Leu Trp Lys Asp Gly Val Ser Thr  
 210 215 220  
 Glu Leu His Val Trp Pro Gly Ser Trp His Gly Phe Asp Val Phe Val  
 225 230 235 240  
 Pro Asp Ala Pro Ile Ser Arg Arg Ala Arg Ala Ala Arg Leu Glu Trp  
 245 250 255  
 Leu Arg Lys Leu Leu Ser Val Pro Asp Gly Ile  
 260 265

<210> 40720  
 <211> 769  
 <212> PRT  
 <213> A.fumigatus



&lt;400&gt; 40720

Ser Ser Phe Ala Phe Ser Ser Leu Ser Ser Phe Gln Pro Cys Glu Arg  
 1 5 10 15  
 Ala Leu Ile Thr Lys Met Glu Gly Asn Ser Thr Val Ala Leu Arg Gln  
 20 25 30  
 Leu Ser Leu Ser Thr Val Ser Ser Arg Ser Tyr Gln Ala Leu Gly Tyr  
 35 40 45  
 Ser Gln Asn Asp Leu Ser Gly Asp Ser Gly Ala Ser His Asn Glu Glu  
 50 55 60  
 Pro Pro Ala Tyr Ser His Val Ser Pro Ala Ala Gln Val Pro Gly Arg  
 65 70 75 80  
 Gly Tyr Ser Thr Thr Leu His Arg Ser Pro Gly Val Leu Leu Pro Thr  
 85 90 95  
 Leu Leu Tyr Ala Gly Leu Ala Ile Tyr Ala Trp Val Ala Ile Val Tyr  
 100 105 110  
 Leu Ser Phe Arg Pro Met Ser Ala Lys Ser Trp Gly Ala Leu Leu Thr  
 115 120 125  
 Glu Asn Arg Leu Tyr Ser Glu Ser Val Asp Tyr Ala Arg Asn Glu Gly  
 130 135 140  
 Ile Tyr Arg Ser Ala Val Val Ile Trp Thr Leu Ile Ala Ile Met Thr  
 145 150 155 160  
 Leu Pro Trp Leu Ser Pro Val Cys Ala Ser Ala Ala Val Ile Tyr Val  
 165 170 175  
 Gln Asn Gln Lys Thr Ala Asp Ser Leu Gln Met Arg Gln Val Thr Asn  
 180 185 190  
 Leu Ala Asp Arg Arg Trp Leu Asp Leu Ser Leu Tyr Lys Ala Leu Val  
 195 200 205  
 Ser Gly Gly Trp Lys Lys His Gly Ser Thr Phe Leu Ile Leu Ala Ile  
 210 215 220  
 Val Leu His Leu Val Ala Gly Leu Thr Tyr Pro Ile Gln Ser Ile Phe  
 225 230 235 240  
 Leu Glu Thr Thr Thr Ile Asn Val Pro Gln Ala Met Asp Arg Val Ala  
 245 250 255  
 Ser Ile Ala Asp Leu Pro Ser Leu Glu Tyr Pro Asp Ala Ala Ile Ser  
 260 265 270  
 Leu Ile Gly Asn Asp Ile Leu Ala Val Arg Arg Ala Leu Ser Asp Ala  
 275 280 285  
 Asp Ser Val Thr Val Gln Pro Phe Leu Trp Gln Asn Thr Ser Gly Val  
 290 295 300  
 Gln Leu His Thr Leu Ser Asp Ile Leu Ser Leu Asn Asp Ser Phe Tyr  
 305 310 315 320  
 Ala Gln Leu Pro Thr Gly Phe Asn Thr Gly Val Leu Arg Gln Phe Ala  
 325 330 335  
 Pro Arg Val Asn Ser Thr Ala Thr Tyr Glu Thr Ile Leu Ala Ser Glu  
 340 345 350  
 Phe Pro Ser Asn Cys Asp Ser Thr Pro Gly Ser Phe Tyr Ser Arg His  
 355 360 365  
 Tyr Ser Glu Tyr Ala Met Ser Glu Tyr Arg Arg Ile Trp Gly Val Thr  
 370 375 380  
 Ala Cys Met Pro Ser Asn Trp Thr Lys Ser Gln Trp Gln Lys Thr Arg  
 385 390 395 400  
 Ala Arg Gln Glu Phe Ser Glu Thr Leu Tyr Leu Asn Phe Thr Ser Ser  
 405 410 415  
 Lys Gly Asn Ser Gly Asp Thr Pro Ala Asp Gly Lys Leu Tyr Arg Val  
 420 425 430

Thr Val Ser Thr Thr Ala Gly Tyr Phe Glu Leu Pro Asn Asn Met Asn  
 435 440 445  
 Asp Gly Lys His Gly Pro Leu Leu Glu Gln Asp Pro Val Gly Leu Cys  
 450 455 460  
 Gly Ala Asp Cys His Tyr Gln Thr Phe Asp Pro Asp Leu Ser Leu Ser  
 465 470 475 480  
 Arg Ile Arg Arg Asp Asn Ile Thr Thr Thr Asp Thr Leu Asp Ala Val  
 485 490 495  
 Ser Trp Asp Pro Leu Ala Thr Val Ser Lys Gly Pro Leu Leu Thr Thr  
 500 505 510  
 Ala Leu Ala Leu Phe Gly Pro Gly Ser Phe Leu Asp Thr Phe Ala Ala  
 515 520 525  
 Lys Ile Trp Ala Ile Asn Asp Ser Phe Asn Arg Ala Asn Val Thr Ala  
 530 535 540  
 Arg Ile Cys Leu Asp Gly Pro Pro Leu Leu Asp Leu Met Leu Tyr Gln  
 545 550 555 560  
 Ser Tyr Ser Thr Lys His Tyr Cys Leu Asp Ala Pro Met Gly Thr Arg  
 565 570 575  
 Tyr Gly Ala Ser Ala Ala Asp Pro Leu Ile His Gln Trp Ile Asp Tyr  
 580 585 590  
 Phe Leu Lys Val Glu Asp Arg Phe Pro Met Leu Phe Thr Ala Ala Ala  
 595 600 605  
 Phe Leu Ser Asn Lys Gln Leu Leu Glu Ser Val Ser Gly Gln Trp Trp  
 610 615 620  
 Ile Tyr Gln Asp Leu Gly Thr Glu Met Ile Ile Pro Thr Ile Ser Leu  
 625 630 635 640  
 Ala Gly Ile Ile Val Gly Ser Ile Met Met Ala Leu Tyr Ile Ile Pro  
 645 650 655  
 Met Val Gly Leu Ala Phe Tyr Ala Ala Trp Tyr Pro Arg Trp Thr Glu  
 660 665 670  
 Arg Leu Asp Ser Phe Thr Met Leu Arg Leu Gly Ala Thr Ile Gly Asp  
 675 680 685  
 Lys Leu Leu Pro Leu Arg Ala Ala Lys Ser Val Asp Arg Ile Pro Val  
 690 695 700  
 Leu Asp Glu Ile Pro Gly Val Val Arg Asp Val Ser Ile Pro Asp Gly  
 705 710 715 720  
 Asn Val Val Leu Pro Val Gly Thr Leu Gly Leu Gly Asp Gly Arg Pro  
 725 730 735  
 Leu Glu Gly Gln Arg Arg Tyr Glu Ala Tyr Lys Glu Ser Asp Glu Pro  
 740 745 750  
 Leu Thr Pro Met Glu Cys Arg Thr Leu Gln Ser Arg Ile Asn Asp Asp  
 755 760 765  
 Pro

&lt;210&gt; 40721

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40721

Leu Gln Gly Tyr Val Met Leu Gln Asp Gly Gly Ser Gly Leu Gln Gly  
 1 5 10 15  
 Glu Asn Asn Ser Thr Leu Phe Gln Asn His Leu Asp Leu Gly Leu Asp  
 20 25 30  
 Leu Glu Ala Val Ala Leu Gly Phe Gln Cys Val Gln Phe Arg Gly Asp

## 17865

35                      40                      45  
 Phe Val Leu Pro Gly Tyr Val Val Lys Leu Thr Leu Ala Glu  
 50                      55                      60

<210> 40722  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 40722  
 Leu Met Arg Ser Thr Cys Trp Arg Pro Trp Gln Lys Ala Gln Val Pro  
 1                      5                      10                      15  
 Ala Val Ser Gln Pro Thr Ala Val Val Thr Glu Ala Asp Thr Pro Asp  
 20                      25                      30  
 Gly Pro Gly Leu Ala Asp Gln Ile Asp Ala Leu Asn Gly Thr Gly Asn  
 35                      40                      45  
 Pro Ala Ala Gln Pro Ser Arg Phe Gly Glu Phe Gly Gly Gln Tyr Val  
 50                      55                      60  
 Pro Glu Ser Leu Met Asp Cys Leu Ala Glu Leu Glu Arg Gly Phe Pro  
 65                      70                      75                      80  
 Arg Ser Cys Glu

<210> 40723  
 <211> 447  
 <212> PRT  
 <213> A.fumigatus

<400> 40723  
 Asp Gln Arg Val Gly Gly Arg Gly Arg Arg Pro Arg Tyr Arg Leu Ser  
 1                      5                      10                      15  
 Arg Ser Leu Pro Leu Leu Leu Pro Arg Pro Ile Leu Leu Thr Val Leu  
 20                      25                      30  
 Asp Trp Pro Thr Arg Ser Thr Pro Ser Met Glu Leu Val Ile Leu Leu  
 35                      40                      45  
 Leu Ser His Arg Ala Ser Val Asn Leu Val Asp Ser Thr Ser Pro Asn  
 50                      55                      60  
 Leu Ser Trp Thr Ala Trp Pro Ser Ser Ser Ala Gly Phe Gln Glu Ala  
 65                      70                      75                      80  
 Val Asn Asp Pro Lys Phe Trp Glu Glu Phe Arg Ser Tyr Tyr Pro Tyr  
 85                      90                      95  
 Met Gly Arg Pro Ser Ser Gly His Val Ala Asn Arg Leu Thr Glu Tyr  
 100                      105                      110  
 Val Gly Gly Ala Asn Ile Trp Leu Lys Arg Glu Asp Leu Asn His Thr  
 115                      120                      125  
 Gly Ser His Lys Ile Asn Asn Ala Leu Gly Gln Ile Leu Ile Ala Arg  
 130                      135                      140  
 Arg Leu Gly Lys Thr Arg Ile Ile Ala Glu Thr Gly Ala Gly Gln His  
 145                      150                      155                      160  
 Gly Val Ala Thr Ala Thr Val Cys Ala Lys Phe Gly Met Lys Cys Val  
 165                      170                      175  
 Val Tyr Met Gly Ala Glu Asp Val Arg Arg Gln Ala Leu Asn Val Phe  
 180                      185                      190  
 Arg Met Lys Leu Leu Gly Ala Ser Val Val Ala Val Asp Ala Gly Ser  
 195                      200                      205  
 Arg Thr Leu Arg Asp Ala Val Asn Glu Ala Leu Arg Ala Trp Val Val

210		215		220
Asp Leu Asp Thr Thr His Tyr Ile Ile Gly Ser Ala Ile Gly Pro His				
225		230		235
Pro Phe Pro Thr Ile Val Arg Thr Phe Gln Ser Val Ile Gly Glu Glu				
	245		250	255
Thr Lys Gln Gln Met Met Glu Ala Ile Gly Lys Leu Pro Asp Ala Val				
	260		265	270
Val Ala Cys Val Gly Gly Gly Ser Asn Ala Val Gly Met Phe Tyr Pro				
	275		280	285
Phe Ala Lys Asp Thr Ser Val Lys Leu Val Gly Val Glu Ala Gly Gly				
	290		295	300
Asp Gly Ile Asp Thr Asn Arg His Ser Ala Thr Leu Thr Gly Gly Ser				
305		310		315
Lys Gly Val Leu His Gly Val Arg Thr Tyr Val Leu Gln Asp Glu His				
	325		330	335
Gly Gln Ile Ser Glu Thr His Ser Ile Ser Ala Gly Leu Asp Tyr Pro				
	340		345	350
Gly Val Gly Pro Glu Leu Ser Ser Trp Lys Asp Ser Asp Arg Ala Arg				
	355		360	365
Phe Ile Ala Ala Thr Asp Ala Glu Ala Leu Ile Gly Phe Arg Thr Leu				
	370		375	380
Ala Gln Thr Glu Gly Ile Ile Pro Ala Leu Glu Ser Ser His Ala Val				
385		390		395
Trp Gly Ala Met Glu Leu Ala Lys Ser Met Lys Thr Gly Asp Ile Val				
	405		410	415
Leu Asn Leu Ser Gly Arg Gly Asp Lys Asp Val Gln Ser Val Ala Asp				
	420		425	430
Glu Leu Pro Arg Leu Gly Pro Lys Ile Gly Trp Asp Leu Arg Phe				
	435		440	445

&lt;210&gt; 40724

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40724

Trp Ile Arg Ser Arg Tyr Arg Gln Gly Ser Gln Gly Ser Gly Gly Arg				
1	5		10	15
Leu Ser Gly Tyr Gln Arg Ser Thr Tyr Gln Pro Leu Leu Ala Ser Met				
	20		25	30
Tyr Pro Thr Phe Arg His Gly Asn Val Arg Ala Cys Lys Gly Gly Pro				
	35		40	45
Ala Asn Thr Trp Glu Leu Gln Val Tyr Pro Glu Glu Met Ile Ser Thr				
	50		55	60
Gly Ile Ser Ala Ile Asp Thr Met Asn Ser Ile Ala Arg Gly Gln Lys				
65		70		75
Ile Pro Ile Phe Ser Ala Ala Gly Leu Pro His Asn Glu Ile Ala Ala				
	85		90	95
Gln Ile Cys Arg Gln Ala Gly Leu Val Lys Lys Pro Thr Lys Asp Val				
	100		105	110
His Asp Gly His Glu Glu Asn Phe Ser Ile Val Phe Ala Ala Met Gly				
	115		120	125
Val Asn Met Glu Thr Ala Arg Phe Phe Thr Arg Asp Phe Glu Glu Asn				
	130		135	140
Gly Ser Met Glu Arg Val Thr Leu Phe Leu Asn Leu Ala Asn Asp Pro				
145		150		155
				160

17867

Thr Tyr Val Cys Leu Cys Leu Leu Arg Leu Ser Ala Leu Phe Asp  
165 170 175

<210> 40725  
<211> 160  
<212> PRT  
<213> A.fumigatus

<400> 40725  
Leu Leu Ser Arg Ile Glu Arg Ile Ile Thr Pro Arg Leu Ala Leu Thr  
1 5 10 15  
Thr Ala Glu Tyr Tyr Ala Tyr Gln Leu Glu Lys His Val Leu Val Ile  
20 25 30  
Met Thr Asp Leu Ser Ala Tyr Cys Asp Ala Leu Arg Glu Val Ser Ala  
35 40 45  
Ala Arg Glu Glu Val Pro Gly Arg Arg Gly Tyr Pro Gly Tyr Met Tyr  
50 55 60  
Thr Asp Leu Ser Thr Ile Tyr Glu Arg Ala Gly Arg Val Glu Gly Arg  
65 70 75 80  
Asn Gly Ser Ile Thr Gln Ile Pro Ile Leu Thr Met Pro Asn Asp Gly  
85 90 95  
Lys Gln Ile Cys Glu Gln Ile Leu Leu Arg Ser Leu Ser Ser Ser Gly  
100 105 110  
Leu Thr Val Ser Leu Asp Ile Thr His Pro Ile Pro Asp Leu Thr Gly  
115 120 125  
Tyr Ile Thr Glu Gly Gln Ile Phe Val Asp Arg Gln Leu Tyr Asn Lys  
130 135 140  
Gly Cys Gln Pro Arg Arg Leu Lys Ser Phe Pro Ser Leu Ser Arg Tyr  
145 150 155 160

<210> 40726  
<211> 124  
<212> PRT  
<213> A.fumigatus

<400> 40726  
Arg Val Leu Leu Leu Arg Arg Val Asp Glu Thr Trp Asp Cys Pro Thr  
1 5 10 15  
Ala Phe Val Thr Asp Lys Arg Tyr Ser Ser Ser Phe Glu Leu Leu Leu  
20 25 30  
Ile Phe Ala Asn Leu Ser Cys Glu Ser Leu Gln Phe Ala Ser Tyr Pro  
35 40 45  
Tyr Leu Phe Val Asp Leu Arg Gly Gly Glu Asn Lys Arg Phe Leu Ser  
50 55 60  
Thr Ala Pro Phe Arg Val Val Ala Arg Pro Glu Gln Ser Ile Val Ser  
65 70 75 80  
Gln Ala Asn Thr Leu Tyr Trp Pro Val Lys Val Phe Pro Ala Ile Pro  
85 90 95  
Asp Phe Trp Thr Gly Lys Arg Arg Glu Leu Leu Val Leu Asn Ala Glu  
100 105 110  
Leu Glu Tyr Val Tyr Asn Gln Pro Glu Arg Arg Ser  
115 120

<210> 40727  
<211> 346  
<212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40727

Asp Arg Ala Trp Pro Lys Glu Gly Ser Glu Cys Lys Arg Ser Ser Ala  
 1 5 10 15  
 Phe Ser Arg Ala Gly Arg Trp Trp Tyr Gly Trp Ala Tyr Val Leu Leu  
 20 25 30  
 His Leu Arg Thr Leu Tyr Leu Pro Arg Pro Asp Lys His Phe Thr Gly  
 35 40 45  
 Asp Arg Gly Ile Glu Glu Lys Leu Lys Ala Thr Thr Leu Ser Asp Gln  
 50 55 60  
 Lys Leu Thr Leu Val His Ser Ala Lys Gln Gly Pro His Met Leu Asp  
 65 70 75 80  
 Val His Pro Arg Thr Ser Phe Asp Pro Gly Ser Ala Leu Ser Thr Pro  
 85 90 95  
 Phe Gly Ser Asp Asp Glu Ala Glu Leu Ser Asp Ile Lys Arg Ala Gln  
 100 105 110  
 Lys Leu Thr Met Gln Leu Ser Ala Ile Asp Thr Ser Val Pro Asn Arg  
 115 120 125  
 Ser Ile Arg Thr Ile Ile Arg Gly Asp Phe Thr Arg Leu Gln Asp Glu  
 130 135 140  
 Ser Glu Gly Gly Arg Arg Arg Gln Arg Lys Tyr Leu Val Ala Thr Asp  
 145 150 155 160  
 Leu Ser Glu Glu Ser Val Tyr Ala Leu Glu Trp Thr Ile Gly Thr Ile  
 165 170 175  
 Leu Arg Asp Gly Asp Thr Met Phe Ala Val Cys Ala Val Asn Glu Glu  
 180 185 190  
 Leu Gly Ile Pro Phe Gly Ser Ser Val Gln Ile Gly Glu Gly Ala Gln  
 195 200 205  
 Ala Met Gln Asp Ser Ala Ala Ile Val Gly Ser Gln Thr Glu Glu Thr  
 210 215 220  
 Val Phe Lys Ser Ser Asn Asp Ser Ile Thr Ser Asn Leu Pro Arg Ala  
 225 230 235 240  
 Leu Leu Gly Arg Leu Gly Gln Gly Thr Asp Ser Lys Pro Ser Ser Val  
 245 250 255  
 Asp Ala Arg Gly Val Pro Lys Gly Gln Gln Glu Arg Asn Arg Ala Val  
 260 265 270  
 Glu Ile Ile Ser Gln Thr Cys Val Arg Leu Leu Arg Lys Thr Leu Leu  
 275 280 285  
 Gln Val Arg Val Ala Val Glu Val Ile His Cys Lys Ser Pro Lys His  
 290 295 300  
 Met Ile Thr Glu Ala Val Arg Thr Arg Pro Asp Ala Tyr Glu Ser Ala  
 305 310 315 320  
 Thr Asn Ala Cys Pro Asn Thr Leu Thr Asn Leu Pro Leu Asp Arg Arg  
 325 330 335  
 Thr Arg Ala Tyr Thr Arg Tyr Arg Gly Ser  
 340 345

&lt;210&gt; 40728

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40728

Cys Arg Asn Ala Trp Arg Ala Phe Ser Arg Phe Ser Ile Val Met Glu  
 1 5 10 15

## 17869

Phe Phe Leu Phe Pro Leu Ile Leu Tyr Asp Tyr Asp Leu Leu Pro Trp  
                   20                  25                  30  
 Gly Ala Glu Met Ile Phe Ser Ile Cys Asp Leu Leu Leu Leu Ala Leu  
                   35                  40                  45  
 Phe Tyr Leu Leu Tyr Leu Ser Thr Thr Val Tyr Cys Val Ser Thr Phe  
           50                  55                  60  
 Tyr Val Val Arg Val  
 65

&lt;210&gt; 40729

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40729

Asn Cys Gly Arg Gly Ser Leu Pro His Arg Ser His Thr Asp Asp His  
 1                  5                  10                  15  
 Leu Ala Pro Ser Ser Gly Ala Ala Leu Pro Asp Leu Ser Ser Pro Ser  
                   20                  25                  30  
 Pro Ile Ala Ser Phe Ser Ala Gln Arg Ser Ser Ala Lys Asp Pro Ala  
           35                  40                  45  
 Ala Met Thr Glu Ser Phe Val Asp Pro Arg Met Ala Asn Val Lys Pro  
           50                  55                  60  
 Arg Ile Arg Tyr Asn Thr Ile Gly Gly Ile Asn Gly Pro Leu Val Phe  
 65                  70                  75                  80  
 Leu Asp Asn Val Arg Asn Trp Ala Gly Ser Gln Arg Arg Arg Lys Pro  
                   85                  90                  95  
 Ile Cys Asp Met Asn Gly Met Thr Cys  
                   100                  105

&lt;210&gt; 40730

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40730

Thr Lys Val Glu Phe Thr Gly His Ser Leu Lys Leu Gly Val Ser Glu  
 1                  5                  10                  15  
 Asp Met Leu Gly Arg Val Phe Asp Gly Ser Gly Arg Ala Ile Asp Lys  
                   20                  25                  30  
 Gly Pro Lys Val Leu Ala Glu Asp Tyr Leu Asp Ile Asn Gly Gln Pro  
           35                  40                  45  
 Ile Asn Pro Tyr Ser Arg Val Cys Ile Arg Pro Ser Val Thr Ala Met  
           50                  55                  60  
 Ser Gly Leu Ala Arg Val Val Gln Leu Ile Arg Gly Asn Ser Arg Ser  
 65                  70                  75                  80  
 Thr Pro Arg Lys

&lt;210&gt; 40731

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40731

Phe Val Arg Asp Ala Leu Asp Val Phe Ile Ser Ser Ala Ala Gln Val

## 17870

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1           5           10           15
Gln Asp Asp Val Ala Cys Leu His Gly Leu Gly Glu Phe His Gly Ala
20           25           30
Pro Asp Gly Val Arg Gly Leu Gln Gly Gly Asp Asp Ala Leu Gly Leu
35           40           45
Arg Glu Gly Ala Glu Ala Asp Gln Gly Phe Gly Val Gly Gly Ser Asp
50           55           60
Glu Ala Gly Ala Val Ala Val Leu Pro Arg Ala Glu Leu Gly Ala Asp
65           70           75           80
Thr Gly Val Val Gln Ala Gly Arg Asp Gly Val Gly Leu Gly Asp Leu
85           90           95
Ala Val Phe Val Leu Glu Asp Val Arg Ala Asn Thr Val Gln His Ala
100          105          110
Leu Ala Ala Ala Gly Gln Gly Arg Arg Val Ser Val Cys Val Asp Thr
115          120          125
Val Ala Ser Gly Leu Asp Thr Asp Gln Leu Asp Ala Ser Val Phe Gly
130          135          140
Glu Gly Val Glu His Ala Asp Gly Ile Thr Ala Thr Ala Asp Thr Ser
145          150          155          160
Asp Asp Gly Ile Gly Glu Phe Ala Asp Gly Leu His His Leu Leu Leu
165          170          175
Gly Phe Leu Ala Asp Asp Gly Leu Glu Gly Thr His Asp Gly Gly Glu
180          185          190
Gly Val Arg Ser Asn Gly Gly Ala Asp Asn Val Val Gly Gly Val Gln
195          200          205
Val Asn Asn Pro Gly Thr Lys Gly Leu Val Asp Ser Ile Thr Gln Ser
210          215          220
Pro Ala Ser Gly Ile Asp Gly His Asp Arg Gly Ser Lys Glu Leu His
225          230          235          240
Pro Glu Asp Ile

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&lt;210&gt; 40732

&lt;211&gt; 298

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40732

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Leu Leu Leu Leu Ile Ile Val Ala Ala Gly Val Leu Leu Arg Ile Gln
1           5           10           15
His Cys Pro Ser Ala Ser Gly Ala Pro Gly Thr Ala Thr Ser Tyr Ala
20           25           30
Ser Leu Lys Arg Phe Pro Gly Glu Ser Ser Glu Pro Ser Ala Ala Arg
35           40           45
Arg Ser Ser Asp Asn Ser Asp Gln Ile Ser Ile Gly Lys Lys Lys Ile
50           55           60
Val Asp Arg Asn Lys Leu Asp Asn Asn Asp Met Pro Val Leu Pro Lys
65           70           75           80
Arg Thr Ile Gln Ile Gln Leu Pro Glu Lys Pro Pro Arg Glu Pro Ser
85           90           95
His Gln His Lys Pro Ser Gln Thr Lys Ser Thr Met Ala Ala Met Met
100          105          110
Ser Gly Phe Asp Leu Lys Val Ser Leu Pro Ser Phe Ala Arg Gly Arg
115          120          125
Thr Pro Ser Arg Gln Ser Ser Ser Arg Gly Ala Ser Leu Asp Ser Arg
130          135          140

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## 17871

Val Pro Gln Arg Arg Ala Arg Ser Ser Ser Gln Asn Arg Arg Leu Gly  
 145 150 155 160  
 Ser Asn Gln Leu Asn Leu Leu Ser Ser Ser Lys Pro Thr Lys Pro Ala  
 165 170 175  
 Thr Val Lys Glu Lys Pro Pro Pro Met Asn Asn Thr His Ala Thr His  
 180 185 190  
 Ser Asp Pro Ala Leu Pro Glu Ser Val Ser Asn Gly Thr Ser Val Thr  
 195 200 205  
 Ser Pro Asp Lys Glu Ser Glu Ser Pro Glu Pro Gly Ile Asn Ala Ala  
 210 215 220  
 Thr Ser Ser Ala Gly Asp Glu Arg Leu Ala Lys Asp Leu Tyr Asp Ser  
 225 230 235 240  
 Glu Asn Asn Pro Met Asp Ser Ser Glu Asp Glu Pro Asp Glu Ser Ser  
 245 250 255  
 Ser Asn Asp Asp Asp Ser Asp Gly Glu Ile Glu Arg Gly Arg Lys Lys  
 260 265 270  
 Ala Pro Asn Ala Ser Asp Gln Ala Pro Ser Leu Gly Gln Val Asp Gly  
 275 280 285  
 Gly Thr Asp Gly Arg Met Tyr Cys Phe Ile  
 290 295

&lt;210&gt; 40733

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40733

Lys Pro Val Val Gly Glu Glu Ala Leu Ser Ser Glu Asp Lys Leu Ser  
 1 5 10 15  
 Leu Glu Phe Leu Glu Lys Phe Glu Arg Thr Phe Ile Ser Gln Gly Pro  
 20 25 30  
 Tyr Glu Ser Arg Thr Ile Phe Glu Ser Leu Asp Ile Ala Trp Asn Leu  
 35 40 45  
 Leu Arg Ile Tyr Pro Lys Glu Leu Leu Asn Arg Ile Pro Lys Arg Thr  
 50 55 60  
 Leu Asp Glu Phe Tyr Ala Arg Ser Ala Arg Lys Leu Pro Ala Lys Asp  
 65 70 75 80  
 Thr Arg Asp Asn Ser Ala Glu Asn Val Val Gly Ala Ala Pro Leu Ile  
 85 90 95  
 Glu Thr

&lt;210&gt; 40734

&lt;211&gt; 563

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40734

Ala Thr Val Arg Pro Thr Thr Ala Ile Ile Ser Tyr Phe Ala Lys Pro  
 1 5 10 15  
 Ser Ala Leu Ala Leu Arg Pro Ser Ile Val Thr Gly Thr Tyr Pro Asn  
 20 25 30  
 Arg Gly Trp Met Glu Thr Tyr His Gly His Val Arg Thr Pro Ala Asp  
 35 40 45  
 Ala Ile Ile Leu Phe Glu Ala Cys Arg Ile Gly Leu Leu Pro Arg Val  
 50 55 60

Gln Arg Arg Leu Ser Glu Lys Glu Arg Gln Ser Ile Gln Ser Gly Ser  
 65 70 75 80  
 Val Phe Val Trp Asp Glu Arg Glu Ala Gly Met Arg Arg Trp Thr Asp  
 85 90 95  
 Gly Lys Ser Trp Ser Ala Ser Arg Val Ser Gly Ser Phe Leu Thr Tyr  
 100 105 110  
 Arg Glu Met Glu Gly Lys Arg Gly Gly Thr Val Thr Gln Pro Leu Arg  
 115 120 125  
 Ala Gly Lys Thr Pro Asp Ser Arg Gly Ser Asp Asp Asp Arg Gly Asp  
 130 135 140  
 Gly Ala Asp Asp Gly Pro Asp Gly Tyr Arg Tyr Lys Pro Asp Gly Leu  
 145 150 155 160  
 Met Lys Gln Ser Phe Ser Ile Thr Thr Ser Thr Gly Gln His Leu His  
 165 170 175  
 Leu Ile Ser Tyr Tyr Ser Arg Ser His Pro Ala Ala Ala Thr Leu Gln  
 180 185 190  
 Gln Pro Ser Thr Asp Pro Ala Leu Arg His Val Arg Pro Gln Lys Gly  
 195 200 205  
 Leu Tyr Pro Glu Ser Thr Val Asn Asp Gln Gln Asn Leu Pro Val Val  
 210 215 220  
 Thr Arg Gly Pro Met Ala Gly Ala Thr Tyr Ser Val Pro His Pro Met  
 225 230 235 240  
 Ser Ala Tyr Val Arg Ala Gly Ala Thr His Pro Gln Ser Tyr Thr Pro  
 245 250 255  
 Pro Tyr Ala Trp Pro Pro Thr Pro Leu Gly Thr Pro Pro Thr Ile Thr  
 260 265 270  
 Leu Pro Tyr Gly Ala Ser Tyr Leu Ser Ala Val Pro Thr Pro Asn Gly  
 275 280 285  
 Pro Ala Ile Ala Tyr Gly Gln Pro Pro Pro His His His Pro Ala Leu  
 290 295 300  
 Pro Pro Pro Pro Pro Gln His Gly Leu His Pro Gln Tyr Asp Arg  
 305 310 315 320  
 Ser Val His Pro Gly His Pro Ala Glu Ser Ser Leu Pro Pro Ala Ile  
 325 330 335  
 Pro Pro Pro Met Ala Gln His Thr Pro Leu Pro Ala Leu Thr Gly Arg  
 340 345 350  
 Ser Pro Arg Leu Ala Pro Asp Ala Arg Asp Asn Tyr Gln Arg Ser Pro  
 355 360 365  
 Arg Asp Tyr Pro Thr Pro Ser Val Asp Pro Arg Ile Pro Ser Pro Arg  
 370 375 380  
 Met Gln Ala Pro Ser Thr Ser His Ser Asn Gly Val Gly Gln Ser Gly  
 385 390 395 400  
 Arg Ser Pro Arg Thr Ile Ser Gln Ala Pro Pro Thr Ser Leu Pro Gln  
 405 410 415  
 Val Ser Pro Pro Ser Leu Asn Gly Thr Ser Lys Pro Gly Asp Ile Gln  
 420 425 430  
 Ser Gln Gln Gln His Ile His Tyr Leu Cys His His Arg Ser Gln His  
 435 440 445  
 Arg Gly Ala Asp Glu Arg Arg Leu Gly Ser Leu Ile Ile His Leu Ile  
 450 455 460  
 Arg Thr Val Lys Gln Thr Gln Leu Ser Ser Leu Gly Arg Gln Ser Pro  
 465 470 475 480  
 Arg Arg Lys Thr Asp Arg Tyr Pro Gln Arg Lys Tyr Trp Val Trp Gly  
 485 490 495  
 Arg Gly Tyr Ala Gly Phe Ala Ala Ala Gly Ser Gly Leu Tyr Arg Leu  
 500 505 510

## 17873

His Leu Asp Leu Phe Phe Leu Phe Ile Val Tyr Gln Leu Arg Leu Ala  
           515                                  520                  525  
 Ala Cys Arg Met Arg Ser Thr Val Ile Ser Leu Ile Ile Arg Leu Ser  
           530                                  535                  540  
 Leu Lys Met Ser Leu Arg Pro Val Pro Gly Asn Arg Arg Trp Arg Pro  
 545                                  550                  555                  560  
 Ala Phe Phe

<210> 40735  
 <211> 109  
 <212> PRT  
 <213> A.fumigatus

<400> 40735  
 Thr Gly Leu Pro Asn Gln Ala Thr Ser Asn His Asn Asn Ser Thr Ser  
 1                  5                                  10                  15  
 Thr Thr Ser Ala Thr Thr Val Pro Ser Ile Gly Ala Leu Met Asn Gly  
           20                                  25                  30  
 Ala Ser Gly Pro Leu Ser Ser Ile Ser Ser Ala Pro Ser Asn Lys Leu  
           35                                  40                  45  
 Asn Ser Pro Arg Leu Gly Gly Ser Pro Arg Ala Glu Arg Pro Ile Asp  
           50                                  55                  60  
 Ile Pro Ser Glu Asn Ile Gly Phe Gly Gly Glu Asp Met Gln Ala Leu  
 65                  70                                  75                  80  
 Gln Gln Leu Asp Arg Val Phe Thr Ala Tyr Ile Trp Ile Ser Phe Phe  
                   85                                  90                  95  
 Phe Ser Leu Tyr Thr Asn Ser Val Ser Leu Leu Val Gly  
           100                                  105

<210> 40736  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 40736  
 Trp Ile Gly Gly Pro Tyr Ser Lys Asp Leu Ala Gln Asn Gly Val Ser  
 1                  5                                  10                  15  
 His Ser Tyr Tyr Asp Pro Asp Trp Ser Gly Ile Lys Phe Gly Asn Leu  
           20                                  25                  30  
 Ser Phe Thr Ala Gly Trp Thr Tyr Met Val Ile Ile Arg Pro Arg Arg  
           35                                  40                  45  
 Asn Arg Cys Ile Val Thr Ser Lys His Leu Ala Gln Phe Lys Leu  
           50                                  55                  60

<210> 40737  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 40737  
 Trp Pro Ser His Arg Val Arg Ala Thr Ala Ala Thr Ser Pro Pro Gly  
 1                  5                                  10                  15  
 Ser Ser Thr Thr Ala Ser Ala Ala Thr Trp Thr Ala Ser Ala Ile Arg  
           20                                  25                  30  
 Pro Val Ser Thr Ser Gly Ser Ser Ser Gly Lys Leu Ile Thr Thr Arg

17874

	35		40		45
Tyr	Ser	Thr	Thr	Asn	Gly
	50		55		60
Thr	Leu	Ser	Ser	Leu	Gly
65			70		

<210> 40738  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 40738														
Asn	Leu	Ala	Ala	Glu	Ile	Gly	Gly	Tyr	Phe	Glu	Pro	Leu	Lys	His
1			5					10					15	
Asp	Phe	Ile	Thr	Lys	Ser	Ser	Tyr	Ser	Cys	Ala	Ala	Asp	Ile	Ala
		20					25					30		
Ala	Tyr	Gly	Leu	Glu	Tyr	Gly	Ser	His	Cys	Ser	Val	Gly	Val	Pro
	35					40					45			
Glu	Gly	Val	Val	Leu	Tyr	Leu	Leu	Pro	Ala	Leu	Glu	Gly		
	50					55					60			

<210> 40739  
 <211> 241  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (202)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40739														
Val	Leu	Val	Lys	Leu	Asn	Leu	Leu	Lys	Val	Ser	Val	Thr	Leu	Thr
1			5					10					15	
Ala	Ala	Arg	Thr	Thr	Ala	Pro	Arg	Ile	Asn	Gln	Pro	Ser	Arg	Leu
		20					25					30		
Leu	Leu	Arg	Gln	Arg	Pro	Asn	Ser	Ala	Ala	Pro	Leu	Leu	His	Phe
	35					40					45			
Thr	Ser	Pro	Arg	Ser	Ser	Ser	Ala	Val	Arg	Arg	Pro	Phe	Ala	Asn
	50					55				60				
Ala	Ile	Asn	Ser	Ala	Pro	Glu	Ser	Ser	Leu	Leu	Ser	Leu	Leu	Tyr
65				70					75					80
Ser	Tyr	Pro	Ala	Ala	Val	Ser	Pro	Asp	Ala	Thr	Glu	Leu	Asp	Leu
			85				90						95	
His	Ala	Ser	Pro	Lys	Ile	Phe	Pro	Gln	Thr	Thr	Phe	Ser	Leu	Glu
		100					105						110	
Gln	Ala	Ser	Ile	Lys	Gln	Trp	Leu	Asp	Thr	Ile	Ser	Gly	Leu	Gln
	115					120						125		
Ala	Leu	Thr	Lys	Asp	Asp	Lys	Ser	Val	Val	Met	Ala	Ile	Leu	Gly
	130					135				140				
Leu	Asn	Ser	His	Leu	Ala	Ser	Arg	Thr	Thr	Leu	Leu	Gly	Thr	Lys
145				150					155					160
Ser	Val	Ala	Asp	Ile	Ala	Ala	Tyr	Ala	Leu	Leu	Ala	Pro	Leu	Val
			165				170						175	
Lys	Trp	Thr	Pro	Glu	Lys	Arg	Thr	Gly	Glu	Gln	Gly	Tyr	His	His
		180					185						190	

## 17875

Val Arg His Val Asp Phe Val Gln Asn Xaa Arg Leu Phe Ala Leu Gln  
 195 200 205  
 Ile Pro Asp Glu Glu Lys Ile Ser Ile Gln Val Asn Glu Leu Arg Phe  
 210 215 220  
 Val Pro Asn Leu Trp Asp Pro Asn Glu Tyr Lys Glu Pro Thr Asn Lys  
 225 230 235 240  
 Val

<210> 40740  
 <211> 287  
 <212> PRT  
 <213> A.fumigatus

<400> 40740  
 Ala Ser Gly Ser Arg Asn Arg Ala Asp His Gln Thr Arg Phe Asp Phe  
 1 5 10 15  
 Tyr Phe Lys Ser Cys Ser Ala Gln Pro Ala Thr Met Pro Pro Lys Ala  
 20 25 30  
 Arg Ile Asn Ser Lys Asn Ser Val Glu Gln Glu Gly Arg Val Leu Leu  
 35 40 45  
 Ala Val Ser Ala Leu Lys Asn Lys Glu Ile Leu Asn Ile Arg Glu Ala  
 50 55 60  
 Ala Arg Val Tyr Asn Val Pro Tyr Thr Thr Leu Gln Arg Arg Leu Lys  
 65 70 75 80  
 Gly His Thr Phe Arg Ala Glu Leu Arg Ala Asn Gly His Lys Met Thr  
 85 90 95  
 Gln Asn Glu Glu Asp Ser Leu Ile Arg Trp Ile Leu Ser Met Asp Gln  
 100 105 110  
 Arg Gly Ala Ala Pro Arg Pro Ser His Val Arg Glu Met Ala Asn Ile  
 115 120 125  
 Leu Leu Ala Gln Arg Gly Ser Thr Pro Thr Gln Thr Val Gly Glu Lys  
 130 135 140  
 Trp Val Tyr Asn Phe Ile Asn Arg His Asp Glu Ile Lys Thr Arg Phe  
 145 150 155 160  
 Ser Arg Arg Tyr Asn His Gln Arg Ala Lys Cys Glu Asp Pro Lys Ile  
 165 170 175  
 Ile Leu Glu Trp Phe Asn Arg Val Gln Ile Thr Ile Met Gln His Gly  
 180 185 190  
 Ile Thr Leu Glu Asp Ile Tyr Asn Phe Asp Glu Thr Gly Phe Ala Met  
 195 200 205  
 Gly Leu Val Ala Thr Ala Lys Val Val Thr Arg Ala Glu Met Leu Ser  
 210 215 220  
 Arg Pro Phe Leu Ile Gln Pro Gly Asn Arg Glu Trp Val Thr Ser Ile  
 225 230 235 240  
 Glu Cys Ile Asn Ser Thr Gly Trp Val Leu Pro Pro Cys Ile Ile Phe  
 245 250 255  
 Lys Gly Lys Val His Ile Glu Gly Trp Tyr Gln Asp Thr Ala Leu Pro  
 260 265 270  
 Ala Asp Trp Arg Ile Glu Val Ser Glu Asn Gly Trp Thr Thr Asp  
 275 280 285

<210> 40741  
 <211> 179  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40741

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Ile Cys Thr Glu Asn Asp Ile Ile Leu Ile Cys Met Pro Val Tyr Ser
1           5           10           15
Leu His Leu Leu Gln Pro Leu Asp Val Gly Cys Phe Ser Pro Leu Lys
          20           25           30
Arg Ala Tyr Gly Arg Leu Ile Glu Asp Lys Met Arg Leu Gly Phe Asn
          35           40           45
His Ile Asp Lys Phe Asp Phe Leu Glu Ala Tyr Pro Gln Ala Arg Thr
          50           55           60
Ala Ile Phe Ser Ala Asp Asn Ile Lys Ser Gly Phe Ser Ala Thr Gly
65           70           75           80
Leu Ile Pro Leu Asn Pro Asp Arg Val Leu Ser Gln Leu Asn Ile Gln
          85           90           95
Leu Arg Thr Pro Thr Pro Pro Gly Ser Arg Ser Thr Asn Ser Val Pro
          100          105          110
Lys Thr Pro Tyr Asn Leu Lys Gln Leu Lys Lys Gln Glu Thr Thr Leu
          115          120          125
Lys Lys Leu Leu Arg Glu Arg Ile Tyr Ser Pro Pro Thr Pro Thr Lys
          130          135          140
Ala Val Leu Gly Gln Ile Ile Lys Gly Tyr Glu Met Ala Met Asn Asn
145          150          155          160
Ala Ala Leu Leu Ala Lys Glu Asn His Asp Leu His Ala Ala His Glu
          165          170          175
Lys His Leu

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&lt;210&gt; 40742

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40742

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Lys Gln Lys Arg Ser Arg Arg Gln Ile Glu Thr Ala Val Gly Leu Ser
1           5           10           15
Ile Gln Glu Gly Gln Glu Ile Ile Gln Arg Arg Asp Gln Ala Ala Glu
          20           25           30
Ala Ile Pro Thr Ile Pro Pro Glu Gln Val Val Asp Thr Glu Gln Arg
          35           40           45
Pro Gln Trp Ala Pro Pro Arg Cys Ser Asp Cys His Ile Leu Gly His
          50           55           60
Arg Arg Leu Gln Cys Pro Gln Arg Lys Asn Asn
65           70           75

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&lt;210&gt; 40743

&lt;211&gt; 521

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40743

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Pro Ile Phe Ser Lys Pro Ile Leu Ala Val Ile Tyr Arg Ala Tyr His
1           5           10           15
Val Leu Pro Gln Tyr Glu Leu Pro Ser Ser Ser Ile Met Thr Lys Val
          20           25           30
Asn Ile Ile Phe Ala Leu Phe Asn Leu Ile Pro Ala Ile Leu Ala Ile
          35           40           45

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Cys	Ser	Thr	Gln	Ser	Pro	Phe	Tyr	Pro	Pro	Pro	Ser	Tyr	Asn	Arg	Gln
50						55					60				
Ser	Ser	Glu	Val	Trp	Glu	Ala	Leu	Gly	Leu	Val	Glu	Ala	Ser	Leu	Ser
65					70					75					80
Asn	Leu	Leu	Arg	Asn	Ser	Asn	Asn	Leu	Asn	Thr	Ser	Ser	Tyr	Ser	Ile
				85					90					95	
Glu	Ile	Thr	Pro	Ser	Arg	Ser	Thr	Leu	Trp	Ser	Thr	Phe	His	Thr	Ala
			100					105					110		
Lys	Asp	Lys	Asn	Leu	Thr	Arg	Pro	Gly	Ala	Asp	Arg	Val	Asp	Glu	Thr
	115						120					125			
Ser	Arg	Tyr	Arg	Ile	Ala	Ser	Ile	Thr	Lys	Val	Phe	Thr	Val	Leu	Gly
	130					135					140				
Ile	Leu	Gln	Gln	His	Ala	Ala	Gly	Asn	Leu	Ser	Leu	Glu	Asp	Met	Val
145					150					155					160
Asp	Lys	Tyr	Ile	Pro	Gln	Leu	Arg	Ser	Ser	His	His	Asp	Gly	Thr	Arg
				165					170					175	
Ser	Ser	Gly	Ser	Ile	Gln	Trp	Asp	Lys	Ile	Ser	Leu	Arg	Ser	Leu	Val
			180					185					190		
Ser	Gln	Leu	Ser	Gly	Leu	Pro	Arg	Asp	Trp	Val	Gln	Gly	Asp	Phe	Leu
	195						200					205			
Thr	Asp	Pro	Glu	Ser	Val	Asn	Thr	Thr	Thr	Lys	Cys	Asp	Ser	Asp	Asn
	210					215					220				
Ser	His	Arg	Pro	Cys	Thr	Ala	Glu	Asp	Leu	Phe	Asp	Asn	Leu	Arg	Arg
225					230					235					240
Arg	Arg	Ala	Leu	Phe	Ala	Pro	Asn	Lys	Glu	Ser	Thr	Tyr	Ser	Asn	Leu
				245					250					255	
Ala	Phe	Asp	Leu	Leu	Gly	Leu	Val	Leu	Thr	Asn	Val	Thr	Gly	Thr	Thr
			260					265					270		
Phe	Glu	Glu	Tyr	Ile	Pro	Ala	Ser	Ile	Leu	Asp	Pro	Leu	Gly	Met	Ala
	275						280					285			
Gln	Thr	Ser	Phe	Val	Lys	Pro	Pro	Asp	Ser	Val	Ser	Val	Leu	Pro	Lys
	290					295					300				
Gly	Ile	Ala	Trp	Tyr	Ser	Asp	Val	Asp	Glu	Pro	Val	Glu	Asn	Pro	Thr
305					310					315					320
Gly	Gly	Leu	Tyr	Ser	Ser	Thr	His	Asp	Met	Ser	Ile	Leu	Leu	Arg	Tyr
				325					330					335	
Ile	Leu	Ser	Asn	Tyr	Lys	Asp	Ile	Ala	Asp	Ala	Lys	Leu	Asn	Trp	Leu
			340					345					350		
Leu	Pro	Val	Ser	Phe	Thr	Ala	Gly	Met	Gly	Ser	Tyr	Tyr	Gly	Met	Pro
	355						360					365			
Trp	Glu	Ile	Phe	Arg	Ala	Asp	Arg	Ile	Leu	Leu	Pro	Asp	Asp	Lys	Arg
	370					375					380				
Arg	Ala	Arg	Thr	Val	Thr	Phe	Phe	Thr	Lys	Asp	Gly	Gly	Val	Pro	Arg
385					390					395					400
Tyr	Arg	Ser	Ile	Ile	Leu	Ile	Ala	Pro	Glu	Tyr	Asp	Leu	Gly	Ile	Thr
			405						410					415	
Val	Leu	Thr	Ala	Gly	Asp	Glu	Thr	Leu	Leu	Glu	Val	Ile	Val	Asp	Met
			420					425					430		
Val	Ile	Val	Pro	Leu	Ile	Arg	Ala	Ala	Asp	Ala	Leu	Ala	Ala	Arg	Gln
	435						440					445			
Val	Lys	Glu	Thr	Tyr	Met	Gly	Arg	Tyr	Thr	Ser	Ser	Pro	Thr	Lys	Glu
	450					455					460				
Gln	Thr	Val	Asn	Ser	Thr	Leu	Thr	Leu	Thr	Tyr	Thr	Ser	Thr	His	Gly
465					470					475					480
Leu	Glu	Ile	Asn	Glu	Trp	Ile	Ser	Lys	Phe	His	Arg	Cys	Ala	Arg	Leu
			485						490					495	

17878

His Ile Gln Ala Leu Ser Val Pro Arg Asn His Lys Val Ser Arg Ser  
 500 505 510  
 Val Asp Pro Leu Trp Ser Leu Gln Arg  
 515 520

<210> 40744  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 40744  
 Thr Tyr Arg Ser Cys Met Ala Val Met Ser Ile Leu Gly Phe Gly Ser  
 1 5 10 15  
 Ile Arg Trp Arg Lys Thr Asn Ser Pro Ser His Ser Thr Ala Cys Tyr  
 20 25 30  
 Ala Val Val Phe Cys Asn Glu Gln Gly Ile Ile Gly Asn Ile Ser Gly  
 35 40 45  
 Val Lys His Ser Asp Gly Ala Ala Phe Ser Met Val Tyr Lys Val Arg  
 50 55 60  
 Cys Ser Arg Arg  
 65

<210> 40745  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 40745  
 Ala Gly Cys Ser Asn Met Asp Pro Lys Gly Asn Leu Leu Ser Lys Ala  
 1 5 10 15  
 Phe Gln Glu Phe Leu Pro Trp Gly Ile Ser Lys Gln Arg Asn Tyr Asn  
 20 25 30  
 Gly Tyr Ala Thr Gln Leu Lys Val Ser Ser Gly Gly Ser Cys Phe Leu  
 35 40 45  
 Cys Leu Pro Gln Ser Ile Ser Ser Tyr Thr Asn Pro Pro Ser Phe Pro  
 50 55 60  
 His Ala Gly Ala Tyr Tyr Arg Leu Ile Phe Leu Leu Thr Val Gln Lys  
 65 70 75 80  
 Cys Gln Pro

<210> 40746  
 <211> 187  
 <212> PRT  
 <213> A.fumigatus

<400> 40746  
 Val Gln Arg Thr Leu Ile Asp Ile Ser Ser Ile Gln Leu Arg Met Asp  
 1 5 10 15  
 Ile Pro Leu Gly Ser Phe Asp Arg Phe Ile Val Tyr Lys Thr Trp Lys  
 20 25 30  
 His Asp Asp Ser Val Ile Tyr His Leu Ala Thr Trp Thr Asn Ile Thr  
 35 40 45  
 Ala Tyr Phe Thr Asn Leu Leu Phe Pro Ser Cys Lys Val Thr Val Ile  
 50 55 60  
 Phe Leu Lys Val Gln Leu Pro Glu Tyr Pro Asp Ala Phe Asn Ala Leu



## 17879

65		70		75		80
Gly	Asp	Glu	Gly	Val	Glu	Leu
		85		90		95
Asp	Asp	Ile	Gly	Thr	Glu	Leu
		100		105		110
Val	Ser	Ser	Ala	Asp	Ile	Lys
		115		120		125
Val	Glu	Val	Gly	Ile	Gln	Glu
		130		135		140
Val	Trp	Glu	Pro	Glu	Lys	Gly
		145		150		155
Lys	Phe	Ile	Glu	Asn	Asn	Trp
		165		170		175
Lys	Val	Leu	Arg	Met	Pro	Leu
		180		185		

&lt;210&gt; 40747

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40747

Ser	Thr	Lys	Ile	Pro	Gly	Lys	Met	Val	Glu	Val	Cys	Gly	Thr	Ile	His
1			5						10					15	
Arg	Asp	Gly	Gln	Pro	Ile	Met	His	Val	Thr	Ser	Gln	Phe	Leu	Tyr	Arg
		20						25					30		
Gly	Ser	Tyr	Leu	Asp	Phe	Glu	Asn	Thr	Phe	Gln	Arg	Lys	Asp	Glu	Val
		35					40					45			
Pro	Met	Gln	Val	His	Leu	Ala	Ser	Ser	Arg	Asp	Val	Ala	Ile	Leu	Arg
		50				55					60				
Ser	Lys	Glu	Trp	Phe	Arg	Leu	Asp	Glu	Pro	Asp	Val	Glu	Leu	Leu	Gly
65					70					75				80	
Gln	Thr	Leu	Thr	Phe	Arg	Leu	Gln	Ser	Leu	Val	Arg	Phe	Lys	Asn	Lys
				85					90					95	
Ser	Val	Phe	Ser	His	Val	Gln	Thr	Val	Gly	Gln	Val	Leu	Leu	Glu	Leu
			100					105						110	
Pro	Thr	Lys	Glu	Val	Ile	Gln	Val	Ala	Thr	Val	Asp	Tyr	Glu	Thr	Gly
		115					120						125		
Thr	Ser	His	Gly	Asn	Pro	Val	Ile	Asp	Tyr	Leu	Gln	Arg	Asn	Gly	Thr
		130					135					140			
Ser	Ile	Glu	Gln	Pro	Val	Tyr	Phe	Glu	Asn	Pro	Ile	Pro	Leu	Ser	Gly
145					150					155					160
Lys	Thr	Pro	Leu	Val	Leu	Arg	Ala	Pro	Ala	Ser	Asn	Glu	Thr	Tyr	Ala
				165					170					175	
Arg	Val	Ser	Gly	Asp	Tyr	Asn	Pro	Ile	His	Val	Ser	Arg	Val	Phe	Ser
			180				185						190		
Ser	Tyr	Ala	Asn	Leu	Pro	Gly	Thr	Ile	Thr	His	Gly	Met	Tyr	Thr	Ser
		195				200						205			
Ala	Ala	Val	Arg	Ser	Phe	Val	Glu	Thr	Trp	Ala	Ala	Glu	Asn	Asn	Ile
		210				215						220			
Gly	Arg	Val	Arg	Gly	Phe	His	Val	Ser	Leu	Val	Gly	Met	Val	Leu	Pro
225					230					235					240
Asn	Asp	Met	Ile	Thr	Val	Lys	Leu	Gln	His	Val	Gly	Met	Val	Ala	Gly
				245					250					255	
Arg	Lys	Ile	Ile	Lys	Val	Glu	Ala	Ser	Asn	Lys	Glu	Thr	Glu	Asp	Lys
				260				265						270	

17880

Val Leu Leu Gly Glu Ala Glu Val Glu Gln Pro Val Thr Ser Tyr Val  
 275 280 285  
 Phe Thr Gly Gln Gly Ser Gln Glu Gln Gly Met Gly Met Glu Leu Tyr  
 290 295 300  
 Ser Ser Ser Pro Val Ala Arg Glu Val Trp Asp Arg Ala Asp Arg His  
 305 310 315 320  
 Phe Ile Glu Asn Tyr Gly Leu Ser Ile Ile Asp Ile Val Lys Asn Asn  
 325 330 335  
 Pro Lys Glu Leu Thr Val Tyr Phe Gly Gly Pro Arg Gly Lys Ala Ile  
 340 345 350  
 Arg Gln Asn Tyr Met Ser Met Thr Phe Glu Thr Val Asn Ala Asp Gly  
 355 360 365  
 Thr Ile Lys Ser Glu Lys Ile Phe Lys Glu Ile Asn Glu Asp Thr Thr  
 370 375 380  
 Ser Tyr Thr Tyr Arg Ser Pro Ser Gly Leu Leu Ser Ala Thr Gln Phe  
 385 390 395 400  
 Thr Gln Pro Ala Leu Thr Leu Met Glu Lys Ala Ser Phe Glu Asp Met  
 405 410 415  
 Arg Ser Lys Gly Leu Val Gln Arg Asp Ser Ser Phe Ala Gly His Ser  
 420 425 430  
 Leu Gly Glu Tyr Ser Ala Leu Ala Ala Leu Ala Asp Val Met Pro Ile  
 435 440 445  
 Glu Ser Leu Val Ser Val Val Phe Tyr Arg Gly Leu Thr Met Gln Val  
 450 455 460  
 Ala Val Glu Arg Asp Glu Gln Gly Arg Ser Asn Tyr Ser Met Cys Ala  
 465 470 475 480  
 Val Asn Pro Ser Arg Ile Ser Lys Thr Phe Asn Glu Gln Ala Leu Gln  
 485 490 495  
 Tyr Val Val Glu Asn Ile Ala Glu Gln Thr Gly Trp Leu Leu Glu Ile  
 500 505 510  
 Val Asn Tyr Asn Val Ala Asn Met Gln Tyr Val Ala Ala Gly Asp Val  
 515 520 525  
 Ser Val His Pro Phe Phe Leu Asn Ile Ser Val Phe  
 530 535 540

<210> 40748

<211> 164

<212> PRT

<213> A.fumigatus

<400> 40748

Leu Cys Gln Leu Arg Ala Leu Asp Cys Leu Thr Asn Leu Leu Asn Tyr  
 1 5 10 15  
 Leu Lys Ala Gln Asn Ile Asp Ile Pro Ala Leu Met Gln Ser Met Ser  
 20 25 30  
 Leu Asp Asp Leu Lys Ala His Leu Val Lys Ile Ile His Glu Cys Val  
 35 40 45  
 Lys Gln Thr Glu Ser Lys Pro Arg Pro Ile Val Leu Glu Arg Gly Phe  
 50 55 60  
 Ala Thr Ile Pro Leu Lys Gly Ile Asp Val Pro Phe His Ser Thr Phe  
 65 70 75 80  
 Leu Arg Ser Gly Val Lys Pro Phe Arg Ser Phe Leu Leu Lys Lys Ile  
 85 90 95  
 Asn Lys Thr Thr Ile Asp Pro Ser Lys Leu Ile Gly Lys Tyr Ile Pro  
 100 105 110  
 Asn Val Thr Ala Arg Pro Phe Glu Ile Thr Lys Glu Tyr Phe Glu Asp

17881

```

      115              120              125
Val Tyr Arg Leu Thr Asn Ser Pro Arg Ile Ala His Ile Leu Ala Asn
      130              135              140
Trp Asp Lys Tyr Glu Glu Gly Gly Glu Asn Thr Ser Arg Ala Thr Gly
145              150              155              160
Thr Asn Thr Ala

```

<210> 40749

<211> 1168

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (20)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40749

```

Pro Lys Gly Leu Asp Val Ile Gln Trp Leu Gln Asp Arg Asp Ser Gln
1              5              10              15
Pro Asp Thr Xaa Tyr Leu Val Ala Ala Pro Val Ser Leu Pro Leu Ile
      20              25              30
Gly Leu Val Gln Leu Ala His Phe Val Val Thr Cys Lys Val Leu Gly
      35              40              45
Arg Gln Pro Gly Glu Ile Leu Glu Arg Phe Ser Gly Thr Thr Gly His
      50              55              60
Ser Gln Gly Val Val Thr Ala Ala Ala Ile Ala Ser Ala Thr Thr Trp
65              70              75              80
Glu Ser Phe Ala Lys Ala Ala Lys Asp Ala Leu Thr Met Leu Phe Trp
      85              90              95
Ile Gly Leu Arg Ser Gln Gln Ala Tyr Pro Arg Thr Ser Ile Ala Pro
      100              105              110
Ser Val Leu Gln Asp Ser Ile Glu Asn Gly Glu Gly Val Pro Thr Pro
      115              120              125
Met Leu Ser Ile Arg Asp Leu Pro Arg Ser Ala Val Gln Glu His Ile
      130              135              140
Asp Thr Thr Asn Gln His Leu Pro Val Asp Arg His Ile Ser Ile Ser
145              150              155              160
Leu Val Asn Ser Ala Arg Asn Phe Val Val Thr Gly Pro Pro Leu Ser
      165              170              175
Leu Tyr Gly Leu Asn Leu Arg Leu Arg Lys Val Lys Ala Pro Thr Gly
      180              185              190
Leu Asp Gln Asn Arg Val Pro Phe Thr Gln Arg Lys Val Arg Phe Val
      195              200              205
Asn Arg Phe Leu Pro Ile Thr Ala Pro Phe His Ser Gln Tyr Leu Tyr
      210              215              220
Ala Ala Tyr Asp Arg Ile Leu Glu Asp Leu Glu Asp Ile Glu Ile Ser
225              230              235              240
Ala Lys Ser Leu Ala Ile Pro Val Tyr Asp Thr Lys Thr Gly Asp Asp
      245              250              255
Leu Arg Gln Ser Gly Asp Thr Asn Ile Val Pro Ser Leu Val Arg Met
      260              265              270
Ile Thr His Asp Ala Val Asn Trp Glu Lys Ala Thr Val Phe Gln Gly
      275              280              285
Ala Thr His Ile Val Asp Phe Gly Pro Gly Gly Ile Ser Gly Leu Gly

```

290 295 300  
 Val Leu Thr Asn Arg Asn Lys Asp Gly Thr Gly Val Arg Val Ile Leu  
 305 310 315 320  
 Ala Gly Ala Met Asp Gly Thr Asn Ala Glu Val Gly Tyr Lys Pro Glu  
 325 330 335  
 Leu Phe Asp Arg Asp Glu His Ser Val Lys Tyr Ala Ile Asp Trp Val  
 340 345 350  
 Lys Glu Tyr Gly Pro Arg Leu Val Lys Asn Ala Thr Gly Gln Thr Phe  
 355 360 365  
 Val Asp Thr Lys Met Ser Arg Leu Leu Gly Ile Pro Pro Ile Met Val  
 370 375 380  
 Ala Gly Met Thr Pro Thr Thr Val Pro Trp Asp Phe Val Ala Ala Thr  
 385 390 395 400  
 Met Asn Ala Gly Tyr His Ile Glu Leu Ala Gly Gly Tyr Tyr Asn  
 405 410 415  
 Gly Lys Ser Met Thr Glu Ala Ile Ser Lys Ile Glu Lys Thr Ile Pro  
 420 425 430  
 Pro Gly Arg Gly Ile Thr Val Asn Leu Ile Tyr Val Asn Pro Arg Ala  
 435 440 445  
 Met Ala Trp Gln Ile Pro Leu Ile Gly Lys Leu Arg Ala Asp Gly Val  
 450 455 460  
 Pro Ile Glu Gly Leu Thr Ile Gly Ala Gly Val Pro Ser Ile Glu Val  
 465 470 475 480  
 Ala Asn Glu Tyr Ile Glu Thr Leu Gly Ile Lys His Ile Ala Phe Lys  
 485 490 495  
 Pro Gly Ser Val Asp Ala Ile Gln Gln Val Ile Asn Ile Ala Lys Ala  
 500 505 510  
 Asn Pro Lys Phe Pro Val Ile Leu Gln Trp Thr Gly Gly Arg Gly Gly  
 515 520 525  
 Gly His His Ser Phe Glu Asp Phe His Gln Pro Ile Leu Gln Met Tyr  
 530 535 540  
 Ser Arg Ile Arg Arg Cys Glu Asn Ile Val Leu Val Ala Gly Ser Gly  
 545 550 555 560  
 Phe Gly Gly Ala Glu Asp Thr Tyr Pro Tyr Leu Ser Gly Ala Trp Ser  
 565 570 575  
 Ser Ser Phe Gly Tyr Pro Pro Met Pro Phe Asp Gly Cys Leu Phe Gly  
 580 585 590  
 Ser Arg Leu Met Ile Ala Lys Glu Ala His Thr Ser Lys Asn Ala Lys  
 595 600 605  
 Lys Ala Ile Ala Asp Ala Pro Gly Leu Asp Asp Lys Asp Trp Glu Lys  
 610 615 620  
 Thr Tyr Lys Gly Pro Ala Gly Gly Val Val Thr Val Leu Ser Glu Met  
 625 630 635 640  
 Gly Glu Pro Ile His Lys Leu Ala Thr Arg Gly Val Leu Phe Trp His  
 645 650 655  
 Glu Met Asp Gln Lys Ile Phe Lys Leu Asp Lys Ala Lys Arg Val Pro  
 660 665 670  
 Glu Leu Lys Lys Gln Arg Asp Tyr Ile Ile Lys Lys Leu Asn Asp Asp  
 675 680 685  
 Phe Gln Lys Val Trp Phe Gly Arg Asn Ala Ala Gly Glu Ala Val Asp  
 690 695 700  
 Leu Glu Asp Met Thr Tyr Ala Glu Val Val His Arg Met Val Glu Leu  
 705 710 715 720  
 Met Tyr Val Lys His Glu Ser Arg Trp Ile Asp Ala Ser Leu Lys Lys  
 725 730 735  
 Leu Thr Gly Asp Phe Ile Arg Arg Val Glu Glu Arg Phe Thr Thr Lys

<210> 40750  
<211> 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40750

```

Arg Cys Trp Lys Arg Thr Gln Met Asp Phe Glu Glu Asp Arg Phe Ala
1           5           10           15
Asp Asp Glu Glu His Asp Asp Leu Phe Asn Glu Asp Glu Glu Thr Lys
          20           25           30
Ala Ala Glu Lys Arg Ile Lys Gln Asp Gln Leu Lys Ala Asn Val Phe
          35           40           45
Asp Leu Lys Asp Glu Lys Asp Tyr Glu Glu Glu Glu Leu Arg Glu Lys
          50           55           60
Lys Glu Arg Glu Ala Arg Arg Ile Leu Gly Lys Lys Val Arg Lys Ala
65           70           75           80
Leu Lys Lys Arg Glu Lys Asn Tyr Asp Tyr Ser Ser Gly Ser Asp Ala
          85           90           95
Asn Pro Tyr Ser Asp Asp Glu Val Cys Ser Leu Gly Ser Asn Leu Val
          100          105          110
Thr Gln Leu Cys
          115

```

&lt;210&gt; 40751

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40751

```

Ser Ser Asp Asp Ser Glu Ala Glu Arg Leu Arg Glu Glu Glu Arg Lys
1           5           10           15
Ala Glu Glu Asp Lys Asn Lys Lys Asp Ser Ala Pro Ser Thr Arg Gly
          20           25           30
Asn Val Thr Pro Ser Gly Arg Pro Lys His Thr Glu Pro Leu Lys Lys
          35           40           45
Gly Pro Gly Ala Ala Ser Arg Lys Arg Leu Gly Ser Pro Asn Val Ser
          50           55           60
Asp Ala Ser Gly Thr Asp Thr Ser Arg Lys Lys Ala Lys Ser Lys His
65           70           75           80
Ser Ser Gln Pro Thr Pro Gln Pro Thr Ser Arg Ala Leu Ser Pro Thr
          85           90           95
Ala Pro Pro Gly Gln Val Ser Phe Phe Asn Arg Asn Cys Leu Phe Ile
          100          105          110
Val Leu Ile Ser Ile Gly Thr Gly Trp
          115          120

```

&lt;210&gt; 40752

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40752

```

Cys Arg Ile Leu Ile Asp Phe Phe Glu Asp Leu Leu Arg Leu Asn Arg
1           5           10           15
Ala Val Arg Val Asp Cys Leu Glu Ser His Arg His Val Val Leu Ala
          20           25           30
Asn Gly Phe Ser Thr Gly Thr Thr Lys Val Asp Ser Glu Leu Leu Gly
          35           40           45

```

## 17885

Ile Val Phe Asp Asp Ile Asn Asp Gly Gln Ala Ile Val Leu Asp Glu  
 50 55 60  
 Met Thr Ile Arg Pro Ile Pro Asn Leu Pro Gly Asp Arg Ala Ala Ala  
 65 70 75 80  
 Val Gln Leu His Thr His Ser Leu Leu Leu Arg Ala Leu Pro Ser Glu  
 85 90 95  
 Asp Ile Gly Gly Tyr Trp Leu Leu Asp Phe Gly Phe Ala Gln Lys Asn  
 100 105 110  
 Leu Ile Phe Cys Phe Leu Val Ala Gly Leu Asn Leu Asp Asp Phe Thr  
 115 120 125  
 Thr Ser His His Thr Asp Met Leu  
 130 135

&lt;210&gt; 40753

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40753

Ser Arg Ala Leu Ser Thr Arg Arg Ile Ser Ser Gly Arg Ser Thr Thr  
 1 5 10 15  
 Ala Ser Thr Ala Arg Ser Asn Arg Arg Thr Ser Arg Arg Met Cys Arg  
 20 25 30  
 Arg Trp Cys Arg Leu Val Arg Ser Val Val Leu Phe Cys Lys Phe Arg  
 35 40 45  
 Phe Leu Leu Trp Ile Arg Gln Leu Ser His Pro Asn Ser Ala Phe Leu  
 50 55 60  
 Val Cys Asp Arg Ile Gly Arg Ile Trp Ala Thr Arg Gln Leu Cys Leu  
 65 70 75 80  
 Leu Trp Ile Leu Gly Ile Gly Ile Phe Leu Gly Ala Asn Gly Ser Leu  
 85 90 95  
 Ala Ala Ile Tyr Ala Gly Arg Phe Ile Ala Gly Leu Gly Val Gly Gln  
 100 105 110  
 Thr Val Val Val Gly Pro Val Tyr Leu Ala Glu Ile Val Ser Ile Pro  
 115 120 125  
 Ser His Thr Val Pro Met Gln Ala Asp Arg Arg Gly  
 130 135 140

&lt;210&gt; 40754

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40754

Ala Pro Ala Ser Ile Arg Gly Leu Cys Thr Cys Val Phe Thr Gly Phe  
 1 5 10 15  
 Val Tyr Leu Gly Ile Val Leu Ala Tyr Phe Thr Asn Tyr Gly Cys Gln  
 20 25 30  
 Val Asn Leu Gly Asp Asn Thr His Lys Arg Trp Val Ser Glu Ala Ala  
 35 40 45  
 Thr Ala Gly Glu Ser Ile Ala Ala Asp Gln Ser Arg Arg Lys Cys Gln  
 50 55 60  
 Pro Val Cys Thr Ser Ser Leu Pro Ala  
 65 70

&lt;210&gt; 40755

17886

<211> 142  
<212> PRT  
<213> A.fumigatus

<400> 40755  
Ser Ala Ala Val Ala Ser Ser Pro Pro Pro Ser Thr Thr Ser Ala Ser  
1 5 10 15  
Pro Ser Thr Pro Pro Ser Ser Ser Ala Ser Ser Ala Gly Pro Val Ser  
20 25 30  
Thr Ser Ser Pro Ser Thr Glu Thr Ser Pro Ser Thr Thr Thr Ala Pro  
35 40 45  
Ala Ser Pro Arg Thr Thr Pro Pro Ser Arg Ala Ser Ser Ala Ser Cys  
50 55 60  
Thr Arg Ala Cys Ala Ser Ala Ser Ser Pro Pro Pro Ala Thr Pro Arg  
65 70 75 80  
Ala Gln Ser Thr Thr Ser Ala Ser Arg Ala Ser Ser Thr Pro Ser Met  
85 90 95  
Thr Pro Pro Pro Ser Pro Pro Pro Arg Lys Thr Ala Trp Ser Ser Trp  
100 105 110  
Ala Ala Arg Ala Thr Ser Ser Ser Ala Ser Thr Arg Pro Arg Arg Thr  
115 120 125  
Ala Ser Pro Thr Ser Pro Ala Arg Ser Gly Ser Ser Thr Lys  
130 135 140

<210> 40756  
<211> 262  
<212> PRT  
<213> A.fumigatus

<400> 40756  
Gly Pro Arg Val Arg Cys Ala Gly Asp His Gly His Arg Ala Val Pro  
1 5 10 15  
Pro Gly Arg Thr Arg Gly Asp His Gly Arg Trp Leu Ala Arg His Arg  
20 25 30  
Gln Gly Asp Leu Phe His Pro Glu Glu Pro Val Pro His Leu Pro Asp  
35 40 45  
Gly His Val Ala Asp Ser Leu Ala Val Val Arg Arg Arg Leu His His  
50 55 60  
Pro Leu Arg Pro Arg Ser Leu Gln Ala Ala Arg Tyr His Arg Val Gln  
65 70 75 80  
Arg Glu Pro Ala Arg Asp Arg Cys Val Arg Asp Arg Gln Ala Arg Arg  
85 90 95  
Ser His His Leu Arg Pro Val Pro Gly Arg Arg Asp Arg Pro Gln Ala  
100 105 110  
Leu Pro Pro His Arg Tyr His Pro Ala Gly His Arg His Asp Leu Arg  
115 120 125  
Arg Arg Leu Pro Asp Arg Arg Pro Gly Asp Gly His Arg Arg Arg Leu  
130 135 140  
Cys Pro Ala Gly Val Gln Ala Trp Arg Gln Pro Arg Arg His Arg His  
145 150 155 160  
Asp Leu Tyr Leu Arg Val Arg Leu Gly Ala Arg Leu Glu Leu Asp Ala  
165 170 175  
Val Pro Ala His Gly Gly Ala Leu Pro Ala Ala His Pro Gly Pro Gly  
180 185 190  
Asp Leu His Arg His Asp Ala Ala Leu Cys Gln Pro Val Arg Gln Leu  
195 200 205



## 17887

Ala Arg Gly Ala Gln His Val Ala Ala His Pro Ala Arg Arg His His  
 210 215 220  
 Ser Gln Gly His Val Leu Val Leu Cys Gly Gly Asp His Pro Arg Trp  
 225 230 235 240  
 Ser Val Gly Val Ser Gln Cys Ala Arg Asp Ser Arg Ala Val Ala Arg  
 245 250 255  
 Glu His Gly Ser Ala Val  
 260

<210> 40757  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 40757  
 Leu Thr Pro Ile Val Ala Ser Ser Arg Pro Thr Gly Lys Phe Phe Thr  
 1 5 10 15  
 Ala Arg Leu Asn Gly Gln Thr Asn Ile Phe Gln Ile Glu Trp Ile Lys  
 20 25 30  
 Val Ser Thr Val Thr Pro Tyr Leu Gln Glu Glu Ala His Trp Ile Gly  
 35 40 45  
 Pro Ser Gly Gly Pro Leu Cys Ala Ala Leu Ala Ala His Arg Cys Leu  
 50 55 60  
 Pro Gly Thr  
 65

<210> 40758  
 <211> 134  
 <212> PRT  
 <213> A.fumigatus

<400> 40758  
 Thr Gln Arg Arg Pro Gly Gln Val Gln Thr Glu Thr Pro Arg Pro Asp  
 1 5 10 15  
 Arg Gly Leu Phe Leu Gln Pro Ala Pro Ala Arg Arg Arg Leu Gln Ile  
 20 25 30  
 Pro Arg Arg Lys Thr His Asp Gln Pro Pro Ser Leu Arg Arg Pro Leu  
 35 40 45  
 Leu Gln Arg His Pro Pro His Pro Gln His Arg Pro Ala Pro Arg Pro  
 50 55 60  
 Arg Pro Arg Ala Arg Ser Arg Pro Arg His Leu Arg Arg Arg Arg His  
 65 70 75 80  
 Pro Leu Arg Arg Arg Arg Leu Pro His Pro Gly Gln Pro Arg His Pro  
 85 90 95  
 Ala His His Pro Pro Pro Ala Pro Gly Arg Ala His Arg His Arg His  
 100 105 110  
 Arg Arg Arg Leu His Arg Gly Arg Lys Val Leu Arg Ala Pro Gln Gly  
 115 120 125  
 Pro Pro Arg Arg Arg Pro  
 130

<210> 40759  
 <211> 233  
 <212> PRT  
 <213> A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (4), (17)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40759

```

Met Asn Lys Xaa Glu Asp Ala Pro Gly Asp Ser Ser Thr Pro Val Thr
1          5          10          15
Xaa Ala Thr Ser Phe Ile Phe Phe Phe Asn Asn Ile Thr Ser Gln Gly
          20          25          30
Leu Pro Phe Phe Ala Pro Thr Ile Val Arg Thr Ile Tyr Pro His Asn
          35          40          45
Ser Val Cys Ser Gln Gln Leu His Thr Val Pro Pro Tyr Val Val Gly
          50          55          60
Ala Phe Phe Thr Val Leu Phe Pro Phe Leu Ser Trp Arg Phe Asp Arg
65          70          75          80
Arg Met Val Phe Phe Val Ile Gly Pro Leu Leu Met Met Ala Gly Thr
          85          90          95
Ile Met Phe Leu Pro Thr Thr Asp Ala Met Ile Arg Tyr Gly Ala Thr
          100          105          110
Phe Leu Ile Ala Ser Gly Ala Phe Ala Phe Gly Ala Leu Cys Asn Ala
          115          120          125
Asn Ala Ser Asn Asn Val Val Ser Asp Thr Ala Arg Ser Ser Ala Ile
          130          135          140
Gly Thr Thr Val Met Met Gly Asn Ile Gly Gly Leu Ile Ser Thr Trp
145          150          155          160
Ser Phe Leu Pro Phe Asp Ala Pro Asn Tyr His Ile Gly Asn Gly Leu
          165          170          175
Asn Leu Ala Thr Ser Ser Met Thr Met Leu Leu Gly Ala Leu Leu Trp
          180          185          190
Gly Trp Met Arg Trp Asp Asn Lys Arg Arg Glu Lys Val Asp Val Asp
          195          200          205
Gln Ala Leu Ala Gly Leu Ser Leu Leu Gln Ile Gln Asp Leu Asp Trp
          210          215          220
Arg Asn Pro Ala Phe Arg Trp Arg Asp
225          230

```

&lt;210&gt; 40760

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40760

```

Ser Trp Glu Val Ile Val Cys Pro Ser Leu Phe Gly His His Pro Pro
1          5          10          15
Gln Phe Ser Cys Ser Ser Leu Leu Pro Gly Ile Leu Asn Thr Lys Asp
          20          25          30
Glu Thr Met Ala Gly Gly Pro Lys Lys Pro Val Asn Ile Phe Arg Leu
          35          40          45
Lys Asn Leu Asn Glu Pro Lys Glu Val Phe Asn Trp Arg Leu Trp Phe
          50          55          60
Ser Val Leu Ser Phe Gly Leu Met Gly Ala Ala Arg Gly Val Asp Glu
65          70          75          80
Gly Leu Ile Ser Gly Ala Phe Asn Ser Lys Asp Phe Gln Arg Thr Ile
          85          90          95
His Tyr Ser Glu Tyr Ser Gln Val Glu Gln Thr Asn Ile Lys Ala Asn

```

[illegible]

```
<210> 40761
<211> 358
<212> PRT
<213> A.fumigatus
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<400>	40761															
Glu	Val	Pro	Thr	Ser	Leu	His	Ile	Ile	Phe	Ala	Gly	Leu	Ile	Phe	Leu	
1				5					10					15		
Leu	Ser	Phe	Leu	Gln	Tyr	Glu	Ser	Pro	Arg	Phe	Leu	Ile	Lys	Lys	Gly	
			20					25					30			
Lys	Tyr	Glu	His	Ala	Ile	Arg	Asn	Leu	Ala	Arg	Val	Arg	His	Leu	Pro	
		35					40					45				
Glu	Asp	His	Glu	Tyr	Val	Val	Gln	Glu	Ile	Thr	Ala	Ile	Glu	Gln	Ser	
	50						55				60					
His	Gln	Ala	Glu	Leu	Glu	Ala	Thr	Met	Gly	Ala	Gly	Trp	Leu	Gly	Ile	
65					70					75					80	
Val	Lys	Glu	Thr	Phe	Phe	Ile	Pro	Lys	Asn	Leu	Tyr	Arg	Ile	Tyr	Leu	
				85					90					95		
Thr	Val	Met	Ser	Gln	Ile	Leu	Ser	Gln	Trp	Ser	Gly	Ala	Gly	Ser	Ile	
			100					105					110			
Thr	Leu	Tyr	Ala	Pro	Asp	Leu	Phe	Lys	Leu	Leu	Gly	Ile	Thr	Gly	Ser	
		115					120					125				
Asn	Glu	Ser	Leu	Leu	Val	Thr	Gly	Val	Phe	Gly	Ile	Val	Lys	Leu	Val	
	130					135					140					
Ala	Ala	Ile	Thr	Cys	Ala	Leu	Phe	Leu	Val	Asp	Val	Ile	Gly	Arg	Lys	
145					150					155					160	
Arg	Ser	Leu	Leu	Ile	Gly	Ile	Thr	Leu	Gln	Ala	Ile	Ala	Met	Ile	Tyr	
				165					170					175		
Val	Ala	Ala	Phe	Leu	Thr	Asp	Val	Pro	Glu	Met	Gly	Ile	Val	Asp	Asp	
			180					185					190			
Phe	Val	Leu	Pro	Glu	Ser	Lys	Leu	Gly	Val	Ser	Arg	Gly	Ala	Ile	Ala	
		195					200					205				
Met	Ile	Tyr	Ile	Ser	Gly	Phe	Gly	Trp	Ala	Leu	Gly	Trp	Asn	Ser	Met	
	210					215					220					
Gln	Tyr	Leu	Leu	Thr	Ala	Glu	Leu	Phe	Pro	Leu	Arg	Ile	Arg	Ala	Leu	
225					230					235					240	
Ala	Thr	Ser	Ile	Ala	Met	Thr	Leu	His	Phe	Ala	Asn	Gln	Tyr	Gly	Asn	
				245					250					255		
Ser	Arg	Ala	Val	Pro	Asn	Met	Leu	Leu	Pro	Thr	Gln	His	Gly	Gly	Ile	
			260					265					270			
Thr	Pro	Lys	Gly	Thr	Phe	Trp	Cys	Phe	Ala	Ala	Val	Thr	Ile	Leu	Gly	
		275					280					285				
Gly	Val	Trp	Val	Phe	Leu	Ser	Val	Pro	Glu	Thr	Ala	Gly	Arg	Ser	Leu	
	290					295					300					
Glu	Ser	Met	Asp	Arg	Leu	Phe	Glu	Leu	Pro	Trp	Tyr	Lys	Ile	Gly	Leu	
305					310					315					320	

<210> 40762  
 <211> 351  
 <212> PRT  
 <213> A.fumigatus

<400> 40762

Gly	Leu	Leu	Ala	Val	Pro	Phe	Val	Leu	His	Ser	Gln	Pro	Thr	Ala	Val
1				5					10					15	
Tyr	Gln	Glu	His	Ser	Glu	Asn	Leu	Val	Ala	Val	Ala	Ala	Asp	Thr	His
			20					25					30		
Gln	Arg	Tyr	Ala	Glu	Ile	Phe	Arg	Asp	Val	Glu	Lys	Leu	Ile	Asp	Asp
			35				40					45			
His	Ser	Arg	Pro	Leu	Ala	Pro	Pro	Val	Leu	Ala	Ser	His	Leu	Thr	Leu
	50					55					60				
Ser	Val	Asp	His	Glu	Arg	Asn	Ala	Ala	Pro	Gly	Lys	Ser	Lys	Leu	Lys
65					70					75					80
Leu	Leu	Val	Pro	Thr	Ala	Gly	Ser	Phe	Phe	Ser	Arg	Leu	Pro	Leu	Glu
				85					90					95	
Asp	Ala	Phe	Lys	Tyr	Gln	Asp	Ala	Lys	Arg	Met	Ile	Ser	Arg	Arg	Arg
			100					105					110		
Phe	Val	Ala	Pro	Ser	Phe	Asn	Asp	Ile	Arg	Leu	Thr	Leu	Asn	Thr	Ala
			115				120						125		
Gln	Leu	Leu	Gly	Leu	Val	Arg	Gly	Pro	Gly	Leu	Asp	Leu	Val	Thr	Phe
			130				135				140				
Asp	Gly	Asp	Val	Thr	Leu	Tyr	Asp	Asp	Gly	Ala	Cys	Leu	Thr	Pro	Asp
145					150					155					160
Asn	Pro	Ala	Ile	Pro	Arg	Ile	Ile	Arg	Leu	Leu	His	Gln	Gly	Val	Arg
			165					170						175	
Ile	Gly	Ile	Val	Thr	Ala	Ala	Gly	Tyr	Thr	Glu	Gly	Ala	Lys	Tyr	Tyr
			180					185					190		
Glu	Arg	Leu	Lys	Gly	Leu	Leu	Asp	Ala	Val	His	Asp	Ser	Ser	Ser	Leu
			195				200				205				
Thr	Pro	Ala	Gln	Lys	Asp	Gly	Leu	Val	Val	Met	Gly	Gly	Glu	Ser	Asn
			210			215					220				
Phe	Leu	Phe	Arg	Phe	Asp	Ser	Ala	Ser	Pro	His	Arg	Leu	Ser	Tyr	Val
225					230					235					240
Pro	Arg	Pro	Glu	Trp	Leu	Leu	Asp	Glu	Met	Lys	Ser	Trp	Asn	Gln	Glu
				245					250					255	
Asp	Ile	Thr	Gln	Leu	Leu	Asp	Ile	Ala	Glu	Ser	Ser	Leu	Arg	Ala	Cys
			260					265					270		
Ala	Ala	Asn	Leu	Asn	Leu	Pro	Val	Ala	Val	Leu	Arg	Lys	Asp	Arg	Ala
			275				280					285			
Val	Gly	Val	Tyr	Pro	Tyr	Asp	Arg	Ser	Lys	Ile	His	Arg	Glu	Gln	Leu
			290			295					300				
Glu	Glu	Thr	Val	Leu	Val	Gln	Asn	Thr	Val	Glu	Arg	Ser	Val	Val	
305					310					315				320	
Gly	Ser	Arg	Leu	Pro	Phe	Cys	Ala	Phe	Asn	Gly	Ala	Ser	Pro	Ser	Ser
				325					330					335	
His	Pro	Leu	Arg	Pro	Pro	Ser	Pro	Asp	Phe	Leu	Phe	Thr	Cys	Met	
			340					345					350		

<210> 40763  
 <211> 107  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40763

```

Asn Tyr Ala Gly Lys Ser Arg Asp Glu Ile Ala Ala Asp Pro Met Ser
1           5           10           15
Ala Ala Val Ile Gly Ile Lys Gly Ser Gln Val Leu Phe Ser Ala Met
          20           25           30
Gly Gly Glu Asp Gly Leu Glu Ala Thr Glu Thr Asp Trp Ala Arg Arg
          35           40           45
Arg Pro Lys Thr Glu Phe Trp Leu Glu Leu Gln Asn Tyr Val Asn Val
          50           55           60
Leu Ser Gly Arg Ala Ser Ala Gly Lys Pro Leu Trp Ser Cys Tyr Glu
65           70           75           80
Ser Lys His Phe Pro Ser Cys Cys Arg Leu Tyr Asn Thr Asp Leu Ser
          85           90           95
Ile Asp Ile Asp Pro Ser Ala Leu Thr Ser Ser
          100          105

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&lt;210&gt; 40764

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40764

```

Leu His Ala Arg Glu Lys Glu Val Trp Gly Arg Gly Thr Glu Gly Val
1           5           10           15
Gly Gly Arg Gly Gly Thr Val Lys Arg Ala Lys Gly Gln Ser Arg Ala
          20           25           30
Asp Asp Arg Ser Phe His Cys Ile Leu His Asp Glu Asp Gly Leu Leu
          35           40           45
Glu Leu Leu Ala Val Asp Leu Ala Pro Val Val Gly Val Asp Thr Asp
          50           55           60
Gly Ala Val Leu Ala Glu Tyr Ser Asn Arg Glu Val Lys Val Arg Gly
65           70           75           80
Ala Ser Ala Gln Arg Arg Leu Arg Asp Ile Glu Gln Leu Gly Asp Ile
          85           90           95
Leu Leu Val Pro Gly Leu His Phe Val Glu Glu Pro Leu Arg Ala Gly
          100          105          110
Asp Val Gly Glu Ala Val Arg Arg Gly Arg Val Glu Ala Glu Glu Glu
          115          120          125
Val Ala Leu Ala Ala His Asp Asp Gln Ala Val Phe Leu Gly Gly Gly
          130          135          140
Glu Gly Gly Gly Val Met Asp Gly Val Glu Glu Ala Leu Glu Ala Leu
145          150          155          160
Val Val Leu Cys Ala Leu Gly Val Ala Gly Gly Gly Asp Asp Ala Asp
          165          170          175
Ala His Ala Leu Val Gln Glu Ala Asp Asp Ala Arg Asp Gly Gly Val
          180          185          190
Val Arg Gly Glu Ala Gly Ala Val Val Val Glu Gly Asp Val Ser Val
          195          200          205
Glu Gly Asp Glu Val Glu Thr Gly Pro Ala Asp Glu Ala Glu Glu Leu
          210          215          220
Gly Gly Val Glu Gly Glu Ala Asp Val Val Glu Gly Gly Gly Asp Glu
225          230          235          240
Ala Thr Ala Ala Asp His Ala Phe Cys Val Leu Val Phe Glu Gly Val
          245          250          255
Phe Glu Arg Glu Pro Ala Glu Glu Arg Ala Arg Gly Arg Asp Glu Glu

```

## 17892

	260		265		270									
Phe	Gln	Phe	Gly	Leu	Ala	Arg	Gly	Gly	Val	Ala	Phe	Met	Val	Asp
	275		280		285									

<210> 40765  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 40765  
 Met Gly Ser Glu Asn Arg Gly Gly Lys Arg Pro Thr Val Val Val Asp  
 1 5 10 15  
 Glu Leu Leu Asn Ile Pro Glu Asp Leu Arg Val Ala Leu Met Gly Val  
 20 25 30  
 Gly Cys Tyr Gly His Glu Val Leu Ala Met Phe Leu Val Asp Ser Gly  
 35 40 45  
 Gly Leu Arg Val Gln His Lys Gly Asp Arg Gln Lys Ala Leu Ser Asn  
 50 55 60  
 Glu Leu Pro Pro Val Asp Met Glu  
 65 70

<210> 40766  
 <211> 404  
 <212> PRT  
 <213> A.fumigatus

<400> 40766  
 Cys Val Pro His Gln His Glu Ser Ala Thr Leu Ser Pro Leu His Pro  
 1 5 10 15  
 Arg Leu Leu His Arg Leu Leu Val Arg Arg Ser Pro Val His Leu Leu  
 20 25 30  
 Leu His Leu His Leu Leu Arg His His Leu Ile Pro Leu Leu Gly Val  
 35 40 45  
 Leu Val Ser Val Gln Thr Asp Leu Val Pro Arg Gln Leu Lys Gln Pro  
 50 55 60  
 Ile His Ala Leu Glu Arg Pro Pro Gly Cys Leu Gly His Thr Glu Lys  
 65 70 75 80  
 His Pro His Ser Thr Glu Asp Gly His Arg Arg Lys Ala Pro Lys Arg  
 85 90 95  
 Ala Leu Gly Ser Asp Ala Ala Val Leu Gly Gly Gln Gln His Val Gly  
 100 105 110  
 His Arg Ala Arg Val Ala Val Leu Val Gly Lys Val Gln Arg His Gly  
 115 120 125  
 Asp Gly Gly Arg Gln Gly Pro Asp Ala Gln Arg Glu Leu Arg Arg  
 130 135 140  
 Glu Gln Val Leu His Arg Val Pro Ala Glu Arg Pro Ala Glu Pro Gly  
 145 150 155 160  
 Asp Ile Asp His Gly Asp Gly Ala Ala Ala Asp Ala Lys Leu Gly Leu  
 165 170 175  
 Arg Gln Asp Lys Val Val Asp Asp Ala His Leu Arg Asp Val Gly Gln  
 180 185 190  
 Glu Gly Gly Asp Val Asp His Gly Asp Gly Leu Gln Gly Asp Thr Asp  
 195 200 205  
 Glu Glu Gly Ala Leu Ala Ala Asp His Val Asp Gln Glu Gln Gly Ala  
 210 215 220  
 Gly Asp Gly Cys Asp Glu Leu Asp Asp Pro Glu His Thr Gly His Glu

## 17893

225                      230                      235                      240  
 Gln Ala Leu Val Gly Pro Gly Asp Thr Glu Gln Leu Glu Glu Ile Gly  
                                  245                      250                      255  
 Gly Val Glu Gly Asp Gly Ala Gly Ala Gly Pro Leu Arg Glu Asn Leu  
                                  260                      265                      270  
 Arg His Asp Arg Gln Val Asp Ala Val Gln Val Leu Arg Asp Glu Lys  
                                  275                      280                      285  
 Gly Leu Leu Asp Asp Ala Glu Pro Ala Ser Ala His Gly Arg Leu Glu  
                                  290                      295                      300  
 Phe Gly Leu Val Gly Leu Leu Asp Gly Arg Asp Leu Leu His Asn Val  
 305                                   310                      315                      320  
 Leu Val Val Leu Arg Glu Val Ser His Ala Arg Gln Ile Ala Asp Gly  
                                  325                      330                      335  
 Val Phe Val Phe Ala Leu Phe Asp Gln Glu Ala Arg Gly Leu Val Leu  
                                  340                      345                      350  
 Gln Lys Gly Glu Glu Glu Asp Gln Ala Gly Lys Asp Asp Val Gln Thr  
                                  355                      360                      365  
 Gly Trp His Phe Leu Arg Asp Trp Ser Ala Ala Ile Asp Ser Pro Ala  
                                  370                      375                      380  
 Val Ala Ala Ser Leu Thr His Arg Leu Cys Val Leu Ser Pro Arg Leu  
 385                                   390                      395                      400  
 Thr Trp Gln Pro

<210> 40767  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

<400> 40767  
 Leu His Arg Tyr Gly Arg Phe Gly Pro Cys Gly Glu Glu Leu Asp Gly  
 1                                   5                                   10                                   15  
 Glu Phe Glu Arg Arg Glu Asn Glu Lys Lys Arg Arg Arg Glu Ala Lys  
                                  20                                   25                                   30  
 Phe Lys Thr Lys Leu Gln Asp Leu Lys Lys Arg Thr Arg Val Glu Ala  
                                  35                                   40                                   45  
 Tyr Arg Arg Asn Arg Gln Gly Ala Ala Gly Gly Asn Phe Gly Asp Asp  
                                  50                                   55                                   60  
 Leu Gly Lys Gly Gly Arg His Val His Gln Trp Gly Arg Ser Val Glu  
 65                                   70                                   75                                   80  
 Asp Pro Glu Thr Gly Ile Gly Val Lys Lys Cys Val Asp Cys Gly Met  
                                  85                                   90                                   95  
 Glu Ile Glu Glu Leu Glu Phe  
                                  100

<210> 40768  
 <211> 658  
 <212> PRT  
 <213> A.fumigatus

<400> 40768  
 Phe Thr Ala Gln Arg Ser Lys Ser Gln Ala Asp Leu Thr Thr Asp Ile  
 1                                   5                                   10                                   15  
 Asp Thr Asp His Gln Leu Gly Val Arg Gln Glu Asn Glu Arg Glu Lys  
                                  20                                   25                                   30  
 Ser Arg Leu Tyr Leu Ser Lys Cys Ser Gln Glu Val Ala Phe His Val

Variable	Mean	Standard deviation	Minimum	Maximum
Age	34.5	10.5	20	55
Gender	0.5	0.5	0	1
Marital status	0.5	0.5	0	1
Education	12.5	1.5	10	15
Income	15.5	5.5	10	25
Health	1.5	0.5	1	2
Stress	2.5	1.5	1	4
Life satisfaction	3.5	1.5	1	5
Work satisfaction	3.5	1.5	1	5
Family satisfaction	3.5	1.5	1	5
Community satisfaction	3.5	1.5	1	5
Overall satisfaction	3.5	1.5	1	5



Variable	Mean	SD	Min	Max	Median	Q1	Q3	Mode	Skewness	Kurtosis	Shapiro-Wilk	Normality
Age	35.2	12.5	18	65	32	28	38	35	0.15	2.1	0.98	Normal
Gender	1.2	0.4	1	2	1	1	1	1	0.05	0.2	0.99	Normal
Marital Status	2.1	0.8	1	3	2	1	3	2	0.12	1.8	0.97	Normal
Education	15.8	2.1	10	20	16	15	17	16	0.08	0.5	0.99	Normal
Income	1200	300	500	2500	1100	900	1300	1000	0.25	3.5	0.95	Normal
Occupation	1.5	0.5	1	3	1	1	2	1	0.03	0.1	0.99	Normal
Health Status	2.5	0.6	1	3	2	2	2	2	0.01	0.05	0.99	Normal
Stress Level	3.2	1.1	1	5	3	2	4	3	0.18	2.5	0.96	Normal
Life Satisfaction	4.1	0.9	2	5	4	3	5	4	0.06	0.8	0.99	Normal
Work-Life Balance	3.8	1.0	2	5	3	3	4	3	0.10	1.5	0.98	Normal
Family Support	4.5	0.7	3	5	4	4	5	4	0.02	0.3	0.99	Normal
Community Involvement	2.8	0.9	1	4	3	2	4	3	0.14	2.0	0.97	Normal
Personal Growth	3.5	1.2	1	5	3	2	4	3	0.16	2.3	0.96	Normal
Overall Well-being	4.2	0.8	3	5	4	4	5	4	0.04	0.6	0.99	Normal

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<210> 40769
<211> 97
<212> PRT
<213> A.fumigatus
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<210> 40769
<211> 97
<212> PRT
<213> A.fumigatus
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<210> 40770
<211> 158
<212> PRT
<213> A.fumigatus
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<210> 40770
<211> 158
<212> PRT
<213> A.fumigatus
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<220>
<221> UNSURE
<222> (131),(144),(145),(148)
<223> Identity of amino acid sequences at the above locations are unknown.
<400> 40770
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## 17896

Lys Lys Lys Thr Gln Lys Lys Lys Ser Leu Ala Phe Gln Asp Ser Asp  
 1 5 10 15  
 Ile Leu Val Thr Thr Gln Phe Leu Leu Cys Thr Thr Arg Phe Val Ala  
 20 25 30  
 Met Gly Lys Gly Arg Arg Met Lys Lys Gln Gly Pro Pro Ala Pro Leu  
 35 40 45  
 Asp Glu Ser Lys Ile Thr Leu Tyr Lys Lys Arg Lys Ala Gly Asp Val  
 50 55 60  
 Glu Ser Lys Ala Glu Ser Gly Lys Lys Arg Arg Arg Ala Glu Asp Glu  
 65 70 75 80  
 Glu Glu Ile Leu Lys Ala Val Pro Lys Lys Lys Val Asn Gly Ala Val  
 85 90 95  
 Lys Gly Lys Glu Asp Lys Ala Val Ala Thr Ala Val Ser Lys Lys Asp  
 100 105 110  
 Ala Asn Thr Asn Ser Lys Pro Ala Ala Lys Gly Lys Thr Tyr Ile Tyr  
 115 120 125  
 Gly Leu Xaa Thr Thr Lys Ile Cys Pro Ile Ser Ile Thr Ile Lys Xaa  
 130 135 140  
 Xaa Trp Ala Xaa Asn Glu Phe Asp Tyr Leu Glu Trp Pro Gln  
 145 150 155

&lt;210&gt; 40771

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40771

Ala Pro Asp Trp Val Met Ser Thr Val Asp Gln Ser Thr Val Thr Thr  
 1 5 10 15  
 Ala Leu Ser Ser Ser Ser Ser Asn Arg His Gln Gly Asn Asp Thr Tyr  
 20 25 30  
 Ser Ile Pro Lys His Ser Gly Thr Thr Ser Thr Ile Thr Ile Thr Met  
 35 40 45  
 Asn Glu Val Ser Phe Val Lys Ser Tyr Leu Ser Thr Leu Asp Ser Arg  
 50 55 60  
 Pro Ile Lys Leu Arg Ser Asp His Val Phe Asp Pro Glu Gln Val Gly  
 65 70 75 80  
 Leu Arg Val Pro Val Arg Leu Pro Pro Ile Ser Tyr Tyr Leu Ser His  
 85 90 95  
 Thr Pro Arg Ile Met Tyr  
 100

&lt;210&gt; 40772

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40772

Ser Thr Gln Tyr Thr Leu Pro Arg Leu His Ala Pro His Pro Glu Met  
 1 5 10 15  
 Pro Lys Lys Thr Lys Gln Pro Leu Ala Pro Gly Ser Ser Lys Ser Ile  
 20 25 30  
 Thr Val His Leu Lys Ser Ala Arg Asn Pro Ala Leu Glu Phe Ser Leu  
 35 40 45  
 Pro Asn Thr Ala Leu Thr Thr Thr Ser Val Gln Asp Leu Lys Asp Ala  
 50 55 60

## 17897

Val Arg Glu Arg Val Thr Asp Ala Gln Gly Asn Lys Ile Ser Leu Asp  
65 70 75 80  
Lys Ile Lys Ile Leu Tyr Lys Arg Lys Pro Val Thr Gly Lys Thr Ile  
85 90 95  
Ala Glu Val Leu Ala Asp Glu Pro Gly Met Leu Ser Gly Gly Lys Glu  
100 105 110  
Val Glu Phe Gly Val Met Ile Ile Gly Gly Ala Gln Val Ala Val Ser  
115 120 125  
Ala Gly Ala Gly Glu Arg Ala Gly Ala Glu Gln Lys Glu Ser Tyr Glu  
130 135 140  
Pro Pro Lys Pro Ala Val Gly Pro Ser Gly Glu Ser Val Val Ala Thr  
145 150 155 160  
Glu Ala Phe Trp Asp Asp Leu Gln Gly Phe Leu Glu Gln Arg Leu Lys  
165 170 175  
Asp Tyr Asp Glu Ala Asn Lys Leu Arg Val Leu Phe Lys Glu Ala Trp  
180 185 190  
Arg Ser Ser Ser Phe  
195

&lt;210&gt; 40773

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40773

Ser Pro Ser Ser Pro Leu Leu Pro Cys Leu Ser Leu Ser Leu Phe Pro  
1 5 10 15  
Ser His Phe Asn Phe Pro Ser Pro Ile Phe Tyr Phe Gln Leu Gln Ile  
20 25 30  
Phe Thr Ser Lys Thr Ser Asn Asn Leu Ala Leu Leu Pro Phe Ile Tyr  
35 40 45  
Leu Leu Leu Ile Leu Lys Lys Lys Lys Asn Ser Tyr Gln Ala Val  
50 55 60

&lt;210&gt; 40774

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40774

Gly Ser Gln Thr Asn Ser Phe Ala Ser Glu Met Val Glu Asn Met Lys  
1 5 10 15  
Val Val Ala Ser Ser Asp Val Glu Leu Thr Val Glu Glu Arg Asn Leu  
20 25 30  
Leu Ser Val Ala Tyr Lys Asn Val Ile Gly Ala Arg Arg Ala Ser Trp  
35 40 45  
Arg Ile Val Thr Ser Ile Glu Gln Lys Glu Glu Ser Lys Gly Asn Glu  
50 55 60  
Ser Gln Val Ala Leu Ile Lys Glu Tyr Arg Gln Lys Ile Glu Ala Glu  
65 70 75 80  
Leu Ala Lys Ile Cys Asp Asp Ile Leu Asp Val Leu Asp Lys His Leu  
85 90 95  
Ile Pro Ser Ala Ala Ser Gly Glu Ser Lys Val Phe Tyr His Lys Met  
100 105 110  
Tyr Val Val Phe Ile Leu Ser Ala Arg Leu Arg Arg Arg Trp Gly Arg  
115 120 125

17898

Met Tyr  
130

<210> 40775  
<211> 168  
<212> PRT  
<213> A.fumigatus

<400> 40775  
Phe Gly Ser Lys Pro Glu Pro Arg Arg Ser Phe Gln Pro Arg Gly Glu  
1 5 10 15  
Asp Phe Tyr Thr Thr Arg Ile Ile Pro Pro Thr Leu Arg Ile Val Lys  
20 25 30  
Thr Ser Ser Lys Ser Arg Val Val Glu Glu Arg Glu Val Thr Ala Leu  
35 40 45  
Phe Ser Trp Ile Leu Leu Cys Phe Ser Gln Pro Asp Ser Lys Gln Pro  
50 55 60  
His Glu Asn Tyr Tyr Ser Tyr Tyr Tyr Arg Gln Ile Val Thr Gly Val  
65 70 75 80  
Val Pro Glu Pro Ala Ser Ala Ser Ala Ser Thr Arg Thr Ser Thr Ser  
85 90 95  
Ile Gly Thr Pro Ala Ser His Leu Pro Leu Ser Thr Ile Thr Thr Thr  
100 105 110  
Ala Ala Ala Ser Pro Pro Leu Pro Pro Phe Ser Leu Val Ser Pro Ser  
115 120 125  
Leu Phe Ser Pro Pro Thr Ser Thr Phe Leu Pro Pro Ser Ser Ile Ser  
130 135 140  
Asn Ser Lys Tyr Leu Pro Pro Lys Leu Pro Thr Thr Leu Leu Ser Phe  
145 150 155 160  
Pro Ser Phe Ile Tyr Phe Ser Phe  
165

<210> 40776  
<211> 91  
<212> PRT  
<213> A.fumigatus

<400> 40776  
Ile Asn Arg Lys Gly Asp Tyr His Arg Tyr Leu Ala Glu Phe Ala Val  
1 5 10 15  
Gly Asp Arg Arg Lys Ala Ala Ala Asp Ala Ser Leu Glu Ala Tyr Lys  
20 25 30  
Asn Ala Thr Glu Val Ala Gln Thr Asp Leu Ala Pro Thr His Pro Ile  
35 40 45  
Arg Leu Gly Leu Ala Leu Asn Phe Ser Val Phe Tyr Tyr Glu Ile Leu  
50 55 60  
Asn Ser Pro Asp Gln Ala Cys His Leu Ala Lys Leu Ala Phe Asp Asp  
65 70 75 80  
Ala Ile Ala Gly Met Ser Thr Leu Tyr Pro Arg  
85 90

<210> 40777  
<211> 85  
<212> PRT  
<213> A.fumigatus

17899

<400> 40777

His	Ala	Thr	Glu	Leu	Asp	Thr	Leu	Ser	Glu	Glu	Ser	Tyr	Lys	Asp	Ser
1				5					10					15	
Thr	Leu	Ile	Met	Gln	Leu	Leu	Arg	Asp	Asn	Leu	Val	Ser	Phe	Leu	Ser
			20					25					30		
Phe	Gly	Arg	Phe	Ser	His	Gly	Val	Cys	Pro	Asn	Gly	Leu	Arg	Leu	Ser
		35					40					45			
Gly	Pro	His	Leu	Arg	Leu	Ser	Pro	Leu	Leu	Ser	Arg	Thr	Leu	Leu	Pro
	50					55					60				
Arg	Arg	Arg	Arg	Arg	Pro	Leu	Pro	Leu	Arg	Ala	Arg	Ser	Pro	Leu	Asn
65					70				75						80
Lys	Gln	Gly	Lys	Thr											
				85											

<210> 40778

<211> 60

<212> PRT

<213> A.fumigatus

<400> 40778

Ala	Gly	Asn	Asp	Lys	Ala	Lys	Pro	Ser	Gln	Pro	Phe	Tyr	Ala	Asp	Arg
1				5					10					15	
Gln	Phe	Ala	Phe	Ser	Gln	Glu	Ala	Thr	Asp	Pro	Leu	Lys	Ser	Gln	Arg
			20					25					30		
Pro	Pro	Pro	Pro	Leu	Arg	Lys	Tyr	His	Gly	Ile	Tyr	Val	Gly	Cys	Thr
		35					40					45			
Arg	Ile	Leu	Ala	Tyr	Cys	Lys	Ser	Thr	Thr	Thr	Pro				
	50					55					60				

<210> 40779

<211> 96

<212> PRT

<213> A.fumigatus

<400> 40779

Trp	Cys	Pro	Cys	Asp	Met	Phe	Lys	Gly	Glu	Arg	Lys	Cys	Asp	Ile	Thr
1				5					10					15	
Thr	Cys	His	Val	Leu	Leu	Trp	Asn	Ser	Ile	Arg	Arg	Leu	Glu	Ser	Cys
			20					25					30		
Met	Ile	Ser	Ala	Leu	Tyr	Ile	Leu	Ala	Ala	Asp	Leu	Glu	Thr	Cys	Leu
		35					40					45			
Thr	Tyr	Thr	Leu	Leu	Pro	Cys	Glu	Gly	Phe	Gly	Leu	His	Pro	Val	Pro
	50					55					60				
Phe	Leu	Gly	Ser	Leu	Asp	Phe	Ile	Val	Val	Ile	Phe	Thr	Ser	Phe	Pro
65					70				75						80
Ser	Pro	Pro	Leu	Pro	His	Ile	Phe	Ser	Leu	Ser	Phe	Thr	Thr	Val	Ala
				85					90					95	

<210> 40780

<211> 65

<212> PRT

<213> A.fumigatus

<400> 40780

Gly	Ser	His	Ser	Ile	Gln	Pro	Gly	Gln	Lys	Tyr	Arg	Val	Leu	Gln	Pro
1				5					10					15	

## 17900

Ile Phe Ser Arg Leu Trp Asn Gln Gly Ser Trp Lys Lys Ser Trp Asn  
 20 25 30  
 Ile Val Asp Ile Leu Gly Cys Ala Ser Ala Ala Ser Leu Lys Glu Ile  
 35 40 45  
 Arg Ser Tyr Ala Leu Leu Glu Gly Pro Ile Pro Thr Asp Met Gly Gly  
 50 55 60  
 Val  
 65

&lt;210&gt; 40781

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40781

Glu Ala Met Asn Pro Lys Ser Ser Leu Arg Gly Ser Ile Pro Gly Arg  
 1 5 10 15  
 Ser Ala Thr Arg Ser His His Arg Thr Tyr Gly Ile Tyr Val Ala Val  
 20 25 30  
 Gly Leu Phe Gly Tyr Asp Trp Gly Arg Glu Gly Ser Glu Tyr Met Glu  
 35 40 45  
 Tyr Ala Leu Asn Leu Glu Asp Cys Ser His Lys Gly Arg Cys Arg  
 50 55 60

&lt;210&gt; 40782

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40782

Pro Tyr Leu Ser Gly Trp Gly Arg Lys Leu Ser Tyr Cys Ile Ala Phe  
 1 5 10 15  
 Ser Ile Asp Gly Ala Thr Asp Val Thr Arg Arg Tyr Val Arg Ser Pro  
 20 25 30  
 Val Lys His Gly Ala Pro Arg Asn Arg Val Pro Glu Glu Val Leu Val  
 35 40 45  
 Trp Ile Ile His Glu Ile Arg Lys Lys Arg Arg Glu Ser Met Ser Lys  
 50 55 60  
 Thr Asp Gln Arg Arg Leu Met Lys Glu Asp Glu Arg Glu Glu Lys Glu  
 65 70 75 80  
 Leu Arg Ala Cys Met Ala Ser Ala Leu Ala Ala Glu Ile Asn Asn Leu  
 85 90 95  
 Ile Pro Arg Glu Gln Thr Ser Gly Arg Pro Gly Glu Gln Lys Thr Pro  
 100 105 110  
 Ala Ser Met Gln Asp Thr Pro Val Asp Trp Val Ala Ala Gln Gln Met  
 115 120 125  
 Gly Pro Gly Gln Ser Gly Pro Asp Arg Ser Gln Asp Gly Arg  
 130 135 140

&lt;210&gt; 40783

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40783

Arg Cys Pro Thr Ser Pro Pro Ser Met Asp Asp Ala Ser Pro Thr Cys

## 17901

1                    5                    10                    15  
 Ser Thr Ile Thr Glu Asp Val Ser Pro Thr Ala Ser Lys Ile Tyr Ala  
                   20                    25                    30  
 Lys Ile Val Asn Ile Lys Lys Gly Lys Ala Asp Ile Met Gln Ser Arg  
                   35                    40                    45  
 Glu Pro Ser His Ala Gly Ser Trp Tyr Ser Asp Asn Arg Ser Thr Leu  
                   50                    55                    60  
 Thr Arg Gln Leu Asp Gln Trp Leu Ala His Val Pro Asn Glu Ile Glu  
 65                    70                    75                    80  
 Gly Ile Gly Ser Leu Pro Val Pro Gly Ser Arg Val Ile Ile Ala Pro  
                   85                    90                    95  
 Tyr Val Ser

&lt;210&gt; 40784

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40784

Leu Ile Glu Thr Arg Lys Arg Ile Phe Ile Leu Gly Pro Ser His His  
 1                    5                    10                    15  
 His Tyr Leu Ser Thr Leu Ala Leu Pro Gln Leu Thr Ser Tyr Tyr Thr  
                   20                    25                    30  
 Pro Leu Ser Asp Glu Pro Leu Pro Leu Asp Thr Glu Leu Ile Ala Lys  
                   35                    40                    45  
 Leu Leu Ser Ala Lys Ala Val Lys Pro Asn Gly Ser Thr Val Ser Phe  
                   50                    55                    60  
 Thr Thr Met Thr Arg Ser Val Asp Glu Asp Glu His Ser Ile Glu Leu  
 65                    70                    75                    80  
 His Leu Pro Tyr Ile His Arg Leu Leu Gln Leu Gln His Pro Thr Lys  
                   85                    90                    95  
 Arg Thr Ser Gln Tyr Pro Pro Leu Val Pro Ile Leu Val Gly Ser Thr  
                   100                    105                    110  
 Ser Ala Ser Thr Glu Gln Ala Phe Gly Ala Leu Leu Ala Ser Tyr Leu  
                   115                    120                    125  
 Glu Asp Pro Ser Asn Val Phe Val Ile Ser Ser Asp Phe Cys His Trp  
                   130                    135                    140  
 Gly Leu Arg Phe Ser Tyr Thr Tyr Tyr Val Pro Gln Ala Pro Lys Pro  
 145                    150                    155                    160  
 Gly Pro Lys Leu Pro Leu Ser Ala Asp Ala Leu Pro Gln Pro Ser Asn  
                   165                    170                    175  
 Asp Leu Asp Glu Phe Glu Glu Arg Ile Glu Leu Val Ser Ala Gly His  
                   180                    185                    190  
 Ser Leu Gln Arg Arg Asp Arg Ile Asn Ser Arg Glu Ser Ala Ile His  
                   195                    200                    205  
 Glu Ser Ile Ser Ala Phe Asp Ile Ala Thr Met Ala Ala Ile Ala Thr  
                   210                    215                    220  
 Gly Glu Thr Glu Asn Phe Leu Asp Val Ile Gln Arg Thr Gly Asn Thr  
 225                    230                    235                    240  
 Val Cys Gly Arg His Pro Ile Gly Val Ile Met Ala Ala Ile Glu Ala  
                   245                    250                    255  
 Thr Arg Thr Gln Glu Asp Gly Lys Lys Gly Ala Phe His Phe Ile Arg  
                   260                    265                    270  
 Tyr Glu Arg Ser Ser Asp Ala Val Asn Val Thr Asp Ser Ser Val Ser  
                   275                    280                    285

17902

Tyr Val Ser Ala Phe Ala Val Leu  
290 295

<210> 40785  
<211> 91  
<212> PRT  
<213> A.fumigatus

<400> 40785  
Val Phe Arg Ser Ser Gln Pro Leu Thr Leu Ala Asn Arg Lys Ser Ala  
1 5 10 15  
Val Ser Gly Trp Phe Ser Thr His Phe Gly Gly Glu Val Pro Tyr Ser  
20 25 30  
Lys Asn Trp Val Phe Pro Ser Asp Leu Leu Trp Tyr Asp Arg Trp Gln  
35 40 45  
Glu Ile Leu Asn Leu Gly Pro Arg Phe Ile Glu Ile Val Thr Trp Asn  
50 55 60  
Asp Tyr Gly Glu Ser His Tyr Ile Gly Pro Leu Ser Ser Pro His Thr  
65 70 75 80  
Asp Asp Gly Ala Ser Lys Trp Val Met Asp Met  
85 90

<210> 40786  
<211> 93  
<212> PRT  
<213> A.fumigatus

<400> 40786  
Ser Leu Lys Leu Leu Val Ser Ile Lys Ser Trp Thr Asp Arg Thr Leu  
1 5 10 15  
Asn Phe Lys Leu Leu Phe Ser Gln Met Met Pro Ser Phe Asp Ser Asn  
20 25 30  
Val Pro Val Ala Phe Ala Glu Thr Arg Ser Ile Leu Val Pro Asp Trp  
35 40 45  
Asn Val Ser Ile Cys Leu Gly Ala Lys Ile Asn Leu Ala Ile Gly Thr  
50 55 60  
Ala Leu Lys His Leu Arg Gln Asp Thr Ser Ala Gln Lys Glu Arg Leu  
65 70 75 80  
Asp Lys Ile Arg Val Ile Pro Leu Gln Pro Leu Ala Ser  
85 90

<210> 40787  
<211> 185  
<212> PRT  
<213> A.fumigatus

<400> 40787  
Ile Gly Ile Thr Ser Asn Arg Gln Ser Ala Ala Asp Tyr Asp Asp Asp  
1 5 10 15  
Met Gln Arg Ala Lys Ala Leu Gly Ile Asp Ala Phe Ala Leu Asn Ile  
20 25 30  
Gly Val Asp Pro Tyr Thr Asp Thr Gln Leu Asn Phe Ala Tyr Glu Ser  
35 40 45  
Ala Ala Arg Asn Asp Met Lys Val Phe Ile Ser Phe Asp Phe Asn Trp  
50 55 60  
Tyr Asn Thr Gly Gln Ala Thr Ala Val Gly Gln Lys Ile Arg Gln Tyr



## 17903

65		70		75		80
Ala	Ser	Leu	Pro	Ala	Gln	Leu
		85		90		95
Ser	Phe	Ala	Gly	Asp	Gly	Leu
		100		105		110
Gly	Thr	Glu	Val	Phe	Phe	Ala
		115		120		125
Phe	Asn	Ala	Ile	Gln	Gly	Ala
		130		135		140
Glu	Asn	Asn	Lys	Ala	Pro	Thr
145			150			155
Gly	Asp	Ser	Lys	Tyr	Ile	Ala
		165		170		175
Arg	Glu	Ser	Phe	Glu	Ala	Pro
		180				185

&lt;210&gt; 40788

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40788

Leu	Leu	Leu	Pro	Gly	Ile	Ala	Leu	Thr	Ala	Ser	Leu	Arg	Pro	His	Asn
1			5					10						15	
Gly	Trp	Leu	Glu	Met	Ser	Lys	Pro	Phe	Ile	Ala	Ala	Tyr	Lys	Ala	Gly
		20					25					30			
Glu	Lys	Ser	Ala	Asn	Asn	Tyr	Ile	Thr	Glu	Asp	Lys	Leu	Ile	Tyr	Trp
		35				40						45			
Tyr	Arg	Pro	Thr	Pro	Lys	Asp	Ile	Asn	Cys	Asp	Ser	Thr	Asp	Thr	Thr
	50				55					60					
Met	Gln	Gly	Asn	Pro	Asn	Asn	Ser	Ser	Gly	Asn	Phe	Phe	Arg	Gly	Arg
65				70					75					80	
Pro	Asn	Gly	Tyr	Glu	Ser	Met	Thr	Asp	Glu	Val	Phe	Val	Val	Ser	Leu
		85						90						95	
Leu	Lys	Ser	Pro	Ala	Thr	Val	Gln	Val	Thr	Ser	Gly	Ser	Ser	Ser	Lys
		100					105						110		
Thr	Phe	Gln	Ala	Gln	Ala	Gly	Ala	Ser	Ala	Phe	Ser	Ala	Pro	Met	Gly
		115				120						125			
Val	Gly	Lys	Gln	Gln	Phe	Ser	Leu	Leu	Arg	Asn	Gly	Gln	Thr	Val	Met
	130				135						140				
Ser	Asp	Thr	Ser	Leu	Lys	Asp	Ile	Val	Asp	Ser	Cys	Ile	Cys	Gly	Ile
145				150					155					160	
Tyr	Asn	Phe	Asn	Ala	Tyr	Val	Gly	Thr	Val	Pro	Pro	Glu	Lys	Thr	Ile
		165					170							175	
Asp	Lys	Leu	Gln	Pro	Ala	Gly	Leu	Ser	Met	Leu	Tyr	Gln	Gly	Leu	Thr
		180					185					190			
Val	Pro	Cys	Pro	Thr	Asn	Thr	Leu	Gly	Leu	Ser	Ser	Pro	Thr	Ala	Thr
		195				200						205			
Ala	Gln														
	210														

&lt;210&gt; 40789

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 17904

&lt;400&gt; 40789

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Asn Ile Ser Tyr Cys Glu Ser Ile His Leu Leu Tyr Thr Leu Asn Ile
1           5           10           15
Phe Glu Phe Ser Asn Thr Trp Ser Leu Thr Tyr Leu Leu Pro Thr Ile
          20           25           30
Pro Ala Glu Phe Trp Asp Cys Ile Arg Ala Val Glu Leu Arg Trp Ala
          35           40           45
Phe Pro Gly His Trp Leu Pro Ser Lys Asp Pro Val Lys Thr Val Tyr
          50           55           60
Phe Ser Ala Gly Arg Gln Gln Trp Val Glu Thr Cys Arg Ala Leu Thr
65           70           75           80
Arg Met Lys Gly Leu Gln Ser Phe Thr Leu Gln Leu Met Gly Asn Trp
          85           90           95
Phe Cys Glu Pro Val Glu Lys Ile Pro Val Phe Leu Glu Pro Leu Arg
          100          105          110
Glu Leu Ser Leu Lys Asn Arg Trp Lys Leu Gln Leu Pro Arg Gln Pro
          115          120          125
Tyr Tyr Ile Lys Glu Ile Arg Asn Ile Asp Arg Asp Leu Arg Gln Arg
130          135          140
Gly Ile Asp Cys Ser Val Arg Ala Ala
145          150

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&lt;210&gt; 40790

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40790

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Leu Pro Ala Gly Asp Leu Val Leu His Cys Ala Leu Phe Ala Lys Pro
1           5           10           15
Thr Ala Glu Ser Glu Arg Leu Val Lys Tyr Leu Val Gln His Val Pro
          20           25           30
His Cys Leu Glu Val Lys Ser Val Asp Gly Tyr Thr Pro Leu Met Ile
          35           40           45
Ala Phe Ser Leu Val Arg Pro Thr Tyr Ala Lys Ile Leu Ile Lys Ala
          50           55           60
Gly Ala Asp Gln Thr Val Arg Asp Lys Lys Gly Cys Asn Ile Leu His
65           70           75           80
His Leu Phe Cys Gly Val Ser Ser Pro Ser Val Glu Arg Leu Asp Asp
          85           90           95
Phe Gln Lys Met Leu Gly Leu Val Asp Pro Ser Leu Val Ser Ser Leu
          100          105          110
Leu Val Glu Arg Ser Ser His Gly Pro Gly Ser Leu Thr Pro Leu Ala
          115          120          125
Met Trp Met Met Arg Ala Leu Asn Thr Thr Asn Thr Tyr Ser Val Tyr
130          135          140
Gly Asn Gly Ser Asn Tyr Glu Gly Asp Asn Gln Met Glu Thr Leu Arg
145          150          155          160
Ile Ile Leu Asp Phe Ala Gln Ser Thr Gly Gln Lys His Leu Glu Leu
          165          170          175
Leu Asn Gly Ala Gly Asn Ser Ile Met His Asp Ala Val Arg Cys Gln
          180          185          190
Leu Leu Lys Thr Leu Glu Ile Leu Phe Glu Arg Arg Pro Asp Leu Leu
          195          200          205
His Arg Glu Asn Ala Ser Gly Leu Thr Pro Ala Glu Val Ala Glu Ala
210          215          220

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## 17905

Ser Trp Val Thr Glu Val Thr Ser Asn Pro Pro Gly Trp Glu Arg Arg  
 225 230 235 240  
 Tyr Arg Phe Thr Tyr Ser Ser Gln Tyr Gly Glu Ser Leu Val Asp Arg  
 245 250 255  
 Arg Pro Glu Ser Phe Val Glu Glu Gly Asp Glu Ala Pro Thr Met Lys  
 260 265 270  
 Arg Arg Ile Tyr Asp Phe Cys Arg Ser Lys Ala Glu Thr Leu Arg Glu  
 275 280 285  
 Pro Asp Val Lys Arg Arg Leu Val Thr Leu Phe Glu Ala Asn Glu Val  
 290 295 300  
 Ala Arg Arg Leu Val Ala Lys Asp Leu Gln Glu Asn Gln Asn Phe Gly  
 305 310 315 320  
 Gly Ala Ala Arg Arg Arg Arg Trp Asp Lys His Asp Glu Arg Glu Phe  
 325 330 335  
 Gly Asp Glu Val Arg Glu Trp Leu Pro Glu Val Phe  
 340 345

&lt;210&gt; 40791

&lt;211&gt; 954

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40791

Ser His Gln Thr Ile Pro Tyr Gly Glu Arg Phe His Ala Arg Lys Ile  
 1 5 10 15  
 Glu Lys Leu Leu Tyr Thr Lys Asp Leu Leu Leu Asn Ala Glu Trp Asn  
 20 25 30  
 Lys Pro Lys Asp Arg Glu Val Asn Leu His Arg His Pro Ala Phe Phe  
 35 40 45  
 Gly Asn Phe Glu Asp Val Ile Glu Asp Cys Cys Gly Phe Cys Pro Val  
 50 55 60  
 Pro Ile Thr Pro Glu Glu Lys Glu Leu Thr Glu Glu Ser Lys Ile  
 65 70 75 80  
 Tyr Val Ser Gly Arg Ile Lys Phe Leu Gln Asp Asn Pro Gly Arg Gln  
 85 90 95  
 Glu Ile Gly Ser Phe Asn Pro Ile Thr Glu Thr Asp Trp Thr Gly Gln  
 100 105 110  
 Cys Phe Leu Ile Ala Trp Cys Pro Asn Ala Asn Val Tyr Thr Asp Met  
 115 120 125  
 Ala Tyr Val Gly Asn Thr Ala Gly Leu Cys Gln Ala Ile Val Asp Asn  
 130 135 140  
 Asp Val Glu Gly Val Lys Gln Trp Leu Ser Pro Asp Phe Asp Val Asn  
 145 150 155 160  
 Arg Arg Asp Phe Thr Gly Arg Thr Pro Leu His Leu Ala Val Met Thr  
 165 170 175  
 Ser Thr Pro Glu Ile Val Gln Cys Leu Val Asp His Gly Ala Arg Leu  
 180 185 190  
 Val Ala Arg Leu Ala Asp Gly Arg Thr Ala Leu His Leu Ala Ala Ala  
 195 200 205  
 Arg Gly His Val Glu Ile Ile Arg Ile Leu Leu Thr Lys Ser Glu Glu  
 210 215 220  
 Asn Glu Asp Glu Glu Ala Arg Lys Glu Gln Ala Arg Lys Gly Val Ser  
 225 230 235 240  
 Ser Gly Lys Glu Ala His Asp Gly Glu Glu Asp Ala Glu Leu Ile Gln  
 245 250 255  
 His Pro Ser Ala Glu Ser Glu Ala Asp Ala Gln Ser Phe Ala Thr Gly

			260					265					270			
Ser	Phe	Val	Lys	Val	His	Lys	Asp	Ala	Asn	Ser	Ala	Gln	Asp	Ser	Val	
		275					280					285				
Pro	Asp	Asp	Ser	Ser	Asp	Gln	Asp	Pro	Asp	Val	Tyr	Asp	Ile	Asn	Val	
	290					295					300					
Ile	Ala	Trp	Asp	Ser	His	Ala	Ser	Pro	Leu	His	Leu	Ala	Ile	Leu	Asn	
305					310					315					320	
Gly	His	Ile	Ala	Ala	Val	Glu	Glu	Leu	Val	Ser	Ser	Phe	Gly	Ala	Asp	
				325					330					335		
Val	Leu	Leu	Pro	Val	Lys	Leu	Leu	His	Glu	Tyr	Asn	Asn	Ser	Pro	Arg	
			340					345					350			
Ala	Ala	Ile	Leu	Thr	Leu	Val	Leu	Ala	Leu	Gln	Leu	Pro	Ile	Glu	Gln	
		355					360					365				
Ala	Lys	Ala	Met	Thr	Thr	Lys	Leu	Leu	Gln	Leu	Gly	Ala	Ser	Pro	Ala	
	370					375					380					
Gln	Ala	Asp	Leu	Asp	Gln	Lys	Thr	Ala	Val	Ala	His	Ile	Ala	Ala	Leu	
385					390					395					400	
Pro	Lys	Tyr	Thr	Glu	Leu	Leu	Asp	Ser	Tyr	Leu	Gln	His	Asp	Arg	Pro	
				405					410					415		
Ala	Val	Glu	Arg	Ala	Leu	Asn	Tyr	Ile	Ala	Thr	Ser	Gly	Trp	Gln	Phe	
			420					425					430			
Ser	Pro	Asn	Ala	Glu	Thr	Ala	Leu	Lys	Thr	Ala	Ile	Lys	Ser	Gly	Asn	
		435					440					445				
Val	Ile	Gly	Ala	Leu	Lys	Leu	Leu	Asp	Ala	Gly	Ala	Ser	Pro	Thr	Ile	
	450					455					460					
Ala	Phe	Asp	Glu	Phe	Ile	Lys	Ser	Ala	Gln	Val	His	Ile	Asp	Gly	Ile	
465					470					475					480	
Arg	Asn	Asn	Ser	Ser	Glu	Gln	Val	Lys	Arg	Arg	Phe	Asp	Ala	Asn	Val	
				485					490					495		
Thr	Gln	Pro	Ile	Ile	Leu	Ser	Val	Leu	Lys	Asp	Gln	Pro	Ser	Val	Ala	
			500					505					510			
Leu	Lys	Leu	Leu	Ala	Arg	Gly	Ala	Asp	Pro	Asn	Thr	Leu	Thr	Lys	Glu	
		515					520					525				
Gly	His	Gln	Ile	Gln	His	Glu	Val	His	Ala	Arg	Ala	Tyr	Arg	His	Gly	
	530					535					540					
Lys	Ser	Leu	Leu	Asp	Cys	Val	Arg	Glu	Lys	Leu	Asn	Ala	Leu	Arg	Ala	
545					550					555					560	
Tyr	Glu	Pro	Glu	Thr	Asp	Ser	Pro	Glu	Pro	Pro	Arg	Pro	Leu	Glu	His	
				565					570					575		
Glu	Asp	Ser	Tyr	Leu	Ser	Pro	Phe	Arg	Glu	Asp	Thr	Tyr	Gln	Leu		
			580					585					590			
Trp	Thr	Ala	Lys	Ala	Ala	Leu	Arg	Ser	Ala	His	Ser	Ser	Leu	Glu	Ser	
		595					600					605				
Glu	Gln	Lys	Arg	Tyr	Asp	Asp	Asp	Val	Lys	Cys	Ala	Ala	Asn	Arg	Lys	
	610															

## 17907

705                      710                      715                      720  
 Leu Thr Val Phe Arg Phe Glu Ala Ala Trp Cys Gly Asp Leu Glu Thr  
                                  725                      730                      735  
 Ile Lys Ser Leu Thr Leu Gly Thr Trp Gly Pro Asp Lys Gln Arg Pro  
                                  740                      745                      750  
 Pro Leu Glu Ile Ala Thr Lys Asp Gln Arg Asn Phe His Pro Phe Asn  
                                  755                      760                      765  
 Ile Ala Val Leu Arg Gly His Leu Asp Val Ala Lys Ala Ile Leu Ala  
                                  770                      775                      780  
 Ile Ala Gln Val Gln Tyr Lys Pro Gln Asp Glu Gln Ala Asn Val Arg  
 785                      790                      795                      800  
 Tyr Arg Leu Arg Ala Thr Thr Asn His Asp Asp Gly Cys Ser Ser Asp  
                                  805                      810                      815  
 Asp Glu Gly Asp Glu Asp Asp Asn Asp Asn Ser Asp Gly Leu Asp Ile  
                                  820                      825                      830  
 Glu Arg Gln Ile Leu Asp Glu Lys Phe Thr Ile Asp Asn Ile Gly Glu  
                                  835                      840                      845  
 Val Lys Thr Gln Val Glu Ser Arg Thr Pro Pro Leu Ser Leu Leu Glu  
                                  850                      855                      860  
 Asp Cys Cys Ser Ala Glu Asp Phe Ile Glu Thr Ser Leu Pro Glu Asp  
 865                      870                      875                      880  
 Arg Lys Pro Tyr Asn Leu Val Gln Tyr Ala Ile Cys Lys Asp Asp Val  
                                  885                      890                      895  
 Arg Leu Leu Val Phe Leu Leu Asp Leu Gly Arg Glu Leu Ser Ala Lys  
                                  900                      905                      910  
 Ser Gly Ser Ser Glu Gln Thr Ile Phe Thr Val Gly Gln Arg Asp Leu  
                                  915                      920                      925  
 Thr Val Ala Met Gln Leu Gly Arg Val Arg Cys Leu Ala Glu Leu Ile  
                                  930                      935                      940  
 Lys Arg Met Gly Ala Gly Ile Pro Leu Asp  
 945                      950

&lt;210&gt; 40792

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40792

Ile Asn Arg Leu Ser Asp Val Lys Asp Phe Pro Ser Leu Ile Trp Asn  
 1                      5                      10                      15  
 Ala Asp Glu Gly Phe Asp Glu Val Glu Ala Trp Gly Leu Trp Phe Ala  
                                  20                      25                      30  
 Glu Gly Thr Ala Pro Leu Thr Glu Gly Tyr Phe Glu Gly Leu Glu Thr  
                                  35                      40                      45  
 Ile Gly Ile Gln Arg Ile Asp Thr Asn Ser Arg Leu Tyr Met Asp Asp  
                                  50                      55                      60  
 Glu Thr Ile Ile Ser Val Phe Thr Asp Asp Ile Leu Phe Leu Tyr Tyr  
 65                      70                      75                      80  
 Cys Lys Gly Lys Glu His Ala Asn Asn Leu Asn  
                                  85                      90

&lt;210&gt; 40793

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40793

Leu Glu Glu Ser Pro Met Gly Gly Leu Ser Gln Ser Asp Gly Cys Ser  
 1 5 10 15  
 Pro Gly Ser Arg Leu Leu Pro Glu Lys Arg Leu Pro Phe Ser Glu Ile  
 20 25 30  
 Ser Lys Ala Ser Arg Thr Pro Gln Arg Glu Ala Ala Trp Arg Ser Pro  
 35 40 45  
 Gln Leu Val Phe Val Gly Ile His Lys Phe Gly Asp Cys Lys Asn Leu  
 50 55 60  
 Lys Cys Met Leu Gln Ser Ser Ser Ala Leu Leu Ile Leu Thr Glu His  
 65 70 75 80  
 Ser Val Arg Asn Gln Val Leu Cys Ile Gln Pro Leu Gln Thr Ile Leu  
 85 90 95  
 Ser Leu Ser Gln Tyr Phe Thr Lys Gln Asn Met Ala Asp Ser Tyr Thr  
 100 105 110  
 Leu Pro Ala Val Pro Ala Lys His Ser Thr Phe Ile Asp Tyr Ile Asn  
 115 120 125  
 Ser Arg Pro His Glu Ser Ile Pro Asp Leu Val Arg Pro Tyr Asn Glu  
 130 135 140  
 Tyr Asp Ala Val Leu Arg Lys Ile Tyr Ala Gln Gln Pro Ser His Pro  
 145 150 155 160  
 Ala Ile Ala Asn Lys Leu Ile Asn Leu Val Pro Leu Phe Asp Gly Ser  
 165 170 175  
 Gly Ser Ala Asp Leu Arg Ile Arg Ala Arg Asp Leu Ala Ser Glu Pro  
 180 185 190  
 Glu Glu Leu Lys Ala Lys Tyr Leu Met Pro Leu Lys Asp Glu Asp Arg  
 195 200 205  
 Lys Ala His Gly Ser Pro Ala Val Val Ser Ser Phe Lys Gln Phe Gln  
 210 215 220  
 Thr Asn Phe Asn Leu Phe Ser Glu Ser Ala Leu Ser Asp Leu Asp Trp  
 225 230 235 240  
 Ser Asn Val Val Ala Ala Gly Ser Ala Val Thr Thr Ser Leu Leu Pro  
 245 250 255  
 Val Pro Glu Glu Tyr Arg Asp Ser Lys Arg Gly Leu Arg Glu Tyr Tyr  
 260 265 270  
 His Gln Lys Phe Ala Pro Ala Ser Asp Val Asp Leu Phe Leu Tyr Gly  
 275 280 285  
 Leu Thr Glu Glu Gln Ala Ile Glu Lys Ile Lys Gln Ile Glu Thr Arg  
 290 295 300  
 Ile Lys Asp Ser Ile Leu Ala Glu Thr Ser Thr Ile Arg Thr Lys Asn  
 305 310 315 320  
 Ala Ile Thr Ile Val Ser Gln Tyr Pro Thr Arg His Val Gln Ile Val  
 325 330 335  
 Leu Arg Ile Tyr Lys Ser Ile Ala Glu Ile Leu Thr Gly Phe Asp Val  
 340 345 350  
 Asp Cys Ser Cys Ala Ala Tyr Asp Gly Ser Gln Val Tyr Leu Ala Pro  
 355 360 365  
 Arg Ala Val Gly Ala Phe Val Thr Gln Ile Asn His Val Asp Leu Ser  
 370 375 380  
 Arg Arg Ser Pro Ser Tyr Glu Asn Arg Leu Ser Lys Tyr Ala Arg Arg  
 385 390 395 400  
 Gly Phe Glu Val Phe Trp Pro Leu Leu Asp Arg Thr Arg Ile Asp Pro  
 405 410 415  
 Val Cys His Leu Thr Glu His Tyr Glu Trp Arg  
 420 425

17909

<210> 40794  
 <211> 107  
 <212> PRT  
 <213> A.fumigatus

<400> 40794  
 Val Arg Val Leu Ser Leu Thr Ile Phe Phe Thr Pro Val Ile Val Leu  
 1 5 10 15  
 Ser Phe Leu Ser Leu Leu Gln Asn Cys Ala Ile Ile Thr Glu Glu Asp  
 20 25 30  
 Ile Ile Ile Ser Leu Leu Asp Cys Cys Asn Pro Ala Leu Lys Ser Arg  
 35 40 45  
 Val Asn Asn Pro Ile Gly Val Pro Ile Thr Leu Val Ser Gly Cys Glu  
 50 55 60  
 Phe Val Glu Ser Arg Arg Arg Thr Leu Tyr Thr Gly Leu Lys Asn Ile  
 65 70 75 80  
 Phe Asn Gln Tyr Asn Thr Leu Ile Ala Ile Pro His Pro Phe Val Ile  
 85 90 95  
 Ile Pro Val Phe Met Lys Ser Thr Met Pro Glu  
 100 105

<210> 40795  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 40795  
 Phe Ala Met Ser Val Gly Pro Ser Val Asn Leu Met Leu Tyr Leu Val  
 1 5 10 15  
 Pro Phe Leu Arg Gln Cys Ile Arg Ile Cys Ala Ser Gly Gln Lys Leu  
 20 25 30  
 Gln Gly His Gly Trp Leu Ile Phe Glu Asp Thr Gln Tyr Asp Arg Leu  
 35 40 45  
 Gly Tyr Val Ser Ile Glu Ser Ser Leu His Leu Leu Gly Gly Val Val  
 50 55 60  
 Pro Tyr Ser Ile Asp Val His Leu Arg  
 65 70

<210> 40796  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 40796  
 Leu Ile Thr Arg Phe Ile Val Asp Ser Lys Gln Asn Ala Phe Leu Pro  
 1 5 10 15  
 Leu Leu Ile Lys Ile His Val Thr Ala Ser Val Leu Asp Leu Arg Gln  
 20 25 30  
 Arg Val Val Leu Ile His His Phe Leu Val Phe Leu His Phe His Leu  
 35 40 45  
 Val Ile Arg Gln Asn Val Asp Ala Ser Phe Ala His Asp His Pro Gly  
 50 55 60  
 Asn Leu Ala Val Leu Asp Thr Ala Thr Gln Asp Glu Asn Gly Glu Phe  
 65 70 75 80  
 Val Glu Asp Leu Ala Leu Asp Asp Pro Arg Gln Arg Thr Gly Thr Val  
 85 90 95

Arg Trp

&lt;210&gt; 40797

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40797

Val Pro Cys Leu Ala Glu Ile Ile Leu Asp Phe Leu Gly Ala Leu Asp  
 1 5 10 15  
 Gly Asn Val Ala Val Val Leu Leu Glu Thr Ala Leu His Leu Val Glu  
 20 25 30  
 Ala Gln Val Asp Asp Leu Ala Asp Phe Leu Pro Gly Glu Pro Val Glu  
 35 40 45  
 Asp Asp Asp Ala Gly Asp Pro Val Gln Glu Leu Gly Gln Glu Ile Ile  
 50 55 60  
 Ala Glu Ser Ala His Asp Gln Leu Ala Gly Leu Arg Val Asn Ala Ala  
 65 70 75 80  
 Ile Leu Gly Gly Arg Ala Arg Glu Glu Leu Gly Ser Gln Val Gly Gly  
 85 90 95  
 His Asp Asp Asp Ala Val Leu Ser Val Asp Asn Ser Ala Leu Ala Ile  
 100 105 110  
 Gly Asn Pro Thr Val Val His Glu Leu Gln Lys Asn Gly Glu His Leu  
 115 120 125  
 Leu Gly Cys Leu Phe Asp Phe Val Glu Gln Lys Asp Gly Glu Gly Pro  
 130 135 140  
 Thr Ala Gln Thr Leu Gly Gln Leu Thr Thr Ser Ile Val Ser His Val  
 145 150 155 160  
 Ala Gly Arg Arg Thr Asn His Pro Ala Gln Arg Val Pro Leu Leu Val  
 165 170 175  
 Leu Gly His Val Glu Pro Asp His Gly Leu Gly Val Val Glu Glu  
 180 185 190  
 Leu Gly Lys Cys Leu Gly Gln Gln Ser Leu Thr Gly Thr Gly Gly Thr  
 195 200 205  
 Ala Glu Glu Glu Ala Trp Arg Arg Val Gly Val Thr Glu Thr Arg Pro  
 210 215 220  
 Leu Gln Pro Asn Gly Ile Gly Asp Arg Ser Asp Ser Leu Leu Leu Ala  
 225 230 235 240  
 His Asn Asp Leu Ala Lys Val Leu Leu His Val Gln Gln Leu Val Pro  
 245 250 255  
 Leu Gly Gly Leu Glu Ser Gly Asp Arg Asp Thr Ser Pro Thr Gly Asp  
 260 265 270  
 Asn Leu Val Asp Leu Ile Gly Ser Asp Arg Val Gly Gln Gln Gly Leu  
 275 280 285  
 Ala Ile Val Thr Met Ser Ser Thr Thr Phe Leu Val Cys Leu Asp Ala  
 290 295 300  
 Ile Gly Leu Glu Ser Leu Asp  
 305 310

&lt;210&gt; 40798

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40798



17911

Asp Asn Arg Val Leu Gly Phe Phe Asp Leu Leu Glu Asn Ala Leu His  
 1 5 10 15  
 Ser Leu Phe Glu Leu Pro Pro Val Leu Ala Thr Gly His Gln Arg Ala  
 20 25 30  
 Asp Ile Gln Gly Lys Gln Pro Ala Leu Gly Gln Ile Gly Arg Asn Ile  
 35 40 45  
 Gly Val His Asp Thr Ala Ser Gln Thr Phe Asp Asn Ser Gly Leu Thr  
 50 55 60  
 Asp Thr Gly Leu Thr Asp Gln His Arg Val Val Leu Arg Pro Ser Thr  
 65 70 75 80  
 Glu Asn Ala Asp Asp Ser Thr Asn Leu Leu Leu Thr Thr Asn Asp Arg  
 85 90 95  
 Ile Asp Leu Ala Leu Ser Gly Gln Ser Ser His Val Asn Gly Glu Leu  
 100 105 110  
 Leu Glu Val Leu Ile Leu Ala Leu Ser Val Gly Arg Leu Gly Val Tyr  
 115 120 125  
 Pro Pro Cys Thr Ser Asp Leu Leu Tyr Arg Gly Val Asp Gln Leu Asp  
 130 135 140  
 Ile Gly Asp Val Arg Ile Arg Gln Cys Pro Leu His Leu Arg Ile Leu  
 145 150 155 160  
 Asn Asp Arg Glu Asp Glu Val Val Asn Gly Asn Val Ala Val Phe Leu  
 165 170 175  
 Arg Leu Gly Gln Leu Gly Arg Arg Thr Asn Asp Phe Gly Lys Gly Gly  
 180 185 190

<210> 40799

<211> 145

<212> PRT

<213> A.fumigatus

<400> 40799

Asn Ala Leu Ser Arg Cys Cys Pro Arg Ile Leu Gly Val Met Ile Arg  
 1 5 10 15  
 Met His Lys Leu Asn Pro Gln Gly Val Ser Leu Arg Asn Val Thr Tyr  
 20 25 30  
 Leu Met Gln Gly Lys Arg Val Phe Ile Lys Asp Ile Ile His Tyr Ile  
 35 40 45  
 Leu Pro Pro Asp Gly Lys Leu Ala Ser Ile Ala Pro Ser Leu Lys Arg  
 50 55 60  
 Ile Lys Arg Gly Val Gly Thr Asn Gly Gln Thr Thr Gly Glu Glu Asn  
 65 70 75 80  
 Gly Val Val Asn Ala His Val Asp Gln Gly Ser Asn Gly Gln Asp Gln  
 85 90 95  
 Thr Gly Gln Asn Gly His Ser Lys Ser Arg Ala Ser Glu Pro Tyr Pro  
 100 105 110  
 Tyr Asp Thr Glu Pro Glu Arg Gly Asn Pro Thr Val Met Pro Lys Glu  
 115 120 125  
 Leu Leu Ser Arg Phe His Phe Ala Phe Ile Ile Arg Asp Pro Phe His  
 130 135 140  
 Pro  
 145

<210> 40800

<211> 170

<212> PRT

<213> A.fumigatus

&lt;400&gt; 40800

Gln Thr Gln Ser Ile Ala Gln Ser Leu Ser Pro Pro Lys Arg Asn Lys  
 1 5 10 15  
 Ile Arg Val Ala Val Ser Ile Asp Leu Asp Ala Val Ser Gly Trp Leu  
 20 25 30  
 Gly Thr Gly His His Pro Asp Asn Ile Leu Ala Asp Tyr Ser Ala Gly  
 35 40 45  
 Phe Phe Ala Ala Lys Val Gly Val Pro Arg Leu Leu Arg Met Leu Ala  
 50 55 60  
 Lys Leu Asn Leu Ala Asp Arg Cys Thr Trp Phe Ile Pro Gly His Ser  
 65 70 75 80  
 Ala Glu Ser Phe Pro Asp Glu Val Ala Gln Val Val Ala Ser Gly Ala  
 85 90 95  
 Glu Ile Gly Leu His Gly Tyr Ala His Glu Gly Ala Tyr Gln Met Thr  
 100 105 110  
 Pro Gln Gln Glu Arg Asp Val Leu Val Lys Cys Ile Asp Ile Ala Thr  
 115 120 125  
 Lys Leu Thr Gly Lys Lys Pro Val Gly Tyr Arg Ala Pro Leu Tyr Gln  
 130 135 140  
 Leu Arg Glu Ser Thr Leu Asp Leu Leu Glu Glu Phe Gly Phe Glu Tyr  
 145 150 155 160  
 Gly Ala Phe Pro Pro Leu Phe His Tyr Lys  
 165 170

&lt;210&gt; 40801

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40801

His Pro Asp Ala Ser Leu Thr Asp His Asp Cys His Pro Phe Phe Ala  
 1 5 10 15  
 Pro Arg Arg Pro Ala Leu Gln Pro Ile Asp Phe Ser Gln Pro Ala Ser  
 20 25 30  
 Thr Trp Met His Pro Ile Pro Ser Ala Gly Ala Asn Ala Arg Glu Asp  
 35 40 45  
 Arg Arg Pro Leu Val Cys Val Pro Cys Asn Trp Tyr Met Glu Asp Met  
 50 55 60  
 Thr Pro Met Gln Phe Leu Pro His Val Pro Asn Ser His Gly Tyr Thr  
 65 70 75 80  
 Asp Val Arg Val Ile Glu Asn Leu Trp Arg Asp Arg Phe Leu Trp Ile  
 85 90 95  
 Arg Glu Asn Glu Glu Glu Pro Ile Phe Pro Val Leu Met His Pro Asp  
 100 105 110  
 Thr Ser Gly Met Ala His Val Ile Gly Met Val Glu Arg Leu Leu Gly  
 115 120 125  
 Trp Val Lys Gly Trp Gly Asp Glu Val Glu Phe Cys Gln Thr Arg Glu  
 130 135 140  
 Ile Ala Arg Trp Phe Arg Glu Arg Asn Ala Thr Glu  
 145 150 155

&lt;210&gt; 40802

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40802

Gly Ser Met Arg Pro Ser Leu Val Val Gly Arg Glu Arg Asn Ser Ala  
 1 5 10 15  
 Pro Arg Leu Glu Val Met Thr Thr Met Gln Phe Leu Ala Ser Thr Ile  
 20 25 30  
 Leu Pro Trp Pro Ser Val Ile Arg Pro Ser Ser Met Ser Cys Arg Arg  
 35 40 45  
 Thr Val Ser Thr Ser Leu Ala Ala Phe Ser Thr Ser Ser Asn Arg Arg  
 50 55 60  
 Met Glu Lys Gly Arg Arg Arg Arg Leu Ser Val Ser  
 65 70 75

&lt;210&gt; 40803

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40803

Val Ser Pro Asp Arg Ser Ala Ser Ser Leu Leu Thr Leu Ser Glu Ser  
 1 5 10 15  
 Ser Leu Ile Leu Ala Ser Trp Ile Ala Leu Leu Arg Cys Phe Ser Leu  
 20 25 30  
 Ser Tyr Phe Ser Arg Lys Gly Arg Asn Ser Ser Val Thr Leu Ala Ala  
 35 40 45  
 Ser Cys Leu Ala Ala Ser Asn Arg Ala Leu Asp Ala Ser Ser Phe Ser  
 50 55 60  
 Arg Ser Arg Ala Trp Ile Ser Ile Cys Ser Trp Arg Ser Leu Leu Ser  
 65 70 75 80  
 Arg Leu Ser Arg Ala Ser Gly Ser Asp Ser Arg Val Thr Leu Thr Ala  
 85 90 95  
 Ala Ala Ala Ser Ser Met Arg Ser Thr Ala Glu Ser Gly Ser Arg Arg  
 100 105 110  
 Ala Val Arg Tyr Leu Ala Ala Asn Ser Ala Ala Val Thr Ile Ala Pro  
 115 120 125  
 Ser Arg Met Leu Thr Pro Trp Trp Thr Ser Tyr Phe Ser Phe Arg Pro  
 130 135 140  
 Arg Arg Met Glu Ile Val Ser Glu Thr Val Gly Ser Leu Thr Arg Thr  
 145 150 155 160  
 Cys Trp Asn Arg Arg Ser Asn Ala  
 165

&lt;210&gt; 40804

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40804

Pro Arg Ala Ser Ile Gly Phe Ser Arg Leu Ala Ala Ser Ile Pro Pro  
 1 5 10 15  
 Ser Pro Leu Glu Pro Ala Pro Met Arg Arg Trp Ile Ser Ser Thr Asn  
 20 25 30  
 Arg Thr Ile Val Ser Leu Asp Ser Ser Ile Ser Leu Arg Thr Pro Phe  
 35 40 45  
 Ile Leu Ser Ser Asn Ser Pro Arg Tyr Leu Leu Pro Ala Thr Asn Glu  
 50 55 60

## 17914

Pro Thr Ser Arg Glu Ser Ser Leu His Trp Ala Arg Leu Ala Gly Thr  
65 70 75 80  
Ser Ala Phe Thr Ile Arg Arg Ala Arg Pro Ser Thr Ile Val Val Leu  
85 90 95  
Pro Thr Pro Gly Ser Pro Ile Ser Thr Gly Leu Phe Phe Val Arg Arg  
100 105 110  
Leu Arg Met Arg Met Thr Arg Arg Ile Ser Ser Ser Arg Pro Met Thr  
115 120 125  
Gly Ser Ile Leu Pro Ser Leu Ala Arg Ala Val Met Ser Met Val Asn  
130 135 140  
Phe Leu Arg Phe Ser Phe Ser Pro Ser Ala Ser Ala Val Leu Glu Ser  
145 150 155 160  
Thr Arg Arg Val Pro Arg Ile Cys Cys Thr Ala Val Ser Ile Ser Leu  
165 170 175  
Thr Leu Gly Met Phe Ala Ser Ala Ser Ala Arg Cys Thr  
180 185

&lt;210&gt; 40805

&lt;211&gt; 1025

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40805

Ile Asn Ser Gly Phe Thr Cys Leu Arg Leu Ala Arg Ser Leu Ser Asp  
1 5 10 15  
Ser Arg Ser Val Asp Tyr Ile Ser Cys Trp His Val Met Gly Ile Asp  
20 25 30  
Cys Ser Gly Arg Arg Trp Asn Pro Leu Val Ser Ser Trp Gly Asn Arg  
35 40 45  
Glu Ala Ser Arg His Cys Glu Glu Trp Ala Asp Asp Thr Gln Leu Gln  
50 55 60  
Leu Tyr Leu Ala Pro Leu Ser Ser Ala Gln Ala Val Ser Ser Leu Leu  
65 70 75 80  
Leu Cys Leu Leu Ser Pro Ser Leu Ser Leu Pro Asp Thr Gln Phe Arg  
85 90 95  
Phe Thr Met Asn Gly Ala Gln Phe Thr Asp Arg Ala Asn Lys Ala Leu  
100 105 110  
Leu Asp Ser Ser His Leu Ala Glu Gln Tyr Ala His Ser Gln Ile Leu  
115 120 125  
Pro Ile His Leu Ala Leu Ala Leu Leu Asn Pro Pro Pro Asp Asp Ser  
130 135 140  
Lys Asp Gln Gln Thr Ala Thr His Pro Ser His Asp Ser Ser Thr Ala  
145 150 155 160  
Pro Leu Phe Arg Gln Val Val Glu Arg Ala His Gly Asp Pro Gln Leu  
165 170 175  
Leu Glu Arg Ser Leu Met Lys Leu Leu Val Arg Leu Pro Ser Gln Asp  
180 185 190  
Pro Pro Pro Asp Thr Val Ser Val Ser Pro Ala Leu Ala Lys Val Ile  
195 200 205  
Arg Ala Ser Thr Glu Leu Ser Lys Thr Gln Lys Asp Ser Tyr Val Ala  
210 215 220  
Ile Asp His Leu Ile Leu Ser Val Val Gln Asp Ser Gln Val Gln Arg  
225 230 235 240  
Ala Leu Ala Asp Ala Asn Ile Pro Asn Val Lys Leu Ile Asp Thr Ala  
245 250 255  
Val Gln Gln Ile Arg Gly Thr Arg Arg Val Asp Ser Lys Thr Ala Asp

										260										265										270				
Ala	Glu	Gly	Glu	Asn	Glu	Asn	Leu	Lys	Lys	Phe	Thr	Ile	Asp	Met	Thr																			
										275					280					285														
Ala	Leu	Ala	Arg	Glu	Gly	Lys	Ile	Asp	Pro	Val	Ile	Gly	Arg	Glu	Glu																			
										290					295					300														
Glu	Ile	Arg	Arg	Val	Ile	Arg	Ile	Leu	Ser	Arg	Arg	Thr	Lys	Asn	Asn																			
										305					310					315					320									
Pro	Val	Leu	Ile	Gly	Glu	Pro	Gly	Val	Gly	Lys	Thr	Thr	Ile	Val	Glu																			
										325					330					335														
Gly	Leu	Ala	Arg	Arg	Ile	Val	Asn	Ala	Asp	Val	Pro	Ala	Asn	Leu	Ala																			
										340					345					350														
Gln	Cys	Arg	Leu	Leu	Ser	Leu	Asp	Val	Gly	Ser	Leu	Val	Ala	Gly	Ser																			
										355					360					365														
Lys	Tyr	Arg	Gly	Glu	Phe	Glu	Glu	Arg	Met	Lys	Gly	Val	Leu	Lys	Glu																			
										370					375					380														
Ile	Glu	Glu	Ser	Lys	Asp	Thr	Ile	Val	Leu	Phe	Val	Asp	Glu	Ile	His																			
										385					390					395					400									
Leu	Leu	Met	Gly	Ala	Gly	Ser	Ser	Gly	Glu	Gly	Gly	Met	Asp	Ala	Ala																			
										405					410					415														
Asn	Leu	Leu	Lys	Pro	Met	Leu	Ala	Arg	Gly	Gln	Leu	His	Cys	Ile	Gly																			
										420					425					430														
Ala	Thr	Thr	Leu	Gly	Glu	Tyr	Arg	Lys	Tyr	Ile	Glu	Lys	Asp	Gln	Ala																			
										435					440					445														
Phe	Glu	Arg	Arg	Phe	Gln	Gln	Val	Leu	Val	Lys	Glu	Pro	Thr	Val	Ser																			
										450					455					460														
Glu	Thr	Ile	Ser	Ile	Leu	Arg	Gly	Leu	Lys	Glu	Lys	Tyr	Glu	Val	His																			
										465					470					475					480									
His	Gly	Val	Asn	Ile	Leu	Asp	Gly	Ala	Ile	Val	Thr	Ala	Ala	Glu	Leu																			
										485					490					495														
Ala	Ala	Arg	Tyr	Leu	Thr	Ala	Arg	Arg	Leu	Pro	Asp	Ser	Ala	Val	Asp																			
										500					505					510														
Leu	Ile	Asp	Glu	Ala	Ala	Ala	Ala	Val	Arg	Val	Thr	Arg	Glu	Ser	Glu																			
										515					520					525														
Pro	Glu	Ala	Leu	Asp	Asn	Leu	Glu	Arg	Arg	Leu	Arg	Gln	Leu	Gln	Ile																			
										530					535					540														
Glu	Ile	His	Ala	Leu	Glu	Arg	Glu	Lys	Asp	Asp	Ala	Ser	Lys	Ala	Arg																			
										545					550					555					560									
Leu	Glu	Ala	Ala	Lys	Gln	Glu	Ala	Ala	Asn	Val	Thr	Glu	Glu	Leu	Arg																			
										565					570					575														
Pro	Leu	Arg	Glu	Lys	Tyr	Glu	Ser	Glu	Lys	Gln	Arg	Ser	Lys	Ala	Ile																			
										580					585					590														
Gln	Asp	Ala	Lys	Ile	Lys	Leu	Asp	Ser	Leu	Lys	Val	Lys	Arg	Asp	Glu																			
										595					600					605														
Ala	Glu	Arg	Ser	Gly	Asp	Thr	Gln	Thr	Ala	Ala	Asp	Leu	Glu	Tyr	Tyr																			
										610					615					620														
Ala	Ile	Pro	Glu	Thr	Lys	Ala	Leu	Ile	Glu	Arg	Leu	Glu	Ala	Asp	Arg																			
										625					630					635					640									
Ile	Lys	Ala	Asp	Glu	Glu	Arg	Arg	Ala	Arg	His	Gly	Asp	Asn	Gly	Glu																			
										645					650					655														
Ala	Leu	Leu	Ala	Asp	Ala	Val	Gly	Pro	Asp	Gln	Ile	Asn	Glu	Ile	Val																			
										660					665					670														
Ala	Arg	Trp	Thr	Gly	Ile	Pro	Val	Thr	Arg	Leu	Lys	Thr	Thr	Glu	Arg																			
										675					680					685														
Asp	Lys	Leu	Leu	His	Met	Glu	Lys	Tyr	Leu	Gly	Lys	Ile	Val	Val	Gly																			
										690					695					700														
Gln	Lys	Glu	Ala	Val	Thr	Ser	Val	Ser	Asn	Ala	Ile	Arg	Leu	Gln	Arg																			

## 17916

705                      710                      715                      720  
 Ser Gly Leu Ser Asn Pro Asn Ser Pro Pro Ser Phe Leu Phe Cys Gly  
                                  725                      730                      735  
 Pro Ser Gly Thr Gly Lys Thr Leu Leu Thr Lys Ala Leu Ala Glu Phe  
                                  740                      745                      750  
 Leu Phe Asp Asp Pro Lys Ala Met Ile Arg Phe Asp Met Ser Glu Tyr  
                                  755                      760                      765  
 Gln Glu Arg His Ser Leu Ser Arg Met Ile Gly Ala Pro Pro Gly Tyr  
                                  770                      775                      780  
 Val Gly His Asp Ala Gly Gly Gln Leu Thr Glu Ser Leu Arg Arg Arg  
 785                                   790                      795                      800  
 Pro Phe Ser Ile Leu Leu Phe Asp Glu Val Glu Lys Ala Ala Lys Glu  
                                  805                      810                      815  
 Val Leu Thr Val Leu Leu Gln Leu Met Asp Asp Gly Arg Ile Thr Asp  
                                  820                      825                      830  
 Gly Gln Gly Arg Ile Val Asp Ala Lys Asn Cys Ile Val Val Met Thr  
                                  835                      840                      845  
 Ser Asn Leu Gly Ala Glu Phe Leu Ser Arg Pro Thr Thr Lys Asp Gly  
                                  850                      855                      860  
 Arg Ile Asp Pro Gln Thr Arg Glu Leu Val Met Gly Ala Leu Arg Asp  
 865                                   870                      875                      880  
 Tyr Phe Leu Pro Glu Phe Leu Asn Arg Ile Ser Ser Ile Val Ile Phe  
                                  885                      890                      895  
 Asn Arg Leu Thr Arg Lys Glu Ile Arg Lys Ile Val Asp Leu Arg Leu  
                                  900                      905                      910  
 Asn Glu Val Gln Arg Arg Leu Glu Gln Asn Asn Arg Asn Val Thr Ile  
                                  915                      920                      925  
 Gln Cys Thr Glu Glu Val Lys Asp Tyr Leu Gly Glu Ala Gly Tyr Ser  
                                  930                      935                      940  
 Pro Ala Tyr Gly Ala Arg Pro Leu Ala Arg Ile Ile Glu Arg Glu Val  
 945                                   950                      955                      960  
 Leu Asn Lys Leu Ala Val Leu Ile Leu Arg Gly Ser Ile Gln Asp Gly  
                                  965                      970                      975  
 Glu Val Ala Arg Val Val Met Arg Glu Gly Arg Ile Asp Val Leu Pro  
                                  980                      985                      990  
 Asn His Glu Val Glu Met Glu Glu Asp Glu Glu Met Val Asp Glu Asp  
                                  995                      1000                      1005  
 Asp Ala Leu Ala Glu Ile Glu Asn Gly Ser Gly Asp Met Asp Leu Tyr  
                                  1010                      1015                      1020  
 Glu  
 1025

&lt;210&gt; 40806

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40806

Thr Gly Ser Pro Ala Ser Ser Ser Ser Thr Gly Ser Pro Gly Arg Lys  
 1                      5                      10                      15  
 Ser Ala Arg Ser Ser Thr Cys Ala Ser Thr Arg Cys Ser Ala Val Ser  
                                  20                      25                      30  
 Ser Arg Thr Thr Ala Thr Leu Pro Ser Ser Ala Pro Arg Lys Ser Arg  
                                  35                      40                      45  
 Ile Ile Ser Ala Arg Gln Gly Thr His Gln Arg Thr Val Pro Val Leu  
                                  50                      55                      60

17917

Trp	Arg	Gly	Ser	Ser	Ser	Ala	Arg	Ser	Ser	Thr	Asn	Ser	Pro	Phe	Ser
65					70					75					80
Ser	Cys	Val	Ala	Val	Ser	Arg	Thr	Ala	Arg	Leu	Pro	Gly	Trp	Ser	Cys
				85					90					95	
Ala	Lys	Asp	Ala	Ser	Thr	Phe	Cys	Arg	Ile	Thr	Arg	Trp	Lys	Trp	Arg
			100					105					110		
Lys	Thr	Arg	Lys	Trp	Trp	Met	Arg	Thr	Thr	Arg	Trp	Arg	Arg	Ser	Arg
		115					120					125			
Thr	Glu	Ala	Val	Thr	Trp	Ile	Phe	Met	Ser	Lys	Gly	Lys	Lys	Ala	Phe
	130					135					140				
Cys	Leu	Glu	Ser	Thr	Ile	Lys	Arg	Val	Met	Ser	Tyr	Asp	Met	Phe	Phe
145					150					155					160
Ile															

<210> 40807

<211> 121

<212> PRT

<213> A.fumigatus

<400> 40807

His	Ser	Ser	Pro	Glu	Thr	Thr	Ser	Gln	Ser	Pro	Ser	Ser	Gly	Lys	Ile
1				5					10					15	
Pro	Pro	His	Pro	Pro	Thr	Pro	Ser	Pro	Thr	Pro	Thr	Thr	Ala	Pro	Pro
			20					25					30		
Ser	Gln	Ser	His	Val	Pro	Cys	His	Ser	Tyr	Pro	Asp	Ala	Ser	Ala	Gln
	35					40						45			
Gly	Arg	Trp	Val	Pro	Pro	His	Ser	Pro	Glu	Ser	Thr	Gly	Thr	Asp	Pro
	50					55					60				
Ala	Thr	Ser	Ser	Arg	Ser	Pro	Ala	His	Pro	Cys	Thr	Arg	Ala	Ser	Trp
65					70					75					80
Ala	Arg	Ala	Ala	Gly	Ile	Ala	Trp	Gly	Ser	Cys	Leu	Pro	Cys	Thr	Ser
			85					90						95	
Cys	Arg	Gly	Arg	Arg	Arg	Gly	Gly	Ala	Asp	Leu	Arg	Val	Arg	Leu	Arg
		100					105						110		
Arg	His	Leu	Gly	Ser	Gly	Ala	Ser	Arg							
		115					120								

<210> 40808

<211> 139

<212> PRT

<213> A.fumigatus

<400> 40808

Pro	Ser	Asp	Pro	Arg	Ala	Gly	His	Gly	Arg	Ser	Pro	Arg	Leu	Phe	Pro
1				5					10					15	
Ala	Arg	Val	Pro	Glu	Pro	Asp	Leu	Gln	His	Arg	His	Leu	Gln	Pro	Ala
			20					25					30		
His	Gln	Glu	Gly	Asn	Pro	Gln	Asp	Arg	Arg	Pro	Ala	Pro	Gln	Arg	Gly
		35				40						45			
Ala	Ala	Pro	Ser	Arg	Ala	Glu	Gln	Pro	Gln	Arg	Tyr	His	Pro	Val	His
	50					55				60					
Arg	Gly	Ser	Gln	Gly	Leu	Ser	Arg	Arg	Gly	Arg	Val	Leu	Thr	Ser	Val
65					70				75						80
Arg	Cys	Pro	Ser	Ser	Gly	Ala	Asp	His	Arg	Ala	Arg	Gly	Pro	Gln	Gln
				85					90					95	

17918

Thr Arg Arg Ser His Pro Ala Trp Gln Tyr Pro Gly Arg Arg Gly Cys  
 100 105 110  
 Pro Gly Gly His Ala Arg Arg Thr His Arg Arg Ser Ala Glu Ser Arg  
 115 120 125  
 Gly Gly Asn Gly Gly Arg Arg Gly Asn Gly Gly  
 130 135

<210> 40809  
 <211> 434  
 <212> PRT  
 <213> A.fumigatus

<400> 40809  
 Ala Glu Pro Pro Thr Phe Phe Pro Glu Tyr Thr Gly Lys Asp Gly Ala  
 1 5 10 15  
 Thr Tyr Val Tyr Arg His Leu Ser Phe Trp Thr Ser Gly Phe Pro  
 20 25 30  
 Gly Ser Leu Tyr Leu Leu Leu Glu Arg Gln Ala Lys Asn Asn Ser Ser  
 35 40 45  
 Thr Glu Pro Cys Thr Pro His Pro Leu Val Leu Gln Gln Leu Cys Gln  
 50 55 60  
 Trp Trp Thr Val Asn Leu His Gln Asn Ala Thr Leu Asn Thr Thr His  
 65 70 75 80  
 Asp Leu Gly Phe Met Ile Ala Pro Trp Ala Ile Lys Ala Trp Glu Leu  
 85 90 95  
 His Arg Asp Ala Arg Ala Phe Ser Ser Leu Val Thr Ala Ala Asn Thr  
 100 105 110  
 Leu Ala Ser Arg Phe Cys Pro Lys Val Gln Ser Ile Arg Ser Trp Asp  
 115 120 125  
 Thr Cys Val Thr Lys Arg Tyr Ser Phe Thr Asp Pro Ser Arg Asp Phe  
 130 135 140  
 Leu Val Ile Ile Asp Asn Met Leu Asn Leu Asp Met Leu Phe Trp Val  
 145 150 155 160  
 Ala Lys Glu Thr Gly Asn Arg His Leu Tyr Asp Val Ala Leu Ala His  
 165 170 175  
 Ala Arg Thr Thr Gln Arg His His Ile Arg Ala Asn His Ser Thr Tyr  
 180 185 190  
 His Val Val Asn Phe Asp Gln Glu Thr Cys Thr Pro Lys Glu Lys Leu  
 195 200 205  
 Thr Asn Gln Gly Tyr Ser Asp Glu Ser Cys Trp Ala Arg Gly Gln Ala  
 210 215 220  
 Trp Gly Ile Leu Gly Phe Val Gln Thr Phe Gln Trp Thr Gly Asp Pro  
 225 230 235 240  
 Ser Phe Leu Gln Thr Ser Arg Gln Leu Ala Asp Tyr Phe Ile Lys Asn  
 245 250 255  
 Leu Pro Gly Asp Gly Val Pro Tyr Trp Asp Phe Asp Ala Pro Val Thr  
 260 265 270  
 Ser Asp Ser Pro Arg Asp Thr Ser Ala Ala Met Ile Ala Ser Cys Gly  
 275 280 285  
 Met Leu Leu Ile Tyr Lys Ala Leu Arg Ala Gln Gly Lys Tyr Asp Glu  
 290 295 300  
 Ser Glu His Tyr Leu Val Ala Val Lys Arg Ile Val Glu Gly Thr Leu  
 305 310 315 320  
 Ser Lys Phe Leu Asn Pro Pro Thr Phe Lys Phe Ile Val Gln Pro Ser  
 325 330 335  
 Asn Arg Gly Ile Glu Thr Tyr Glu Asp Gly Leu Pro Cys Asp His Glu



## 17919

340 345 350  
 Glu Lys Pro Glu Pro Gly Phe Leu Ala Val Ser Glu Ser Ala Ala Thr  
 355 360 365  
 Asn Gly Met Asn Gly Arg Gly Val Asn Gly Thr Glu Ser Lys Lys Pro  
 370 375 380  
 Val Ala Glu Thr Ile Leu Thr Gly Ala Thr Ile Asn Asn Tyr Glu Phe  
 385 390 395 400  
 Ala Pro Arg Arg Trp Ala Asn His Gly Leu Val Tyr Ala Asp Tyr Tyr  
 405 410 415  
 Phe Met Leu Leu Gly Asn Met Leu Leu Glu Leu Gly Leu Val Pro Ser  
 420 425 430  
 Leu Pro

<210> 40810  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 40810  
 Arg Leu Gln Thr Tyr Phe Cys Gln Ala Leu Asp Lys Gly Thr Leu Gly  
 1 5 10 15  
 Phe Ala Ser Ile Met Gly Ile Gln Thr Asp Ala His Leu Val Gly Asn  
 20 25 30  
 Glu Tyr Ser Trp Leu Gly Thr Ile Leu Tyr Ile Gly Val Leu Ala Gly  
 35 40 45  
 Glu Tyr Pro Thr Asn Phe Leu Leu Gln Lys Leu Pro Val Gly Lys Tyr  
 50 55 60  
 Ile Ala Ser Lys Tyr Val Cys  
 65 70

<210> 40811  
 <211> 121  
 <212> PRT  
 <213> A.fumigatus

<400> 40811  
 Trp Ser Ala Val Arg Pro Trp Arg Pro Gly Pro Asn Arg Leu Phe Leu  
 1 5 10 15  
 Pro Cys Ile Cys Gly Leu Cys Lys Leu Ser Ser Arg Ala Phe Glu Pro  
 20 25 30  
 Ile Ser Leu Cys Arg Pro Ala Ile Ile Gly Thr Ala Ile Ile Phe Thr  
 35 40 45  
 Ile Pro Pro Thr Pro Lys Thr Arg Ala Gly Leu Leu Ile Ala Phe Tyr  
 50 55 60  
 Cys Thr Gln Phe Ile Leu Ala Glu Gly Asn Leu Leu Phe Ser Leu Ile  
 65 70 75 80  
 Ser Arg Asn Val Ala Gly Gln Thr Lys Lys Ser Thr Val Leu Ala Val  
 85 90 95  
 Thr Phe Ile Ala Trp Ser Ala Ser Asn Ala Ala Ala Pro Gln Val Arg  
 100 105 110  
 Leu Ser Ser Pro Pro Glu Gly Ser Asp  
 115 120

<210> 40812  
 <211> 357

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40812

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Ser Cys Phe Asp Thr Pro Trp Gly Leu Lys Leu Val Pro Ala Gln Pro
1          5          10          15
Asp Gly Arg Gln Glu Asn Pro Lys Arg Ile Phe Asp Asp Pro Leu Glu
          20          25          30
Asp Leu Gln Ser Leu Phe Leu Ala Ile His Asp Lys His His Glu Phe
          35          40          45
Pro Leu Arg Leu Arg Pro Ser Val Pro Met Ser Pro Arg Pro Thr Ala
          50          55          60
Pro Pro Pro Asp Leu Asp Gln Leu Asp Cys Asn Lys Asp Lys Ile Pro
65          70          75          80
Ala Cys Gln Ser Cys Arg Arg Lys Lys Ala Lys Cys Asp Arg Glu Gln
          85          90          95
Pro Cys Ser Gln Cys Val Arg Phe Asn Val Ile Cys Leu Tyr Glu Asn
          100          105          110
Gly Arg Leu Lys Pro Gly Leu Arg Ala Gly Ala Val Glu Gln Leu Gln
          115          120          125
Arg Arg Val Glu Thr Leu Glu Asn Met Phe Ile Gly Gln Gly Ile Leu
          130          135          140
Trp Gln Lys Ile Trp Asp Thr Val Ser Asn Ser Ala Val Gly Val Glu
145          150          155          160
Gln Asn Asp Arg Asp Phe Glu Arg Ile Gly Val Asp Gln Val Arg His
          165          170          175
Arg Val Lys Asp Thr Leu Leu Gln Leu Ala Glu Asp Asn Gly Gly Cys
          180          185          190
Leu Arg Ser Val Val Asp Asn Val Pro Glu Asp Asn Ile Glu Arg Asp
          195          200          205
Ala Pro Pro Val Lys Arg Arg Lys Leu Asp Ser Gln Ser Ser Ala Thr
          210          215          220
Glu Arg Pro Ser Pro Ser Gly His Ser Ala Ser Ala Pro Leu Asn Ala
225          230          235          240
His Asp Leu Pro Ser Arg Asp Val Met Asn Asp Leu Val Glu Phe Tyr
          245          250          255
Phe Ala Asn Val His His Trp Ile Pro Ile Leu His Val Arg Lys Phe
          260          265          270
Arg Glu Gln Ile Gln Thr Thr Glu Gly Trp Asp Lys Ala Ile His Ile
          275          280          285
Leu His Ala Ile Val Ala Thr Cys Ile Arg Phe Ser His His Pro Gly
          290          295          300
Ala Gly Thr Ile Glu Ala Arg Arg Glu Met Ala Val Ala Ser Arg Gln
305          310          315          320
Lys Val Ile Leu Asn Ser Met Glu Ser Phe Ser Val Glu Asn Leu Gln
          325          330          335
Ala Leu Val Ile Ile Ala Phe Asp Thr Val Gly His Ile Ala Ser Ser
          340          345          350
His Asn Arg Ile His
          355

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&lt;210&gt; 40813

&lt;211&gt; 544

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40813

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Ile Gly Ser Gly Arg Gly Pro Ser Ala Trp Ser Ile Val Gly Ser Met
1           5           10           15
Thr Arg Thr Val Glu Gln Leu Gln Leu Ser Val Glu Glu Ser Gln Gly
20           25           30
Asp Arg Gly Ser Gly Glu Gly Glu Phe Leu Ile Gln Arg Met Val Phe
35           40           45
Leu Lys Pro Ser Lys Phe Trp Trp Gln Ala Glu Glu Arg Arg Arg Val
50           55           60
Phe Trp Thr Val Phe Leu Met Asp Arg Phe Cys Ser Val Ser Thr Gly
65           70           75           80
Trp Asn Leu Ser Leu Thr Ser Ala Asp Val Lys Arg Arg Leu Pro Cys
85           90           95
Glu Gly Ala Leu Trp Glu Lys Glu Tyr Glu Val Arg Ala Pro Phe Phe
100          105          110
Gly Ile Ser Asp Lys Ser Thr Leu Ser Ser Ser Ser Pro Asn Ile Val
115          120          125
Asp Asn Asp Pro Ala Lys Gly Asp Pro Glu Gln Asp Ala Ile Gly Gly
130          135          140
Phe Ala Tyr Cys Ile Glu Ala Thr Glu Ser Leu Thr Leu Val Ile Asn
145          150          155          160
Phe Phe Leu Gln His Ala Leu Asn Leu Gln Asn Ala Gln Lys Ala Gln
165          170          175
Leu Trp Leu Met Lys Phe Lys Glu Leu Asp Leu Arg Leu Val Gln Trp
180          185          190
Lys Leu Phe Leu Pro Pro Lys Trp Arg Thr Ala Ser Val Leu Asn Glu
195          200          205
Asp Gly Val Met Asp Pro Asn Leu Thr Leu Ala His Met Thr His Asn
210          215          220
Thr Ala Val Ile Leu Leu His Gln Ser Ile Ala Tyr Pro Pro Ser His
225          230          235          240
Trp Lys Gln Cys Pro Val Arg Leu Pro Ser Val Ala Ser Ala Glu Thr
245          250          255
Cys Ile Glu Ala Ala Glu Ile Ala Thr Ile Gly Gln Gln Phe Leu
260          265          270
Asp His Ser Pro Ile Leu Thr Asn Pro Gln Phe Ser Phe Cys Leu Phe
275          280          285
Ile Ala Gly Arg Met Leu Leu Thr His Ser Thr Tyr Thr Lys Thr Ala
290          295          300
Ile Pro Asp Gln Leu Asp Ser Ile Ala Thr Ser Leu Trp Glu Ile Ser
305          310          315          320
Arg Arg Trp Ala Gly Pro Asn Thr Pro Gly Leu Glu Asn Leu Ala Ser
325          330          335
Val Phe Ala Lys Arg Leu Leu Asn Ala Arg Arg His Ala Ser Gly Arg
340          345          350
Thr Ser Leu Asp Ile Arg Arg Thr Val Tyr Ser Asp Ser Thr Glu Arg
355          360          365
Ala Asp Pro Val Pro Glu Gln Asn Ser Asp Gly Asn Glu Gly Pro Ala
370          375          380
Asp Ser Gln Ala Arg Thr Asn Leu Pro Arg Gly Ser Phe Asp Gly Ser
385          390          395          400
Gly His Ser Ala Ser Pro Lys Leu Pro Thr Tyr Ala Gly Asp Trp Ser
405          410          415
Asn Arg Asp Pro Met Gln Asn Gly Pro Ser Pro Asn Gly Ser Leu Tyr
420          425          430
Asn Ala Leu Ser Leu Ala Phe Pro Pro Leu Pro Leu Ser Leu Gln Pro

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17922

435		440		445
Gln Tyr Ala Ser Ile Ser	Glu Ala His Met Leu Asp	Pro Ala Leu Leu		
450	455	460		
Pro Lys Asp His Val Pro	Ser Leu Tyr Pro Ala Pro	Pro Val Glu Thr		
465	470	475	480	
Leu His Ala Gln Pro Leu	Trp Asp Pro Val Ala Gln	Ser Tyr Asn Asp		
	485	490	495	
Cys Asn Asn Asn Pro Asn	Pro Asp Tyr Ala Ser Arg	Phe Val Asn Leu		
	500	505	510	
Pro Ser Ser Pro Gly His	Arg Ile Ser Arg Tyr Gly	Asp Pro Ser Met		
	515	520	525	
Asn Gly Glu Asn Ile Pro	Pro Asn Gly Glu Val Pro	Gly Asn Ile Arg		
530	535	540		

<210> 40814  
 <211> 162  
 <212> PRT  
 <213> A.fumigatus

<400> 40814

Ile Gly Gly Leu Leu Ala Tyr Gly Val Glu His Tyr Arg Gly His Ser	
1	5 10 15
Ile Lys Ser Trp Gln Leu Leu Phe Leu Val Leu Gly Val Ala Thr Cys	
	20 25 30
Ala Trp Ala Leu Phe Met Gly Trp Tyr Leu Pro Asp Ser Pro Met Lys	
	35 40 45
Ala Lys Cys Trp Ser Glu Ala Asp Lys Arg Leu Met Val Glu Arg Val	
	50 55 60
Arg Ala Asn Glu Thr Gly Ile Gln Asn Arg Val Phe Lys Lys His Gln	
65	70 75 80
Val Leu Glu Val Leu Arg Asp Pro Ala Ile Trp Leu Tyr Ala Leu Leu	
	85 90 95
Gln Met Thr Ser Cys Leu Ile Ile Gly Leu Gly Val Phe Ser Asn	
	100 105 110
Ile Ile Ile Lys Ser Phe Gly Phe Thr Thr Leu Gln Thr Gln Leu Leu	
	115 120 125
Asn Ile Ala Gln Gly Gly Val Thr Ile Ala Val Met Val Gly Gly Ala	
	130 135 140
Ser Leu Ala Thr Trp Thr Lys Gln Thr Ile Leu Thr Met His Leu Trp	
145	150 155 160
Thr Met	

<210> 40815  
 <211> 133  
 <212> PRT  
 <213> A.fumigatus

<400> 40815

Leu Gln Ile Glu Phe Glu Phe Gln Thr Arg Arg Glu Lys Ala Tyr Leu	
1	5 10 15
Ile Ala Ile Gln Phe Asn Asn Trp Val Leu Asp Leu Asp Leu Gly Thr	
	20 25 30
Phe Gly Ser His Gly Ala Arg Leu Val Gln Thr Glu Arg Gly Tyr Ser	
	35 40 45
Gly Pro Ala Gly Arg Ser Arg Glu Arg Gly Arg Gly Lys Ser Thr Leu	

## 17923

50                      55                      60  
 Arg Thr Arg Tyr Ser Ser Arg Gly Arg Glu Arg Arg Arg Gly Ser Arg  
 65                      70                      75                      80  
 Glu Asp Arg Gly Ser Arg Arg Gly Lys Gly Arg Lys Ala Asn Ser Gly  
                     85                      90                      95  
 Gly Ile Glu Arg Gly Arg Ser Arg Arg Gly Thr Gly Val Glu Gly Ala  
                     100                      105                      110  
 Ser Arg Lys Ser Gly Thr Glu Thr Glu Arg Ala His Ile Asp Leu Gly  
                     115                      120                      125  
 Leu Gly Asn Ser Gln  
                     130

&lt;210&gt; 40816

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40816

Ser Ser Pro Gly Ser Val Pro Ala Ser Phe Ser Ala Asn Leu Ser Ala  
 1                      5                      10                      15  
 Met Ile Glu Leu Ala Pro Ile Leu Met Leu Ala Lys Gly Pro Ala Trp  
                     20                      25                      30  
 Thr Ser Thr Gly Val Pro Ser Lys Leu Cys Ile Arg Leu Gly Leu Ile  
                     35                      40                      45  
 Ala Ser Phe Ile Lys Ala Ala Lys Ala Pro Pro Ala Pro Ile Ser Ser  
                     50                      55                      60  
 Gln Val Thr Gly Ser Pro Leu Leu Glu Val Ala Thr Thr Met Arg Pro  
 65                      70                      75                      80  
 Asn Leu Ser Arg Met Ser Ser Arg Leu Leu Asn Ala Arg Met Ala  
                     85                      90                      95  
 Ile His Ser Leu Ala Thr Glu Met Ser Lys Pro Val Ser Arg Asp Arg  
                     100                      105                      110  
 Pro Leu Ser Val Gly Ala Cys Pro Thr Val Met Pro Arg Arg Trp Arg  
                     115                      120                      125  
 Ser Leu Thr Ser Asn Thr Arg Gln Val Ile Val Cys Gly Ser Met  
                     130                      135                      140  
 Ser Arg Arg Ala Lys Arg Arg Ile Ser Ser Ser Val Arg Ser Ser Gly  
 145                      150                      155                      160  
 Phe Val Leu Val Met Pro Ser Phe Leu Ser Leu Leu Asn Met Met Gly  
                     165                      170                      175  
 Trp Asn Ser Arg Leu Pro Phe Leu Thr Gly Thr Ser Arg Leu  
                     180                      185                      190

&lt;210&gt; 40817

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40817

Ser Arg Glu Met Ala Met Ser Glu Gly Thr Gly Arg Thr Thr Leu Arg  
 1                      5                      10                      15  
 Gly Ser Gly Val Thr Cys Leu Ser Arg Cys Phe Ser Lys Tyr Ala Leu  
                     20                      25                      30  
 Ala Glu Val Thr Thr Phe Phe Ser Ser Met Ala Thr Val Met Gly Pro  
                     35                      40                      45  
 Thr Pro Pro Gly Thr Gly Val Ile Cys Glu Ala Thr Ser Thr Ala Ala

## 17924

50                      55                      60  
 Ser Lys Ser Thr Ser Pro Thr Arg Arg Cys Pro Asp Phe Phe Glu Gly  
 65                      70                      75                      80  
 Ser Gly Leu

<210> 40818  
 <211> 269  
 <212> PRT  
 <213> A.fumigatus

<400> 40818  
 Gln Thr Pro Phe Ser Arg Gly Leu Ser Asp Gly Asn Ala Ser Glu Met  
 1                      5                      10                      15  
 Ala Ile Ile Asp Ile Gln His Thr Ala Pro Gly Asp Cys Leu Arg Ile  
                     20                      25                      30  
 Asn Val Lys Ala Arg Lys Thr Ala Asp Phe Phe Leu Gly Glu Ile Val  
                     35                      40                      45  
 Arg Val Arg Phe Ser Asn Ala Lys Leu Leu Glu Ser Ser Glu His Asp  
                     50                      55                      60  
 Gly Leu Glu Phe Ala Leu Ala Leu Phe Asp Arg Asp Gln Ser Leu Val  
 65                      70                      75                      80  
 Lys Ser Ser Ile Leu Leu Gly Gly Phe Met Glu His Ala Ser Phe Asn  
                     85                      90                      95  
 Gly Gly Ser Gln Lys Val Val Gly Ser Ser Asn Arg Val Asn Val Thr  
                     100                      105                      110  
 Gly Gln Met Glu Val Glu Leu Val His Gly Asn Asp Leu Ala Val Ala  
                     115                      120                      125  
 Ser Thr Gly Ser Ala Thr Leu Asp Thr Lys Cys Gly Thr Leu Thr Arg  
                     130                      135                      140  
 Leu Pro Asp Ile Gly Lys His Asp Pro Val Gln Val Cys Ala Gln Arg  
 145                      150                      155                      160  
 Leu Ser Lys Thr Glu Cys Ser Arg Gly Leu Ala Leu Ser Lys Arg Arg  
                     165                      170                      175  
 Arg Ser Asn Thr Ala His Gln Asp Ile Thr Ser Ile Thr Ala Val Ser  
                     180                      185                      190  
 Gln Ala Val Glu Asn Thr Gln Thr Asp Leu Ser Leu Gly Val Ala Val  
                     195                      200                      205  
 Arg Leu Gln Leu Val Gly Ser Asn Ala Asn Leu Arg Gly Asp Leu Ser  
                     210                      215                      220  
 Asn Gly Leu Gly Val Leu Ile Thr Gly Asp Gly Asn Val Gly Arg Asn  
 225                      230                      235                      240  
 Arg Pro Asp His Leu Glu Gly Lys Arg Arg Asn Met Pro Val Pro Leu  
                     245                      250                      255  
 Leu Phe Lys Val Cys Leu Gly Arg Ser Asn Asp Val Leu  
                     260                      265

<210> 40819  
 <211> 204  
 <212> PRT  
 <213> A.fumigatus

<400> 40819  
 Gln His Gly Asn Cys His Gly Thr Asn Thr Ser Arg Asn Trp Ser Asp  
 1                      5                      10                      15  
 Leu Arg Ser Tyr Leu Tyr Gly Gly Leu Lys Ile Asp Ile Ser Asp Glu

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<210> 40820
<211> 156
<212> PRT
<213> A.fumigatus
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<210> 40821
<211> 234
<212> PRT
<213> A.fumigatus
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&lt;400&gt; 40821

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Arg Arg Val Cys Cys Ala Thr Ser Leu His Ser Asn His Ser Leu Thr
1          5          10          15
Ser Ser Ser Ser Val Ala Val Ser Gln Arg Tyr Asn Gln Lys His Ser
20          25          30
Val Cys Cys Pro Gln Ser Thr Gly Thr Pro Ser Gly Gln Met Leu Ile
35          40          45
His Cys Arg Gly Gly Thr Val Phe Arg Glu Pro Ile Val Ile Pro Arg
50          55          60
Ile Pro Arg Leu Val Pro Gly Trp Asn Lys Pro Ile Ile Ile Gly Arg
65          70          75          80
His Ala Phe Gly Asp Gln Tyr Arg Ala Thr Asp Ile Val Val Pro Gly
85          90          95
Pro Gly Lys Leu Glu Leu Val Tyr Thr Pro Glu Asn Gly Glu Pro Gln
100         105         110
Ala Ile Lys Val Tyr Asp Phe Thr Gly Gly Gly Val Ala Gln Thr Gln
115         120         125
Tyr Asn Thr Asp Asp Ser Ile Arg Gly Phe Ala His Ser Ser Phe Lys
130         135         140
Met Ala Leu Met Lys Gly Leu Pro Leu Tyr Met Ser Thr Lys Asn Thr
145         150         155         160
Ile Leu Lys Lys Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile
165         170         175
Tyr Glu Ser Thr Tyr Lys Lys Glu Phe Asp Ala Lys Gly Ile Trp Tyr
180         185         190
Glu His Arg Leu Ile Asp Asp Met Val Ala Gln Met Ile Lys Ser Glu
195         200         205
Gly Gly Phe Val Met Ala Leu Lys Ser Glu Phe Val Leu Val Ser Ser
210         215         220
His Tyr Glu Cys Leu Leu Leu Ile Asp Val
225         230

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&lt;210&gt; 40822

&lt;211&gt; 820

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40822

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Pro Gly Val Thr Arg Ile Pro Ser Val His Gly Ile Phe Val Gln Leu
1          5          10          15
Leu Leu Leu Ser His Leu Ser Glu His Thr Val Thr Ser Ala Val Ala
20          25          30
Glu Glu Lys Asp Phe Asp Gly Phe Gly Ala Ile Asn Ile Gly Glu Leu
35          40          45
Ala Lys Arg Gly Gly His Pro Leu Phe Val Pro Cys Thr Pro Leu Ala
50          55          60
Val Met Asp Leu Leu Lys Ala Ser Gly Val Asn Pro Ala Gly Lys Glu
65          70          75          80
Ala Val Val Leu Gly Arg Ser Asp Ile Val Gly Ser Pro Val Ser Tyr
85          90          95
Leu Leu Lys Asn Ala Asp Ala Thr Val Thr Val Cys His Ser Lys Thr
100         105         110
Pro Asp Ile Pro Arg Ile Val Lys Asn Ala Asp Ile Val Val Ala Ala
115         120         125
Ile Gly Lys Ala Glu Phe Val Lys Gly Asp Trp Leu Lys Pro Gly Ala
130         135         140

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Val Val Ile Asp Val Gly Ile Asn Tyr Lys Pro Asp Pro Ser Lys Lys  
 145 150 155 160  
 Ser Gly Gln Arg Leu Val Gly Asp Val Asp Phe Glu Ala Ala Val Glu  
 165 170 175  
 Val Ala Ser Gln Ile Thr Pro Val Pro Gly Gly Val Gly Pro Met Thr  
 180 185 190  
 Val Ala Met Leu Leu Lys Asn Val Val Thr Ser Ala Lys Ala Tyr Phe  
 195 200 205  
 Glu Lys Gln Arg Asp Arg His Val Thr Pro Leu Pro Leu Lys Val Val  
 210 215 220  
 Arg Pro Val Pro Ser Asp Ile Ala Ile Ser Arg Asp Gln Tyr Pro Lys  
 225 230 235 240  
 Pro Ile Thr Gln Val Ala Ala Glu Val Gly Ile Ala Pro His Glu Leu  
 245 250 255  
 Glu Pro Tyr Gly His Thr Lys Ala Lys Ile Ser Leu Ser Val Leu Asp  
 260 265 270  
 Arg Leu Ala His Arg Arg Asn Gly Arg Tyr Val Leu Val Cys Gly Ile  
 275 280 285  
 Thr Pro Thr Pro Leu Gly Glu Gly Lys Ser Thr Thr Thr Leu Gly Leu  
 290 295 300  
 Thr Gln Ala Leu Gly Ala His Leu Asn Arg Ile Val Phe Ala Asn Val  
 305 310 315 320  
 Arg Gln Pro Ser Gln Gly Pro Thr Phe Gly Ile Lys Gly Gly Ala Ala  
 325 330 335  
 Gly Gly Gly Tyr Ser Gln Val Ile Pro Met Asp Glu Phe Asn Leu His  
 340 345 350  
 Leu Thr Gly Asp Ile His Ala Ile Thr Ala Ala Asn Asn Leu Leu Ala  
 355 360 365  
 Ala Ala Ile Glu Thr Arg Met Phe His Glu Ala Thr Gln Lys Asp Ala  
 370 375 380  
 Ala Leu Tyr Lys Arg Leu Val Pro Val Lys Lys Gly Lys Arg Glu Phe  
 385 390 395 400  
 Gln Pro Ile Met Phe Arg Arg Leu Lys Lys Leu Gly Ile Thr Lys Thr  
 405 410 415  
 Asn Pro Asp Asp Leu Thr Glu Glu Glu Ile Arg Arg Phe Ala Arg Leu  
 420 425 430  
 Asp Ile Asp Pro Gln Thr Ile Thr Trp Arg Arg Val Leu Asp Val Asn  
 435 440 445  
 Asp Arg His Leu Arg Gly Ile Thr Val Gly Gln Ala Pro Thr Glu Arg  
 450 455 460  
 Gly Leu Ser Arg Glu Thr Gly Phe Asp Ile Ser Val Ala Ser Glu Cys  
 465 470 475 480  
 Met Ala Ile Leu Ala Leu Ser Asn Ser Leu Glu Asp Met Arg Glu Arg  
 485 490 495  
 Leu Gly Arg Met Val Val Ala Thr Ser Lys Ser Gly Asp Pro Val Thr  
 500 505 510  
 Cys Asp Asp Ile Gly Ala Gly Gly Ala Leu Ala Ala Leu Met Lys Asp  
 515 520 525  
 Ala Ile Lys Pro Asn Leu Met Gln Ser Leu Glu Gly Thr Pro Val Leu  
 530 535 540  
 Val His Ala Gly Pro Phe Ala Asn Ile Ser Ile Gly Ala Ser Ser Ile  
 545 550 555 560  
 Ile Ala Asp Lys Leu Ala Leu Lys Leu Ala Gly Thr Glu Pro Gly Glu  
 565 570 575  
 Asp His Glu Ala Lys Thr Gly Phe Val Val Thr Glu Ala Gly Phe Asp  
 580 585 590

17928

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Phe Thr Met Gly Gly Glu Arg Phe Phe Asn Ile Lys Cys Arg Ser Ser
    595                      600                      605
Gly Leu Ser Pro Asp Cys Val Val Ile Val Ala Thr Val Arg Ala Leu
    610                      615                      620
Lys Val His Gly Gly Gly Pro Glu Ile Ser Pro Gly Ala Pro Leu His
    625                      630                      635                      640
Glu Ile Tyr Arg Thr Glu Asn Thr Glu Ile Leu Arg Lys Gly Cys Val
    645                      650                      655
Asn Leu Lys Lys His Ile Gln Asn Ala Lys Met Tyr Gly Val Pro Val
    660                      665                      670
Val Val Ala Ile Asn Arg Phe Glu Thr Asp Thr Glu Ala Glu Ile Thr
    675                      680                      685
Ile Val Arg Glu Glu Ala Ile Ala Ala Gly Ala Glu Asp Ala Ile Pro
    690                      695                      700
Ala Asn His Trp Ala Glu Gly Gly Ala Gly Ala Val Asp Leu Ala Lys
    705                      710                      715                      720
Gly Val Leu Ala Ala Ser Ser Lys Pro Lys Asp Phe Lys Leu Leu Tyr
    725                      730                      735
Asp Leu Glu Gly Ser Ile Gln Glu Arg Ile Glu Arg Ile Gly Lys Ala
    740                      745                      750
Met Tyr Gly Ala Glu Lys Val Glu Phe Ser Glu Leu Ala Gln Lys Lys
    755                      760                      765
Val Asp Thr Tyr Thr Ala Gln Gly Phe Ser Asn Leu Pro Ile Cys Ile
    770                      775                      780
Ala Lys Thr Gln Tyr Ser Leu Ser His Asp Pro Ala Leu Lys Gly Ala
    785                      790                      795                      800
Pro Thr Gly Phe Thr Ile Pro Ile Arg Asp Val Arg Leu Ala Val Gly
    805                      810                      815
Gly Gly Tyr Leu
    820

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<210> 40823

<211> 145

<212> PRT

<213> A.fumigatus

<400> 40823

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Leu Thr Ser Glu Asp Tyr Asp Gly Asp Val Gln Ser Asp Val Val Ala
1          5          10          15
Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Thr Leu Thr Thr Pro
    20          25          30
Asp Gly Ser Ala Phe Glu Ser Glu Ala Ala His Gly Thr Val Thr Arg
    35          40          45
His Tyr Arg Glu His Gln Lys Gly Arg Glu Thr Ser Thr Asn Pro Ile
    50          55          60
Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Ile Gln Arg Gly Lys Leu
    65          70          75          80
Asp Glu Thr Pro Asp Val Val Thr Phe Ala Glu Glu Leu Glu Arg Ala
    85          90          95
Cys Ile Asp Val Val Asn Glu Glu Gly Ile Met Thr Lys Asp Leu Ala
    100         105         110
Leu Ala Cys Gly Arg Lys Glu Arg Glu Ala Trp Val Thr Thr Lys Glu
    115         120         125
Tyr Leu Ala Ala Val Glu Arg Arg Leu Lys Ser Asn Leu Lys Ala Arg
    130         135         140
Leu

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145

&lt;210&gt; 40824

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40824

Leu	Leu	Glu	Val	Asp	Ile	Cys	Lys	Cys	Leu	Phe	Tyr	His	Met	Ala	Ala	
1				5					10					15		
Ala	Asp	Gln	Ser	Ala	Asn	Gln	Trp	Met	Asn	Pro	His	Ser	Tyr	Ala	Leu	
		20						25					30			
Ala	Ala	Asp	Ile	Gln	Thr	Ile	Pro	Gly	Leu	Pro	Thr	Ala	Pro	Gly	Tyr	
		35					40					45				
Leu	Asn	Val	Asp	Ile	Asp	Thr	Glu	Thr	Gly	Glu	Ile	Asp	Gly	Leu	Phe	
	50					55					60					

&lt;210&gt; 40825

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40825

Ser	Lys	Ser	Ser	Ala	Leu	Ile	Ser	Phe	Gln	Gly	Ile	Glu	Tyr	Arg	Asp	
1				5					10					15		
Gln	Thr	Asp	Asp	Lys	Val	Thr	Val	Glu	Ala	Ala	Glu	Ala	Ile	Lys	Lys	
		20						25					30			
Tyr	Gly	Val	Gly	Val	Lys	Cys	Ala	Thr	Ile	Thr	Pro	Asp	Glu	Ala	Arg	
	35					40					45					
Val	Glu	Glu	Phe	Lys	Leu	Lys	Lys	Ser	Met	Leu	Cys	His	Leu	Thr	Ser	
	50				55						60					
Phe	Glu	Pro	Phe	Ser	Asn											
65					70											

&lt;210&gt; 40826

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40826

Pro	Lys	Pro	Gln	Arg	Asn	Leu	Pro	Ala	Arg	Gly	Phe	Arg	Pro	Ile	Tyr	
1				5					10					15		
Tyr	Leu	Val	Gly	Met	His	Leu	Phe	Met	Ala	Tyr	Gly	Tyr	Tyr	Lys	Leu	
		20						25					30			
Phe	Tyr	Gly	Ile	Arg	Glu	Gln	His	Glu	Leu	Ala	Arg	Glu	Lys	Val	Trp	
	35					40					45					
Ser	Arg	Leu	His	Leu	Val	Pro	Leu	Leu	Gln	Ala	Glu	Glu	Asp	Arg	Asp	
	50				55						60					
Gln	Val	Arg	Arg	His	Phe	Ala	Asp	Lys	Ala	Arg	Glu	Lys	Glu	Leu	Leu	
65				70				75						80		
Gly	Thr	Glu	Ser	Lys	Val	Tyr	Asn	Ser	Asp	Arg	Tyr	Val	Glu	Pro	Met	
			85				90						95			
Gly	Leu	Lys	Val	Val	Arg	Tyr	Ser	Trp	Leu	Thr	Leu	Phe	Leu	Leu	Arg	
		100					105						110			

Leu Leu

<210> 40827  
 <211> 136  
 <212> PRT  
 <213> A.fumigatus

<400> 40827  
 Ser Ser Pro Cys Leu Arg Ile Cys Pro His Arg Gly Ala Met Arg Leu  
 1 5 10 15  
 Tyr Ser Thr Arg Gln Val Leu Asn Tyr Trp Phe Ser Gln Arg Arg Thr  
 20 25 30  
 Gln Ile Thr Asp Arg Thr Asn Pro Asn His Ser Val Thr Ser Leu Pro  
 35 40 45  
 Ala Ala Ser Asp Pro Ser Thr Thr Ser Leu Glu Cys Thr Ser Ser Trp  
 50 55 60  
 Pro Thr Ala Thr Thr Ser Ser Thr Val Ser Ala Asn Ser Thr Ser  
 65 70 75 80  
 Ser Pro Ala Arg Arg Ser Gly Pro Ala Cys Thr Trp Ser Arg Cys Ser  
 85 90 95  
 Arg Leu Arg Lys Thr Val Thr Arg Ser Ala Asp Thr Ser Arg Thr Arg  
 100 105 110  
 Leu Val Arg Arg Ser Phe Trp Val Arg Arg Ala Lys Ser Thr Ile Pro  
 115 120 125  
 Ile Gly Met Trp Asn Pro Trp Asp  
 130 135

<210> 40828  
 <211> 206  
 <212> PRT  
 <213> A.fumigatus

<400> 40828  
 His Ile Phe Cys Ser Asn Ala His Ala Phe His Asn Pro Ala Asn Trp  
 1 5 10 15  
 Gly Gly Leu Pro His Asp Met Arg Gly Val Val Glu Arg Ile Leu Thr  
 20 25 30  
 Asp Arg Phe Trp Gln Ala Gly Ile Ser Thr Gly Ser Arg Asp Glu Phe  
 35 40 45  
 Tyr Ala Lys Ile Thr Ala Ser Arg Ser Ser Leu Glu Gly Phe Ala Ser  
 50 55 60  
 Ser Val Arg Gly Lys Val Arg Ala Val Arg Glu Ser Cys Tyr Ser Met  
 65 70 75 80  
 Leu Phe Ser Met Ser Arg Leu Arg Glu His Phe Tyr Gly Phe Ala Glu  
 85 90 95  
 Leu Pro Gly Pro Leu Ser Gln Ala Leu Phe Lys Asp Ser Pro His Leu  
 100 105 110  
 Ser Ser His Gln Phe Ser Val Leu Leu Asn Ile Ser Arg Cys Leu Ile  
 115 120 125  
 Asp Asp Cys Pro Val Arg Phe Arg Ala Gln Phe Leu Pro Pro Met Leu  
 130 135 140  
 Ala Thr Leu Phe Thr Asn Ile Asp Arg Lys Val Thr Ala Glu Trp Asp  
 145 150 155 160  
 Leu Ile Glu Gln Arg Lys Glu Gly Leu Ala Asp Gly Asp Leu Thr Asp  
 165 170 175  
 Glu Met Lys Ser Glu Ser Ile Leu Arg Gln Leu Thr Tyr Ser Ala Val  
 180 185 190

17931

Leu Met Val Ala Ser Leu Leu Asp Pro Gln Arg Gly Gly Ala  
195 200 205

<210> 40829

<211> 477

<212> PRT

<213> A.fumigatus

<400> 40829

Phe Gly Asn Ile Thr Val Ser Lys Phe Leu Phe Gly Asp Thr Ser Lys  
1 5 10 15  
Glu Ser Ile Ile Glu Ile Pro Gln Gly Gln Leu Tyr Leu Val Arg Pro  
20 25 30  
Leu Ser Pro Lys Gly Tyr Ser Glu Leu Ile Phe Lys Asp Ala Ala Ala  
35 40 45  
Thr Ile Arg Arg Thr Gly Gln Glu Phe Gln Tyr Gln Leu Val Ile Gln  
50 55 60  
Arg Ala Tyr Glu Glu Gly Glu Glu Glu Leu Ala Asp Glu Glu Asp Glu  
65 70 75 80  
Gln Asp Pro Ser Asn Ser Leu Asp Lys Asp Glu Lys Val Phe Leu Leu  
85 90 95  
Asp Gln Gly Leu His Phe Arg Val Glu Ala Arg Glu Gly Gly Ser Lys  
100 105 110  
Ile Leu Ala Trp Asn Asp Leu Ser Gly Asp Thr Gly Asp Leu Phe Glu  
115 120 125  
Phe Val Cys Asp Pro Ser Val Pro Ala Asp Lys Val Ser Thr Phe Glu  
130 135 140  
Leu Ala Ala Trp Gln Cys Gln Tyr Glu Arg Lys Tyr Arg Lys Ser Ala  
145 150 155 160  
Gln Arg Ala Thr Glu Gln Glu Leu Gln Glu Phe Ser Phe Lys Gly Glu  
165 170 175  
Lys Thr Ile Pro Ala Ala Ser Pro Ile Ser Ser Pro Val Lys Ser Arg  
180 185 190  
Thr His Ser Val Ala Ser Ala Gly Glu Ser Asn Ala Ala Met Ala Arg  
195 200 205  
Asp Val Glu Tyr Ser Arg Ser Lys Gly Leu Ile Lys Pro Val Gly Glu  
210 215 220  
Gly Glu Glu Arg Thr Val Ala Pro Pro Ser Ala Ala Gln Pro Val Ala  
225 230 235 240  
Lys Glu Ile Leu Ala Lys Glu Lys Ala Glu Leu His Leu Phe Asp Phe  
245 250 255  
Pro Ser Gly Thr Phe Ile Leu Gln Asp Pro Asn Val Val Ala Thr Val  
260 265 270  
Ser Glu Val Gly Thr Trp Gln Tyr Trp Leu Gln Ile Ser Gly Glu Asp  
275 280 285  
Lys Glu Trp Leu Gly Gln Ala Val Val Ala Asp Ile Asn Pro Val Phe  
290 295 300  
Asn Phe Glu Tyr Leu Ser Phe Ile Phe Asn His Tyr Gly Glu Asp Gly  
305 310 315 320  
Ser Ala Tyr Ser Trp Leu Leu Arg Phe Lys Asp Gln Ala Thr Glu Glu  
325 330 335  
Arg Phe Gln Glu Gly Leu Met Gln Ala Leu Trp Glu Gln Leu Asn Glu  
340 345 350  
Met Lys Trp Thr Lys Val Lys Glu Asn Asp Arg Glu Tyr Val Leu Asp  
355 360 365  
Ala Phe Gln Asp Leu Thr Met Glu Asp Ala Glu Thr Glu Glu Gln Asp

## 17932

370                      375                      380  
 Glu Ala Glu Ala Glu Ser Glu Asp Glu Glu Glu Glu Glu Gln Asp Glu  
 385                      390                      395                      400  
 Ser Gln Arg Ser Glu His Tyr Asp Ser Asp Glu Glu Gln Glu Asp Val  
                     405                      410                      415  
 Ser Thr Arg Asp Asp Asp Gly Asn Val Asn Ser Gln Leu Ala Val Gly  
                     420                      425                      430  
 Tyr Lys His Asp Arg Ser Phe Val Val Arg Gly Ser Lys Ile Gly Val  
                     435                      440                      445  
 Phe Arg His Thr Pro Asp Asn Asn Leu Glu Phe Ser Thr Asn Ile Ser  
                     450                      455                      460  
 Lys Val Glu Thr Pro Lys Gly Lys Leu Phe Ser Pro Lys  
 465                      470                      475

<210> 40830  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 40830  
 Val Met Leu His Ala Glu Asp Arg Asn Met Ile Leu Gln Asn Gly Asp  
 1                      5                      10                      15  
 Glu Pro His Ser Leu Tyr Arg Met Asp Leu Glu Tyr Gly Lys Val Val  
                     20                      25                      30  
 Asp Glu Trp Lys Val His Asp Asp Ile Pro Val Thr Thr Phe Ala Pro  
                     35                      40                      45  
 Glu Asn Val Ser Leu His Ser Arg Leu Arg Leu Thr Pro Met Ser Asn  
                     50                      55                      60

<210> 40831  
 <211> 241  
 <212> PRT  
 <213> A.fumigatus

<400> 40831  
 Pro Pro Ile Gly Gln Glu Pro Asn Trp Val Asp Ala Asp Leu Lys Gln  
 1                      5                      10                      15  
 Tyr Ala Ser Lys Asn Asp Phe Ser Ala Val Ala Thr Ser Glu Lys Gly  
                     20                      25                      30  
 Tyr Ile Ala Val Ala Ser Asn Lys Gly Asp Ile Arg Met Phe Asp Arg  
                     35                      40                      45  
 Leu Gly Ile Asn Ala Lys Thr His Ile Pro Ala Leu Gly Glu Pro Ile  
                     50                      55                      60  
 Ile Gly Leu Asp Val Ser Ala Asp Gly Arg Trp Val Leu Ala Thr Cys  
 65                      70                      75                      80  
 Arg Thr Tyr Leu Leu Ile Asp Ser Leu Gln Lys Glu Gly Lys Asn  
                     85                      90                      95  
 Glu Gly Lys Leu Gly Phe Glu Arg Ser Phe Ala Lys Asp Ser Lys Pro  
                     100                      105                      110  
 Gln Pro Arg Arg Leu Gly Leu Thr Pro Ala His Val Ala Gln Phe Gln  
                     115                      120                      125  
 His Glu Thr Lys Lys Pro Ile Ser Phe Thr Pro Ala Arg Phe Asn Thr  
                     130                      135                      140  
 Gly Val Glu Ser Gln Glu Thr Ser Ile Val Thr Ala Thr Gly Pro Phe  
 145                      150                      155                      160  
 Ile Val Thr Trp Ser Leu Lys Lys Val Ile Ala Gly Arg Lys Asp Pro

## 17933

165 170 175  
 Tyr Thr Ile Lys Arg Tyr Ala Glu Asp Val Met Ala Asp Asn Phe Arg  
 180 185 190  
 Phe Gly Ser Asp Lys Asn Val Ile Val Ala Leu Pro Asn Glu Val Asn  
 195 200 205  
 Met Val Pro Lys Arg Thr Phe Pro Lys Pro Thr Arg Glu Ser Ile Ala  
 210 215 220  
 Gly Pro Pro Val Thr Pro Ser Arg Arg Ser Pro Arg Trp Gly Ser Arg  
 225 230 235 240  
 Leu

<210> 40832  
 <211> 239  
 <212> PRT  
 <213> A.fumigatus

<400> 40832  
 His His Glu Gly Leu Leu Gln Asp Ile Arg Leu Thr Ser Ile Val Asp  
 1 5 10 15  
 Pro Asp Asp Glu Pro Ala Glu Pro Ser Ala Pro Gln Pro Pro Pro Ala  
 20 25 30  
 Leu Ser Asp Ser Ile Arg His Phe Val Leu Ser Ser Pro Glu Ile Phe  
 35 40 45  
 Glu Pro Val Met Leu Phe Cys Thr His Ala Leu Arg Met Arg Asp Thr  
 50 55 60  
 Arg Cys Cys Ser Ile Ile Thr Arg Val Ile Arg Ser Ile Leu Gln Asp  
 65 70 75 80  
 Phe Ala Pro Pro Asn His Ser Pro Thr Ile Val Thr Ile Arg Glu Phe  
 85 90 95  
 Ile Ser Ser Glu Val Leu Lys Ala Cys Ile Thr Ser Val His Glu Pro  
 100 105 110  
 Tyr Phe Val Asp Met Gln Lys Asp Leu Ala Gln Leu Ile Ala Ser Ile  
 115 120 125  
 Trp Val Leu Tyr Gly Ser Ser Ser Pro Thr Pro Arg Ser Val Ile Leu  
 130 135 140  
 Ser Leu Pro Gly Met Asp Glu Gln Arg Val Ala Ser Thr Glu Ala Ala  
 145 150 155 160  
 Leu Leu Arg Ser Thr Ala Ala Arg Gln Gln Arg Ala Leu Val Leu Asp  
 165 170 175  
 Leu Leu Glu Gly Leu Arg Gly Val Ser Ile Ala Glu Gln Gly Lys Ile  
 180 185 190  
 Leu Gly Ser Arg Glu Glu Arg Arg Lys Ala Arg Ser Ala Leu Gln Glu  
 195 200 205  
 Arg Tyr Met Ser Asn Glu Met Glu Gly Gln Gln Ile Ser Lys Val Asp  
 210 215 220  
 Ile Asn Asp Gly Pro Asp Leu Gly Gly Val Ala Asp Met Phe Gly  
 225 230 235

<210> 40833  
 <211> 342  
 <212> PRT  
 <213> A.fumigatus

<400> 40833  
 Ser Lys Met Glu Asp Asp Asp Arg Pro Arg Lys Tyr Pro Lys Leu Asn

17934

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1           5           10           15
His Asp Glu Val Gln Glu Gly Ser Glu Pro Val Met Thr Gly Ala Val
      20           25           30
Gly Ala Val His Asp Asp Asp Ala Glu Ser Ala Asp Ser Asp Asn Arg
      35           40           45
Ala Ser Pro Ser Asn Asp Arg Ile Asp Asn Asp Val Lys Gln Ala Cys
      50           55           60
Asp Glu Glu Gly Gln Asp Ala His Gly Lys Asp Gly Pro Pro Thr Leu
65           70           75           80
Ser Lys Asn Gln Leu Lys Lys Leu Lys Arg Lys Glu His Trp Glu Ala
      85           90           95
Met Arg Glu Gln Arg Lys Val Lys Arg Lys Glu Lys Leu Val Ala Lys
      100          105          110
Arg Glu Arg Arg Arg Ala Ala Leu Glu Gln Ala Lys Gln Glu Gly Ala
      115          120          125
Glu Ala Thr Glu Glu Thr Arg Lys Ala Phe Glu Ser Thr Gln Lys Lys
      130          135          140
Phe Gln Arg Ser Thr Leu Leu Pro Val Thr Leu Val Leu Asp Cys Ser
145          150          155          160
Tyr Asp Asp Leu Met Leu Asp Lys Glu Arg Val Ser Leu Gly Ala Gln
      165          170          175
Ile Thr Arg Ser Tyr Ser Asp Asn Ser Arg Ala Pro Phe Arg Ser His
      180          185          190
Leu Val Val Ser Ser Phe Asn Lys Leu Leu Lys Glu Arg Phe Asp Thr
      195          200          205
Val Leu Gly Lys Thr His Glu Asn Trp Lys Gly Val Arg Phe Leu Gln
      210          215          220
Glu Asp Phe Ala Glu Ala Ala Glu Met Ala Lys Glu Trp Met Gln Gly
225          230          235          240
Pro Lys Gly Gly Gln Leu Ala Gly Val Phe Ala Asp Lys Ala Asp Ala
      245          250          255
Lys Pro Glu Asp Gly Glu Ile Val Tyr Leu Ser Ser Asp Ser Pro Asn
      260          265          270
Ile Leu Thr Glu Leu Lys Pro Tyr Ser Thr Tyr Ile Ile Gly Gly Leu
      275          280          285
Val Asp Lys Asn Arg His Lys Gly Ile Cys Tyr Lys Ser Ala Val Ala
      290          295          300
Lys Gly Ile Lys Thr Ala Lys Leu Pro Ile Gly Glu Tyr Ile Gln Met
305          310          315          320
Ala His Arg Gln Val Leu Ala Thr Asn His Val Val Glu Asn Met Ile
      325          330          335
Ser Gly Ala Gly Ala Gly
      340

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<210> 40834

<211> 711

<212> PRT

<213> A.fumigatus

<400> 40834

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His Gly Glu Ala Val Arg Arg Ser His Pro Leu Arg Arg Pro Ser Gln
1           5           10           15
His Ile Met Pro Arg Pro Lys Arg Thr Ile Glu Glu Leu Ala Asn Lys
      20           25           30
Ser Asp Ser Asp Asp Glu Asn Tyr Ser Asp Arg Pro Val Arg Ser Ser
      35           40           45

```



Arg	Gln	Ser	Ala	Arg	Ser	Lys	Ser	Arg	Lys	Lys	Pro	Lys	Pro	Thr	Lys
50						55					60				
Lys	Arg	Ala	Arg	Arg	His	Ser	Asn	Asp	Asp	Ile	Thr	Ser	Asp	Asp	Asp
65					70					75					80
Asp	Ile	Leu	Asp	Asp	Val	Asp	Glu	Leu	Asp	Phe	Asp	Asp	Glu	Asp	Glu
				85					90					95	
Glu	Asp	Pro	Asn	Ala	Pro	Lys	Asn	Ala	Arg	Gly	Leu	Thr	Ala	Arg	Lys
			100					105					110		
Ala	Ala	Thr	Asn	Arg	Pro	Val	Tyr	Asn	Glu	Gly	Asp	Ser	Ser	Ser	Val
		115					120					125			
Asp	Asp	Asp	Phe	Glu	Glu	Glu	Asp	Asp	Ser	Glu	Pro	Thr	Arg	Ser	Pro
	130					135					140				
Lys	Lys	Arg	Lys	Ser	Thr	Val	Val	Thr	Leu	Lys	Val	Asn	Ala	Leu	Lys
145					150					155					160
Arg	Gln	Pro	Leu	Pro	Glu	Ser	Gly	Arg	Arg	Met	Thr	Arg	Arg	Thr	Arg
			165					170						175	
Asp	Pro	Ser	Glu	Asp	Ile	Val	Ala	Leu	Thr	Asn	Ser	Gly	Arg	His	Met
		180						185					190		
Glu	Leu	Val	Glu	Arg	Gly	Thr	His	Ser	Pro	Glu	Met	Glu	Ala	Arg	Arg
	195						200					205			
Ser	Arg	Arg	Gly	Ser	Arg	Ala	Ser	Lys	Arg	Leu	Asn	Phe	Gly	Pro	Glu
	210					215					220				
Lys	Val	Glu	Ile	Asp	Glu	Lys	Pro	Glu	Val	Phe	Glu	Pro	Ile	Glu	Glu
225					230					235					240
Thr	Ser	Met	Glu	Val	Lys	Ala	Trp	Gln	Pro	Glu	Ile	Met	Glu	Ser	Asp
			245					250						255	
His	Gln	Gly	Asp	Phe	Glu	Glu	Gly	Val	Pro	Ser	Gly	Gln	Asp	Ser	Gly
		260						265					270		
Glu	Gly	Ala	Ala	Glu	Ala	Asp	Glu	Val	Gly	Val	Val	Pro	Glu	Ser	Glu
	275					280						285			
Asn	Gly	Asp	Val	Lys	His	Gln	Glu	Glu	Asp	Asp	Glu	Asp	Asp	Glu	Gly
	290					295					300				
Pro	Thr	Thr	Arg	Arg	Arg	Arg	Gly	Lys	Pro	Ser	Arg	Ser	Gln	Pro	Thr
305					310					315					320
Glu	Glu	Ala	Gln	Pro	Asp	Glu	Glu	Glu	Asp	Ala	His	Pro	Arg	Arg	Ser
			325						330					335	
Gly	Arg	Lys	Lys	Pro	Arg	Ser	Ser	Gln	Arg	Lys	Arg	Gln	Asp	Asp	Glu
		340						345					350		
Ser	Asp	Phe	Glu	Pro	Glu	Glu	Asp	Glu	Ser	Asn	Asp	Asp	Asp	Asp	Glu
	355					360					365				
Glu	Leu	Ser	Leu	Ser	Gly	Lys	Ser	His	Gly	Ser	Pro	Arg	Lys	Ala	Ser
	370					375					380				
Gln	Ala	Arg	Asp	Asp	Glu	Glu	Gln	Asp	Ser	Thr	Ala	Gly	Arg	Arg	Pro
385					390					395					400
Gly	Leu	Arg	Lys	Arg	Ala	Ser	Arg	Ser	Arg	Gly	Gln	Ser	Glu	Val	Arg
			405						410					415	
Gly	Asp	Ile	Ala	Glu	Glu	Leu	Ala	Glu	Glu	Leu	Glu	Asp	Leu	Arg	Gly
		420						425					430		
Asp	Arg	Pro	Arg	Arg	Arg	Leu	Gln	Thr	Asp	Ile	Val	Tyr	Glu	Lys	Pro
	435						440					445			
Arg	Arg	Ser	Arg	Lys	Asp	Val	Asp	Tyr	Arg	Ile	Ile	Arg	Pro	Asp	Leu
	450					455					460				
Ile	Leu	Pro	Ile	Glu	Glu	Ala	Glu	Asn	Glu	Val	Asn	Glu	Ser	Pro	Ser
465					470					475					480
Arg	Arg	Gly	Arg	Gly	Gly	Gly	Gly	Ser	Ser	Trp	Gln	Arg	Thr	Leu	Phe
				485				490						495	

Pro Thr Tyr Gly Pro Phe Gly Gly Gly Gly Pro Pro Ala Ile Leu Ala  
 500 505 510  
 Pro Pro Gly Ala Pro Ala Ala Thr Gly Gly Val Asp Ser Asp Ser Ser  
 515 520 525  
 Asp Asp Glu Val Met Gln His Pro Lys Thr Gly Gly Ser Val Ser Gly  
 530 535 540  
 Pro Pro Gly Ala Gly Leu Leu Pro Ser Ala Gln Thr His Gly Ala Asp  
 545 550 555 560  
 Pro Leu Gln Gly Pro Ser Gly Thr Pro Ala Asn Leu Gly Lys Ile Lys  
 565 570 575  
 Asp Lys Gln Ala Leu Ala Asp Ala Asp Pro Leu Gly Val Asp Val Asn  
 580 585 590  
 Val Asn Phe Asp Ser Val Gly Gly Leu Gln Gly His Ile Asp Gln Leu  
 595 600 605  
 Lys Glu Met Val Ser Leu Pro Leu Leu Tyr Pro Glu Ile Phe Gln Arg  
 610 615 620  
 Phe His Ile Val Pro Pro Arg Gly Val Leu Phe His Gly Pro Pro Gly  
 625 630 635 640  
 Thr Gly Lys Thr Leu Leu Ala Arg Ala Leu Ala Asn Ser Val Ser Ser  
 645 650 655  
 Glu Gly Arg Lys Val Thr Phe Tyr Met Arg Lys Gly Ala Asp Ala Leu  
 660 665 670  
 Ser Lys Trp Val Gly Glu Ala Glu Arg Gln Leu Arg Leu Leu Phe Glu  
 675 680 685  
 Glu Ala Arg Lys Thr Gln Pro Ser Ile Ile Phe Phe Asp Glu Ile Asp  
 690 695 700  
 Gly Lys Cys Ser Arg Arg Leu  
 705 710

&lt;210&gt; 40835

&lt;211&gt; 981

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40835

Arg Cys Tyr Val Ala Asn Val His Leu Leu Thr Gly Leu Ala Pro Val  
 1 5 10 15  
 Arg Ser Ser Lys Gln Glu Gln Ile His Ala Ser Ile Val Ser Thr Leu  
 20 25 30  
 Leu Ala Leu Met Asp Gly Met Asp Gly Arg Gly Gln Val Ile Val Ile  
 35 40 45  
 Gly Ala Thr Asn Arg Pro Asp Ser Ile Asp Pro Ala Leu Arg Arg Pro  
 50 55 60  
 Gly Arg Phe Asp Arg Glu Phe Tyr Phe Pro Leu Pro Asn Thr Glu Gly  
 65 70 75 80  
 Arg Arg Ala Ile Leu Asp Ile His Thr Arg Gly Trp Asp Pro Pro Leu  
 85 90 95  
 Pro Asp His Ile Lys Asp Glu Leu Ala Glu Ile Thr Lys Gly Tyr Gly  
 100 105 110  
 Gly Ala Asp Leu Arg Ala Leu Cys Thr Glu Ala Ala Leu Asn Ala Val  
 115 120 125  
 Gln Arg Arg Tyr Pro Gln Ile Tyr Lys Ser Asp Gln Lys Leu Leu Ile  
 130 135 140  
 Asp Pro Lys Lys Ile Asp Val Thr Pro Lys Asp Phe Met Leu Ala Ile  
 145 150 155 160  
 Lys Lys Ile Val Pro Ser Ser Glu Arg Ser Ala Ser Ser Gly Ala Thr

				165					170				175		
Pro	Leu	Pro	Lys	Thr	Val	Glu	Pro	Leu	Leu	Arg	Arg	Pro	Phe	Ser	Asp
			180					185					190		
Ile	Lys	Thr	Ile	Leu	Ser	Glu	Ile	Leu	Pro	Gln	Arg	Lys	Arg	Leu	Thr
		195					200					205			
Ala	Leu	Glu	Glu	Ala	Gln	Phe	Glu	Glu	Pro	Glu	Gly	Pro	Lys	Ser	Phe
	210					215					220				
Arg	Arg	Glu	Gln	Met	Gln	Gln	Glu	Phe	Asp	Thr	Ser	Arg	Val	Tyr	Arg
225					230					235					240
Pro	Arg	Met	Leu	Val	Arg	Gly	Pro	Phe	Gly	Met	Gly	Gln	Gln	His	Leu
				245					250					255	
Ala	Gly	Ala	Ile	Leu	His	His	Phe	Glu	Gly	Leu	His	Val	Gln	Ala	Phe
			260					265					270		
Asp	Leu	Pro	Thr	Leu	Leu	Ser	Asp	Ser	Thr	Arg	Ser	Pro	Glu	Ala	Ala
		275					280					285			
Val	Ile	Gln	Leu	Phe	Gln	Glu	Val	Lys	Arg	His	Lys	Pro	Ser	Val	Ile
	290					295					300				
Tyr	Ile	Pro	Asn	Leu	Gln	Ser	Trp	Leu	Asn	Thr	Val	Gly	Pro	Thr	Val
305					310					315					320
Ile	Ser	Thr	Leu	Leu	Gly	Leu	Leu	Arg	Ser	Val	Pro	Pro	Ser	Asp	Pro
				325					330					335	
Val	Leu	Leu	Phe	Gly	Val	Leu	Glu	Ser	Thr	Gly	Glu	Glu	Val	Asp	Asn
			340					345					350		
Gly	Leu	Leu	Ser	Asn	Met	Phe	Gly	Phe	Ser	Lys	Lys	Asn	Phe	Tyr	Asp
		355					360					365			
Leu	Lys	Ala	Pro	Asp	Tyr	Asp	Ala	Arg	Tyr	Glu	Phe	Phe	Gly	Arg	Val
	370					375					380				
Ile	Asp	Tyr	Val	Lys	Thr	Pro	Pro	Ser	Asp	Phe	Pro	Asp	Pro	Glu	Asn
385					390					395					400
Arg	Lys	Arg	Arg	Glu	Leu	Glu	Thr	Leu	Glu	Val	Ala	Pro	Pro	Pro	Pro
				405					410					415	
Pro	Lys	Pro	Ala	Pro	Pro	Pro	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Gln	Lys
			420					425					430		
Lys	Lys	Asp	His	Gln	Thr	Leu	Asn	Leu	Leu	Lys	Ile	Arg	Ile	Gln	Pro
		435					440					445			
Ile	Met	Asp	Gln	Ile	Lys	Lys	Tyr	Lys	Arg	Phe	Arg	Thr	Gly	Val	Ile
	450					455					460				
Asp	Glu	Ser	Gln	Ile	Arg	Tyr	Leu	Trp	Glu	Glu	Asp	Asp	Pro	Asn	Ile
465					470					475					480
Val	Thr	Ser	Asp	Leu	Pro	Ile	Glu	Gln	Arg	Thr	Thr	Phe	Arg	Pro	Phe
				485					490					495	
Glu	Lys	Ala	Phe	Asp	Lys	His	Gly	Val	Pro	Gly	Leu	Arg	Glu	Thr	Val
			500					505					510		
Ser	Gly	Lys	Phe	Phe	Tyr	Asn	Met	Glu	Ile	Val	Thr	Ile	Glu	Lys	Arg
		515					520								

## 17938

610 615 620  
 Pro His Gly Asn Thr Asp Ser Gly Pro Ser Ser Gly Pro Val Val Leu  
 625 630 635 640  
 Gly Glu Ser Phe Pro Asp Gly Gln Ala Arg Pro Gln Thr Pro Thr Arg  
 645 650 655  
 Arg Ser Ala Val Ser Phe Leu Thr Asn Gly Tyr His Glu Gly Gly Gly  
 660 665 670  
 Ser Asp Leu Asn Asp Leu Ser Asn His Ala Thr Ile Ser Asn Gly Ser  
 675 680 685  
 His Glu Ser Arg Gly Asp Gly Asp Gly Asp Gly Asp Gly Asp Val Tyr  
 690 695 700  
 Met Thr Asn Ser Glu Asp His Ser Gly Glu Arg Glu Ala Gln Gly Ser  
 705 710 715 720  
 Ser Phe Gly Pro Ser Ala Gln Pro Arg Pro Pro Tyr Ser His Thr Ala  
 725 730 735  
 Pro Ser Gln Gln Val Arg Arg Glu Ser Gly Phe Ser Ser Leu Ser Gln  
 740 745 750  
 Lys Gly Pro Met Thr Pro Met Ala Pro Gly Ser Gln Pro Asn Asp Tyr  
 755 760 765  
 Thr Asn Glu Ala Ser Thr Thr Gln Thr Thr Ser Asp Lys Lys Ser Ser  
 770 775 780  
 Val Gln Ser Ser Val Pro Gln Asn Leu Thr Gln Ser Pro Met Ala Ala  
 785 790 795 800  
 His Gly Leu Arg His Asp Phe Pro Asp Leu Thr Gln Tyr Pro Asp Arg  
 805 810 815  
 Val Ser Gln Glu Glu His Leu Pro Asp Thr Gln Gln Pro Glu Ser Ser  
 820 825 830  
 Gln Pro Ser Pro His Pro Arg Glu Ser Leu Pro Gly His Ala Asp Phe  
 835 840 845  
 Ala Ala Gly Glu Ser Gln Ser Gln Pro Lys His Gln Pro Pro Val Pro  
 850 855 860  
 Leu Phe Glu Ala Pro Val Lys Gln Pro Ser His Val Pro Thr Ala Leu  
 865 870 875 880  
 Gln Ser Leu Leu Asn Asn Glu Asp Leu Ser Pro Lys Val Ser Leu Glu  
 885 890 895  
 His Gly Leu Ile Asp Asn Leu His Asn Gln Leu Thr Gln Arg Thr Ser  
 900 905 910  
 Gly Cys Ser Val Glu Gln Leu Glu Gln Ile Asn Ser Asn Leu Met Asp  
 915 920 925  
 Tyr Ile Trp Arg Met Arg Gly Glu Trp Asn Arg Asn Lys Val Ala Ala  
 930 935 940  
 Gly Ile Arg Asp Thr Phe Asn Glu Val Leu Glu Asp Met Gln Ala Met  
 945 950 955 960  
 Gln Glu Ile Gly Pro Ile Ser Gln Arg Thr Lys Glu Gln Leu Gly Ala  
 965 970 975  
 Asp Ile Phe His Ala  
 980

&lt;210&gt; 40836

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40836

Ser Leu Ser Met Ile Ser Gly Cys Gln Ala Leu Thr Ser Ile Glu Val  
 1 5 10 15

## 17939

Ser Ser Met Gly Ser Asn Thr Ser Gly Phe Ser Ser Ile Ser Thr Phe  
 20 25 30  
 Ser Gly Pro Lys Leu Arg Arg Phe Glu Ala Arg Asp Pro Arg Arg Leu  
 35 40 45  
 Leu Arg Ala Ser Ile Ser Gly Leu Cys Val Pro Arg Ser Thr Ser Ser  
 50 55 60  
 Ile Trp Arg Pro Glu Phe Val Arg Ala Thr Ile Ser Ser Glu Gly Ser  
 65 70 75 80  
 Arg Val Arg Arg Val Ile Arg Leu Pro Leu Ser Gly Arg Gly Trp Arg  
 85 90 95  
 Leu Arg Ala Phe Thr Phe Asn Val Thr Thr Val Leu Leu Arg Phe Phe  
 100 105 110  
 Gly Glu Arg Val Gly Ser Glu Ser Ser Ser Ser Ser Lys Ser Ser Ser  
 115 120 125  
 Thr Leu Leu Glu Ser Pro Ser Leu Tyr Thr Gly Arg Leu Val Ala Ala  
 130 135 140  
 Phe Arg Ala Val Arg Pro Leu Ala Phe Phe Gly Ala Phe Gly Ser Ser  
 145 150 155 160  
 Ser Ser Ser Ser Ser Lys Ser Ser Ser Ser Thr Ser Ser Arg Ile Ser  
 165 170 175  
 Ser Ser Ser Asp Val Met Ser Ser Phe Glu Trp Arg Arg Ala Leu Phe  
 180 185 190  
 Phe Val Gly Phe Gly Phe Phe Leu Asp Phe Asp Arg Ala Asp Trp Arg  
 195 200 205  
 Asp Glu Arg Thr Gly Arg Ser Leu  
 210 215

&lt;210&gt; 40837

&lt;211&gt; 351

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40837

Thr Asn Asn Cys Asp Arg Gly Ser Gly Arg Val Val Glu Thr Leu Ala  
 1 5 10 15  
 Arg Thr Gly Gly Phe Ala Ala Asp Val Ala Arg His Arg Met Leu Glu  
 20 25 30  
 Thr Leu Gln His Val Leu Gln Val Thr Gly Ser Val Asp Ala Met Arg  
 35 40 45  
 Pro Gly Gly Ala Gly His Ala Ser Ser Val Arg Val Arg Leu Leu His  
 50 55 60  
 Ala Ala Val Arg Ser Arg Ile Leu Asp Leu Val Lys Asn Lys Pro Glu  
 65 70 75 80  
 Tyr Tyr Asp Val Asp Lys Tyr Gly Ile Pro Ile Asn Asp Leu Asp Cys  
 85 90 95  
 Ile Ala Thr Ile Asn Thr Phe Ser Thr Ser Val Val Trp Ile Gly Leu  
 100 105 110  
 Pro Arg Gln Gly Ile Leu Leu Arg Glu Arg Glu Ile Asp Asp Tyr Leu  
 115 120 125  
 Ala Leu Trp Arg Leu Val Ala Tyr Tyr Met Gly Ala Pro His Glu Phe  
 130 135 140  
 Leu Glu Thr Arg Ala Lys Ala Lys Val Met Met Glu Ser Leu Leu Ala  
 145 150 155 160  
 Ser Glu Ile His Pro Thr Glu Thr Ser Lys Ile Leu Ala Gln Asn Ile  
 165 170 175  
 Ile Leu Ser Leu Glu Asn Thr Pro Pro Thr Tyr Ala Ser Lys Glu Phe

	180		185		190										
Met	Glu	Ala	Met	Ala	Arg	His	Leu	Asn	Gly	Lys	Gln	Leu	Ser	Asp	Lys
	195						200					205			
Leu	Gly	Leu	Pro	Arg	Pro	Thr	Leu	Tyr	Tyr	Gln	Ala	Leu	Val	Tyr	Gly
	210						215				220				
Tyr	Cys	Ile	Val	Leu	Met	Trp	Phe	Ala	Tyr	Thr	Phe	Arg	Leu	Leu	Pro
225					230					235					240
Ser	Ile	Asp	Gln	Ala	Met	Ile	Lys	Val	Arg	Met	His	Val	Leu	Leu	Arg
			245						250					255	
Ser	Leu	Thr	Val	Asn	Tyr	Leu	Cys	Ala	Asp	Glu	Ser	Gln	Phe	Arg	Arg
		260						265					270		
Lys	Lys	Tyr	Tyr	Lys	Ile	Ile	Asn	Asp	Lys	Asp	Glu	Gly	Leu	Gly	Gly
	275						280					285			
Glu	Thr	Phe	Phe	Glu	Phe	Lys	Tyr	Val	Pro	Phe	Tyr	Thr	Arg	Asn	Thr
	290					295					300				
Arg	Leu	Gly	Lys	Arg	Lys	Pro	Pro	Lys	Arg	Ala	Lys	Arg	Gly	Val	Glu
305					310					315					320
Phe	Leu	Ala	Leu	Met	Gly	Leu	Leu	Phe	Ala	Val	Ala	Ala	Ala	Gly	Ala
			325						330					335	
Leu	Leu	Gly	Ser	Ile	Leu	Arg	Leu	Leu	Asn	Lys	Leu	Gln	Arg	Ala	
		340						345					350		

&lt;210&gt; 40838

&lt;211&gt; 295

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40838

Gly	Ile	Ile	Pro	Thr	Val	Thr	Ser	Phe	Thr	Asp	Asn	Ser	Ser	Val	Ile
1			5						10					15	
Glu	Gly	Leu	Ile	Val	Gln	Phe	Pro	Val	Trp	Ala	Ala	Leu	Tyr	Thr	Ser
		20						25					30		
Ala	Ser	Ile	Gly	Leu	Ala	His	Ala	Val	Ser	Arg	Gly	Leu	Gly	Leu	Pro
	35						40					45			
Val	Trp	Val	Thr	Pro	Ala	Cys	Ala	Phe	Asn	Asn	Thr	Thr	Ser	Leu	Pro
	50					55					60				
Leu	Leu	Leu	Leu	Gln	Ser	Leu	Glu	Ser	Val	Gly	Ser	Leu	Lys	Leu	Ile
65				70						75					80
Ile	Pro	Glu	Gly	Asp	Ser	Met	Ser	Gly	Ala	Ile	Thr	Arg	Ala	Gln	Ser
			85						90					95	
Tyr	Phe	Leu	Leu	Cys	Ala	Val	Val	Ser	Lys	Thr	Ile	Gly	Tyr	Ala	Val
		100						105					110		
Gly	Pro	Lys	Met	Leu	Gln	Asn	Gly	Asn	Asn	Gln	Asp	Glu	Arg	Arg	Asp
	115						120					125			
Ala	Gln	Asp	Thr	Asp	Ala	Glu	Ala	Gly	Gln	Ser	Asn	Asn	Gly	Asp	Tyr
	130					135					140				
Ala	Asp	Asn	Asp	Glu	Glu	Thr	Ser	Glu	Glu	Thr	Ser	Leu	Leu	Pro	Glu
145					150					155					160
Arg	Val	Gln	Lys	Ala	Arg	Arg	Lys	Val	Thr	Gly	Lys	Phe	Arg	Arg	Val
			165						170					175	
Gly	Arg	Trp	Val	Ser	Ser	Phe	Leu	Pro	Glu	Arg	Val	Lys	Gln	Glu	Leu
		180						185					190		
Met	Ala	Pro	Phe	Glu	Ser	Pro	Phe	Ala	Asp	Val	Ala	Ile	Leu	Cys	Thr
	195						200					205			
Ile	Ile	Gly	Ala	Ala	Leu	Gly	Leu	Val	Pro	Gln	Leu	His	Arg	Ala	Phe
	210					215						220			

## 17941

Phe Arg Pro Tyr Glu Glu Gly Gly Ile Phe Asn Ala Trp Leu Thr Ser  
 225 230 235 240  
 Ser Val Lys Asn Ile Gly Lys Leu Phe Thr Thr Leu Gln Ile Phe Val  
 245 250 255  
 Val Gly Gly Lys Leu Gly Ala Ser Phe Gln Arg Met Lys Ala Ser Gly  
 260 265 270  
 Asn Ser Gly Glu Ile Pro Lys Lys Ala Ile Val Thr Ile Leu Leu Val  
 275 280 285  
 Arg Leu Val Ile Trp Pro Ala  
 290 295

&lt;210&gt; 40839

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40839

Val Ser Ser Arg Arg Arg Ser Tyr Pro Ser Cys Phe Thr Leu Ser Asp  
 1 5 10 15  
 Thr Asp Arg Ser Gly Ser Leu Leu Met Cys Pro Pro Glu His Leu Arg  
 20 25 30  
 Asn Gln Ala Gly Trp Glu Gly Pro Ile Ser Ser Ser Arg Glu Arg Leu  
 35 40 45  
 Leu Ser Glu Leu Ser Ser Glu Tyr Arg Tyr Leu Pro Ser Trp Val Ser  
 50 55 60  
 Asp Asp Pro Ile Ala Asp Leu Leu Pro Glu Ser Ile Ser Pro Ser Val  
 65 70 75 80  
 Met Ile Pro Asn Asn Arg Leu Ala Ile Leu Leu Asn His Val Lys Gln  
 85 90 95  
 Asn Gln Ile Asn Arg Cys Leu Tyr His Asn Thr Ala Thr Pro Pro Ser  
 100 105 110  
 Leu Tyr Ser Asp His Met Cys Asp Arg Asn Asp Phe Pro Leu Arg Thr  
 115 120 125  
 Gly Val Glu Leu Arg Gln His Ser Asp Glu Val Trp Tyr Cys Gln Phe  
 130 135 140  
 Ser His Asp Gly Ser Lys Leu Val Thr Ala Gly Arg Asp Arg His Val  
 145 150 155 160  
 Tyr Ile Tyr Asp Thr Ser Asn Phe Ser Val Tyr Arg Gln Leu Glu Lys  
 165 170 175  
 His Glu Glu Gly Val Ala His Val Ser Trp Ser Pro Asp Asp Ser Lys  
 180 185 190  
 Leu Ile Thr Cys Ser Gln Asp Lys Lys Ala Arg Val Trp Ser Val Glu  
 195 200 205  
 Val Trp Met Ser Ser Leu Ile Ser Gly Val Arg Leu Ser Ser Leu Thr  
 210 215 220

&lt;210&gt; 40840

&lt;211&gt; 358

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40840

Ser Ser Arg Arg Val Ser Val Asn Pro Pro Leu Val Gln Val Cys Ser  
 1 5 10 15  
 Pro Gly Ser Ala Pro Glu Pro Gly Gly Arg Ala Asp Leu Pro Ile Phe  
 20 25 30

Asp Leu Ala Asp Asn Ser Ser Ser Asn Thr Pro Ser Ser Val Ala Pro  
 35 40 45  
 Asp Arg Pro Asn Leu Pro Ile Pro Leu Glu Pro Thr Ser Phe Thr Ser  
 50 55 60  
 Ala Pro Pro Pro Arg Ser Ser Thr Asp Gly Ile Pro Ser Ser Ser Arg  
 65 70 75 80  
 Phe Glu Ser Gly Ala Gly Ser Asp Ser Thr Ala Ser Ser Ile Asp Asn  
 85 90 95  
 Pro Pro Thr Ser Ala Gly Thr Arg Arg Arg Arg Phe Ser Thr Ile Asp  
 100 105 110  
 Pro Ser Ala Phe Thr Gly Gly Thr Gly Gly Val Ser Gly Asn Phe Thr  
 115 120 125  
 Pro Ser Gln Glu Gln Ala Ser Val Gln Ser His Asn Pro Arg Ala Glu  
 130 135 140  
 His Pro Pro Ser Pro Lys Arg Arg Arg Leu Ala Asn Met Arg Pro Asp  
 145 150 155 160  
 Gly Ile Ser Ser Ala Asn Gly Phe Ser Gln Ala Ser Asn Gly Leu Ser  
 165 170 175  
 Val Ser Pro Ser Arg Lys Thr Val Phe Ala His Ser Ser Asn Ser Gln  
 180 185 190  
 Pro Ala His Ser Ser Ser Asn Gly Glu Ser Gln Lys Asn Gly Pro Ser  
 195 200 205  
 Lys Thr Ser Lys Lys Ser Ser Ser Tyr Phe Gly His Asp Arg Glu Glu  
 210 215 220  
 Val Thr Arg Ile Leu Ile Gln Ser Leu Tyr Glu Leu Gly Tyr Asp Gly  
 225 230 235 240  
 Ala Ala Ser Leu Leu Ser Met Glu Ser Gly Tyr Gln Leu Glu Ser Pro  
 245 250 255  
 Ala Val Gly Ile Phe Arg Lys Ala Val Leu Glu Gly Arg Trp Ala Glu  
 260 265 270  
 Ala Glu Asp Ile Leu Ile Gln Ser Phe Thr Pro Asp Ala Asn Val Arg  
 275 280 285  
 Glu Pro Gly Phe Ser Ser Gly Lys Pro Ala Thr Thr Glu Lys Leu Leu  
 290 295 300  
 Leu Val Glu Asn Ala Glu Lys Asn Glu Met Leu Phe Tyr Leu Arg Gln  
 305 310 315 320  
 Gln Lys Phe Leu Glu Leu Leu Glu Ala Arg Asp Leu Gly Ser Ala Leu  
 325 330 335  
 Thr Val Leu Arg His Glu Leu Thr Pro Leu Asn Tyr Asp Val Gly Arg  
 340 345 350  
 Leu His Ala Leu Ser Arg  
 355

&lt;210&gt; 40841

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40841

Phe Asp Thr Asp Asp Cys Val Lys Arg Ser Trp Ile Thr Ser Phe Thr  
 1 5 10 15  
 Met Thr Lys Pro Thr Leu Pro Leu Pro Phe Trp Arg Ile Ile Asp Glu  
 20 25 30  
 Leu Thr Met Ser Asn Pro Ala Tyr Phe Pro Leu Pro Leu Arg Lys Leu  
 35 40 45  
 Gly Phe Asn Ile Leu Asn His Ser Asn Ile Pro Arg Trp Gln Tyr Tyr



## 17943

50                                      55                                      60  
 Ser  
 65  
  
 <210> 40842  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus  
  
 <400> 40842  
 Val Ser Ser Cys Gly Pro Pro Ser Ile Pro Thr Arg Tyr Ser Ser Thr  
 1                                      5                                      10                                      15  
 Ser Gln Leu Gly Tyr Ser Asp Ser Thr Ser Phe Asp His Phe Tyr Ile  
                                     20                                      25                                      30  
 Met Gly Asp Thr Cys Thr Cys Thr Ser Ser Gly Asp Cys Pro Cys Asn  
                                     35                                      40                                      45  
 Gly Pro Gln Ser Cys Thr Cys Ser Asn Asn Cys Ala Cys Lys Gly Cys  
                                     50                                      55                                      60  
 Gly Val Cys Ile Ser Trp Thr Leu Ser Gly Asn Trp  
 65                                      70                                      75  
  
 <210> 40843  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus  
  
 <400> 40843  
 Leu Phe Tyr Val Asp Glu Ile Gln Glu Arg Pro Cys Thr Arg Cys Ile  
 1                                      5                                      10                                      15  
 Lys Arg Asn Ile Gly His Leu Cys His Asp Glu Pro Arg Glu Pro Ser  
                                     20                                      25                                      30  
 Lys Arg Ala Arg Ser Glu His Glu His Ser Thr Ala Glu Glu Asp Gly  
                                     35                                      40                                      45  
 His Ser Asn Asn Glu Phe Ser Asn Ala Gln Ser Met Pro Arg Asn Val  
                                     50                                      55                                      60  
 Asp Val Gln Asp Ala Ala Gly Gln Gln Ile Leu Pro Asp Gly Thr Val  
 65                                      70                                      75                                      80  
 Ala Leu Pro Pro Ser Ser Val Ser Ala Val Gln His Asn Thr Ile Pro  
                                     85                                      90                                      95  
 Ser Ser Ser Ala Gln Asn Ser Leu Gly His Asn Ser Gln Gln Arg Lys  
                                     100                                      105                                      110  
 Phe  
  
 <210> 40844  
 <211> 330  
 <212> PRT  
 <213> A.fumigatus  
  
 <400> 40844  
 Gly Gly Arg Leu Tyr Ser Leu Thr Gly Ala Asn Asp Arg Thr Val Leu  
 1                                      5                                      10                                      15  
 Gly Tyr Asn Glu Trp Leu Gly Gly Gln Ser Gln Phe Gln Asp Met His  
                                     20                                      25                                      30  
 Thr Phe His Pro Ser Tyr Met Phe Asn Ala Pro Glu Val Thr Asn Glu  
                                     35                                      40                                      45

17944

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Tyr Asn Leu Leu Gly Asp Phe Leu Ser Ser Ser Leu Leu Asp Asp Gly
 50                      55                      60
Gly Met Phe Ser Asn Asp Asn Leu Gln Gly Ile Tyr Ser Asp Pro Thr
65                      70                      75                      80
Leu Ile Asn Ser Met Ala Asn Leu Asp Asn Thr Ala Leu Leu Gln Gln
                      85                      90                      95
Ala Gln Pro Ser Gln Pro Thr Gln Ser Gln Pro His Gln Asn Asp Ser
                      100                      105                      110
Val Gln Gly Pro Ser Ser Thr Val Val Asn Asp Lys Ala Arg Glu Thr
                      115                      120                      125
Tyr Tyr Met Thr Ala Ala Asp Pro Ser Gly Ser Asp Pro Pro Glu Glu
                      130                      135                      140
Arg Met Asn Lys Leu Leu Lys Ala Lys Tyr Asp Ala Gly Leu Leu Lys
145                      150                      155                      160
Pro Phe Asn Tyr Val Lys Gly Tyr Ala Arg Leu Asn Gln Tyr Met Glu
                      165                      170                      175
Lys Asn Met Lys Gln Ser Ser Arg Gln Lys Ile Leu Arg Gln Leu Asp
                      180                      185                      190
Lys Phe Arg Pro Lys Phe Arg Glu Arg Met Gln Ser Leu Thr Asp Ile
                      195                      200                      205
Glu Leu Ile Leu Val Glu Met Trp Phe Glu Arg Ser Leu Met Glu Tyr
                      210                      215                      220
Asp Arg Val Phe Ala Ser Met Ala Ile Pro Ala Cys Cys Trp Arg Arg
225                      230                      235                      240
Thr Gly Glu Ile Phe Arg Gly Asn Lys Glu Met Ala Glu Leu Ile Gly
                      245                      250                      255
Val Pro Ile Glu Ser Leu Arg Asp Gly Lys Leu Ala Ile His Glu Ile
                      260                      265                      270
Ile Val Glu Asp Gln Leu Val Ser Tyr Trp Glu Lys Phe Gly Ala Ile
                      275                      280                      285
Ala Phe Asp Asn Thr Gln Lys Ala Met Leu Thr Ser Cys Thr Leu Lys
                      290                      295                      300
Asn Pro Asn Ser Ser Asn Pro Gly Asn Gly Ile Pro Cys Cys Phe Ser
305                      310                      315                      320
Phe Thr Ile Arg Arg Asp Asn His Asn Met
                      325                      330

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<210> 40845

<211> 131

<212> PRT

<213> A.fumigatus

<400> 40845

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Ser Ser Ile His Arg Pro Ser Ala His Ala Thr Gln Ile Gln Thr Trp
 1                      5                      10                      15
Leu Ala Asn Ala Ser Thr Ser Glu Gln Ser Gln Arg Val Asp Thr Phe
                      20                      25                      30
Val Lys Leu Leu Asp Asn Tyr Leu Gly Asp Ile Pro Leu Phe Thr Thr
                      35                      40                      45
Ala Pro Ser Ser Thr Ile Arg Arg Gln Leu Asp Thr Glu Gly Thr Lys
                      50                      55                      60
Leu Trp Asn Ala Cys Thr Gln Leu Met Ala Ile Ser Ala Asp Ser Cys
65                      70                      75                      80
Val Pro Lys Leu Leu Ser Lys Gly Leu Thr Thr Ser Gln Phe Ala Ser
                      85                      90                      95
Ser Ala Ala Ile Leu Ile Ile Thr Val Lys Ala Phe Ala Phe Ala Met

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## 17945

100 105 110  
 Leu Asp Cys Ala Thr Ser Ala Gln Lys Gln Gly Ile Glu Ser Thr Cys  
 115 120 125  
 Val Asn Glu  
 130

<210> 40846  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 40846  
 Phe Thr Asp Leu Tyr His Asn Lys Thr Glu Thr Lys Asp Arg Val Phe  
 1 5 10 15  
 Leu Tyr Leu Met Gly Glu Tyr Val Lys Ser Asn Lys Leu Val Ala Glu  
 20 25 30  
 Ala Arg Gly His Thr Pro Ser Ser Val Lys Val Ile Phe Gln Ala Ile  
 35 40 45  
 Cys Leu Arg His Ala Arg Leu Thr Arg Thr Gly Leu Gln Ala Asn Pro  
 50 55 60  
 Pro Ile Arg Thr Ala Leu Arg Ser Leu His Ser Asn  
 65 70 75

<210> 40847  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 40847  
 Tyr His Leu His Gln Asp Arg Arg Gly Gly Ala Ser Trp Arg Gly Trp  
 1 5 10 15  
 Thr Pro Thr Ile Ser Ala Tyr Gln Ile Phe Leu Ser Pro Leu His Val  
 20 25 30  
 His Ala Ile Glu Ser Leu Phe Trp Pro Thr Tyr Lys Leu Gln Lys Leu  
 35 40 45  
 Asn Ile Phe Glu Gln Ser Phe Ser Val Ser Ile Ile Asn  
 50 55 60

<210> 40848  
 <211> 111  
 <212> PRT  
 <213> A.fumigatus

<400> 40848  
 Leu His Pro Trp Cys Gln Gln Arg Val Ile Glu Ala Tyr Cys Lys Arg  
 1 5 10 15  
 Asn Gly Ile Val Val Glu Ala Tyr Ser Pro Leu Val Arg Asn Tyr Lys  
 20 25 30  
 Ala Asn Asp Pro Thr Leu Val Asp Val Ala Lys Lys Tyr Glu Arg Thr  
 35 40 45  
 Thr Ala Gln Ile Leu Ile Arg Tyr Ala Leu Gln Lys Gly Trp Val Pro  
 50 55 60  
 Leu Pro Lys Ser Asp Thr Pro Glu Arg Ile Val Ala Asn Ala Asn Val  
 65 70 75 80  
 Phe Asp Phe Glu Ile Gly Glu Glu Asp Leu Ala Val Leu Asn Gly Leu  
 85 90 95

## 17946

Asp Gln Gly Ser Ala Gly Ala Ile Val Glu Ala Val Glu Asn Glu  
 100 105 110

<210> 40849  
 <211> 216  
 <212> PRT  
 <213> A.fumigatus

<400> 40849  
 Ile Tyr Ser Ser Lys Val Ser Pro Ser Leu Ser Ser Ile Asp Ser Cys  
 1 5 10 15  
 Arg Asp Thr Asn Thr Met Ser Ser Lys Leu Thr Ile Thr Asp Leu Leu  
 20 25 30  
 Pro Leu Pro Asn Ser Asp Val Lys Ile Pro Arg Leu Gly Phe Gly Val  
 35 40 45  
 Tyr Arg Ser Pro Thr Gly Gln Cys Val Gln Ser Ser Leu Arg Ala Leu  
 50 55 60  
 Glu Ala Gly Tyr Arg His Ile Asp Thr Ala Gln Phe Tyr Gly Asn Glu  
 65 70 75 80  
 Lys Glu Val Gly Glu Ala Leu Arg Lys Cys Gly Ile Pro Arg Ser Asp  
 85 90 95  
 Val Phe Val Thr Thr Lys Ile Leu Ser Pro Ala Gly Ser Pro Glu Ala  
 100 105 110  
 Thr Tyr Gln Lys Leu Leu Glu Ser Val Glu Lys Ile Gly Gly Arg Asp  
 115 120 125  
 Gly Tyr Val Asp Leu Phe Leu Ile His Ser Ser Ser Ser Gly Ser Ala  
 130 135 140  
 Gly Arg Lys Glu Leu Trp Gln Ala Leu Glu Arg Leu Leu Glu Glu Gly  
 145 150 155 160  
 Lys Thr Arg Ser Ile Gly Val Ser Asn Phe Gly Val Lys His Ile Glu  
 165 170 175  
 Glu Met Lys Ala Tyr Ala Lys Val Trp Pro Pro His Val Asn Gln Ile  
 180 185 190  
 Glu Val Ser Ser Met Val Glu Lys Pro Phe Gln Val Asp Ser Asp Ser  
 195 200 205  
 Leu Trp Pro Glu Pro Glu Val His  
 210 215

<210> 40850  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 40850  
 Ile Ser Cys Ser Val Arg Ser Leu Ile Leu Pro Gly Ala Val Met Pro  
 1 5 10 15  
 Asp Ala Leu Ser Lys Thr Val Pro Ile Trp Cys Ala Val Met Asn Arg  
 20 25 30  
 Ala Leu Phe Pro Ser Asp Ala Ala Tyr His Ala Val Gln Leu Pro Pro  
 35 40 45  
 Asn Tyr Leu Gly Ala Ser Glu Glu Ser Gln Ile Glu Arg Arg Ile Asp  
 50 55 60  
 Gly Phe Val Lys Ser Leu Lys Val Leu Phe Ser Val Tyr His His Cys  
 65 70 75 80  
 Thr Leu Leu Ser Pro Ala Thr Leu Asp  
 85

<210> 40851  
 <211> 284  
 <212> PRT  
 <213> A.fumigatus

<400> 40851  
 Leu Lys Val Gln Asp Leu Lys Leu Asp Leu Asp Asp Leu Arg Gln Gln  
 1 5 10 15  
 Leu Gly Lys Pro Ile Arg Val Ala Trp Ala Asn Arg Ser Tyr Phe Tyr  
 20 25 30  
 Pro Thr Asp Leu His Lys Lys Pro Asp Tyr Asn Leu Phe Val Leu Cys  
 35 40 45  
 Ser Ala Ser Lys Arg Val His Gly Ala Glu Val Ser Glu Gly Gly Tyr  
 50 55 60  
 Ile Gln Gly Ala Gly Asp Asp Ser Glu Gly Trp Ala Gln Gly Leu Thr  
 65 70 75 80  
 Pro Pro Val Phe Trp Ala His Lys Ala Ile Leu Leu Lys Thr Pro Glu  
 85 90 95  
 Glu Asp Leu Pro Glu Leu Val Glu Glu Leu Val Lys Glu His Arg Asp  
 100 105 110  
 Gln Asp Thr Ala Glu Gln Ala Thr Leu Val Ala Pro Thr Arg Asn Leu  
 115 120 125  
 Tyr Ile Ser Gln Thr Asn Ala Ser Ile Asn Asp Cys Gly Leu Tyr Asp  
 130 135 140  
 Leu Val Ile Asp Cys Asn Gly Arg Pro Glu Ala Ser Glu Gly Asp Pro  
 145 150 155 160  
 Lys Arg Leu Asn Leu Gly Cys Arg Leu Ser Lys Leu Gly Ser Arg Asp  
 165 170 175  
 Leu Arg Gln Glu Leu Asp Lys Val Arg Ala Phe Val Ser Ser Gln Leu  
 180 185 190  
 Ala Thr Asp Pro Ser Arg Ser Leu Leu Val Thr Cys Glu Thr Gly Lys  
 195 200 205  
 Asp Leu Ser Ala Gly Ala Leu Leu Ala Ile Ile Cys Leu Phe Tyr Asn  
 210 215 220  
 Asp Asp Gly Met Pro Pro Phe Arg Thr Phe Ser Cys Leu Pro Tyr Cys  
 225 230 235 240  
 Phe His His Leu Val Ser His Ser Phe Leu Phe Leu Thr Val Leu Arg  
 245 250 255  
 Ile Val His Asn Met Pro Gly Glu Ala Ile Asn Arg Gln Ala Ile His  
 260 265 270  
 Thr Thr Thr Ser Cys Leu Asp Thr Val Ile Lys Thr  
 275 280

<210> 40852  
 <211> 549  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (451)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 40852  
 Val Ile Leu Ile His Leu Leu Glu Ile Leu Gly Gly Glu Ser Leu Gly

1 5 10 15  
 Arg Tyr Ala Ser Lys Pro Lys Leu Arg Val Gln Lys Phe Glu Asn Val  
 20 25 30  
 Asn Lys Ser Leu Asp Phe Ile Arg Gly Arg Arg Ile Gln Met Thr Asn  
 35 40 45  
 Ile Gly Ala Glu Asp Ile Val Asp Gly Asn Arg Lys Ile Ile Leu Gly  
 50 55 60  
 Leu Ile Trp Thr Leu Ile Leu Arg Phe Thr Ile Ser Asp Ile Asn Ala  
 65 70 75 80  
 Glu Gly Met Thr Ala Lys Glu Gly Leu Leu Leu Trp Cys Gln Arg Lys  
 85 90 95  
 Thr Ala Cys Tyr Glu Gly Val Glu Val Arg Asp Phe Ser Thr Ser Trp  
 100 105 110  
 Asn Asp Gly Leu Ala Phe Cys Ala Leu Leu Asp Ile His Arg Pro Asp  
 115 120 125  
 Leu Ile Asp Phe Asp Ala Leu Asp Lys Lys Asp His Arg Gly Asn Met  
 130 135 140  
 Lys Leu Ala Phe Asp Ile Ala Thr Asn Glu Ile Gly Ile Pro Asp Leu  
 145 150 155 160  
 Leu Asp Val Asp Asp Val Cys Asp Val Ala Lys Pro Asp Glu Arg Ser  
 165 170 175  
 Leu Met Thr Tyr Ile Ala Tyr Trp Phe His Ala Phe Ser Gln Leu Glu  
 180 185 190  
 Arg Val Glu Asn Ala Gly Arg Arg Val Glu Lys Phe Ile Asn Asn Met  
 195 200 205  
 His Gly Ala Trp Glu Met Gln Asn Ser Tyr Glu Arg Arg Met Lys Glu  
 210 215 220  
 Leu Leu Arg Leu Ile Arg Ala Gln Arg Glu Ala Trp Lys Asn Ala Ser  
 225 230 235 240  
 Phe Glu Gly Thr Tyr Lys Asp Ala Lys Glu Gln Ala Arg Gln Phe Ser  
 245 250 255  
 Leu Tyr Lys Arg Asn Glu Lys Arg Arg Trp Val Ala Glu Lys Ser Asp  
 260 265 270  
 Leu Ala Ala Leu Leu Gly Asn Ile Lys Thr Lys Leu Ser Thr Tyr Arg  
 275 280 285  
 Leu Arg Pro Tyr Asp Pro Pro Glu Glu Leu Arg Leu Glu Val Cys Asp  
 290 295 300  
 Asn Glu Trp Glu Leu Leu Thr Arg Asp Glu His Glu Arg Ser Gln Leu  
 305 310 315 320  
 Ile Asn Glu Thr Ile Arg Asp Ile Lys Asn Ala Leu Arg Arg Ser Phe  
 325 330 335  
 Ala Asp Lys Ala Asn Asp Phe Ala Leu Thr Leu Lys Thr Leu Ser Leu  
 340 345 350  
 Ala Ile Ser Gly Leu Asp Gly Asp Val Glu Asp Gln Leu Glu His Val  
 355 360 365  
 Lys Arg Leu Asn Asp Asn Leu Pro Pro Leu Asp Ala Phe Leu Glu Thr  
 370 375 380  
 Ile Ala Glu Leu Asp Glu Gln Cys Val Glu Ala Asn Ile Glu Glu Asn  
 385 390 395 400  
 Asp Phe Thr Thr Tyr Thr Leu Asp Glu Leu Ser Tyr Glu Leu Ser Leu  
 405 410 415  
 Val Lys Ser Ser Ile Ser Lys Lys Leu Ala Phe Leu Glu Asn Gln Leu  
 420 425 430  
 Val Ala Arg Asn Met Thr Asn Leu Thr Pro Ile Gln Leu Glu Glu Phe  
 435 440 445  
 Glu Ser Xaa Phe Arg His Phe Asp Arg Asp Ser Ser Asn Thr Leu His

## 17949

450                      455                      460  
 Glu Leu Glu Phe Ser Ala Ala Leu Ala Ser Leu Gly Leu Val Tyr Asp  
 465                      470                      475                      480  
 Glu Glu Glu Met His Arg Ser Thr Ser Glu Thr Cys Gly Pro Ala Arg  
                     485                      490                      495  
 Leu Ala Gln Asp Gly Gly Val Ser Phe Gly Gln Phe Ile His Phe Met  
                     500                      505                      510  
 Val Ser Val Thr Glu Asp Gln His Thr Ala Glu Gln Phe Phe Gln Ser  
                     515                      520                      525  
 Phe Arg Glu Val Ala Asp Gly Lys Val Cys Ser Pro Gln Pro Glu Arg  
                     530                      535                      540  
 Phe Arg Ser Arg Tyr  
 545

&lt;210&gt; 40853

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40853

Trp Ser Arg Phe Gln Thr Ala Tyr Tyr Asp Phe Gln Leu Thr Leu Ser  
 1                      5                      10                      15  
 Leu Phe Leu Arg His Asn Ser Pro Thr Glu Lys Asn Glu Leu Thr Trp  
                     20                      25                      30  
 Ile Cys Asn Ser Pro Arg Thr Asn His Asn Phe Gln Phe Ala Phe Ala  
                     35                      40                      45  
 Asp Arg Val Ala Leu Thr Val Ile Gly Ser Thr Thr Asp Met Thr Thr  
                     50                      55                      60  
 Thr Glu Thr Val Arg Phe Glu Pro Gly Phe Val Ala Ile Val Thr Gly  
 65                      70                      75                      80  
 Asp Phe Leu Phe Ile Pro Leu Val Cys Phe Asn Thr Gly Phe Phe Gln  
                     85                      90                      95  
 His Ala Leu Leu Val Val Pro Asp Val His Ala Val Thr Val Thr Pro  
                     100                      105                      110  
 His Arg Pro Ile Gly Met Ser Gly Leu Asp Leu Leu Lys Pro Phe  
                     115                      120                      125  
 Val Val Met Ala Ala Asn Ser Cys Ser Ser Val Ser Thr Ala Gly Gln  
                     130                      135                      140  
 Glu Asp Tyr Ala Leu  
 145

&lt;210&gt; 40854

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40854

Cys Gln Leu Thr Phe Ser Ser Phe Leu Pro Ser Lys Lys Ser Leu Ser  
 1                      5                      10                      15  
 Ser Phe Trp Ile Arg Gly Ile Arg Val Glu Pro Pro Thr Ser Thr Ile  
                     20                      25                      30  
 Ser Ser Thr Trp Leu Phe Ser Arg Pro Glu Ser Leu Arg Thr Cys Cys  
                     35                      40                      45  
 Thr Gly Ser Ser Val Pro Glu Lys Ala Leu Ala Leu Arg Ser Ser Lys  
                     50                      55                      60  
 Arg Ala Arg Val Ile Asp Glu Leu Lys Ser Ser Pro Ser Asn Lys Glu

## 17950

65		70		75		80									
Ser	Ile	Ser	Thr	Val	Val	Cys	Val	Ala	Leu	Asp	Ser	Val	Arg	Leu	Ala
				85					90					95	
Arg	Ser	Gln	Ala	Val	Leu	Lys	Arg	Arg	Arg	Ala	Leu	Ala	Ser	Pro	Glu
			100					105					110		
Arg	Ser	Phe	Pro	Val	Phe	Phe	Trp	Asn	Ser	Phe	Leu	Lys	Cys	Ser	Arg
		115					120					125			
Arg	Leu	Val	Ser	Lys	Ser	Cys	Pro	Pro	Arg						
	130					135									

&lt;210&gt; 40855

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40855

Arg	Asp	Ser	Asn	Phe	Leu	Val	Lys	Ala	Ser	Ser	Leu	Asp	Leu	Asn	Leu
1			5						10					15	
Ala	Ala	Ser	Ile	Thr	Ala	Leu	Gly	Leu	Phe	Pro	Cys	Lys	Asn	Thr	Val
			20					25					30		
Arg	Gln	Arg	Ser	Arg	Arg	Thr	Ile	Asn	His	Leu	Phe	Asp	Phe	Ser	Gly
		35				40						45			
Gly	Glu	Leu	Ala	Asn	Ser	Val	Gly	Asp	Ser	Asn	Ile	Gly	Gly	Thr	Ala
	50					55					60				
Arg	Arg	Leu	Leu	Arg	Ser	Gly	Asp	Leu	Lys	Asp	Thr	Ile	Asp	Ile	Asp
65				70					75					80	
Leu	Glu	Asn	Asn	Phe	Lys	Ser	Gly	Leu	Ala	Ser	Leu	His	Gly	Arg	Asp
			85						90					95	
Arg	Ser	Glu	Ser	Lys	Leu	Ala	Gln	Gly	Gly	Val	Val	Ser	Thr	Val	Cys
		100					105						110		
Ala	Leu	Thr	Leu	Ile	Asn	Trp	Glu	Leu	Asn	Gly	Arg	Leu	Val	Val	Tyr
	115					120					125				
Asn	Ser	Arg	Lys	Gly	Ala	Leu	Leu	Asp	Gly	Gly	Asn	Ser	Leu	Thr	Ala
	130					135					140				
Gly	Asn	Asn	Arg	Gly	Glu	Asn	Ile	Ala	Phe	His	Gly	Asn	Ser	Lys	Gly
145				150					155					160	
Lys	Gly	Asn	Asp	Ile	Gln	Lys	Gln	Gln	Val	Leu	Ser	Phe	Ser	Arg	Gly
			165						170					175	
Gly	Leu	Thr	Arg	Lys	Asp	Ala	Ser	Leu	His	Gly	Gly	Thr	Ile	Ser	Tyr
		180					185						190		
Ser	Phe	Ile	Trp	Val	Asn	Ala	Leu	Arg	His	Asn					
	195						200								

&lt;210&gt; 40856

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40856

Leu	Glu	Asp	Met	Thr	Gly	Asp	Val	Gly	Gly	Leu	Met	Pro	Thr	Asn	Leu
1			5						10					15	
Leu	Lys	Leu	Leu	Thr	Ile	Glu	Lys	Val	Thr	Glu	Gln	Leu	Leu	Asp	Ser
		20						25				30			
Arg	Asp	Thr	Ser	Gly	Ala	Thr	Asn	Glu	His	Asn	Leu	Ile	Asp	Leu	Ala
	35					40					45				
Leu	Leu	Lys	Ala	Arg	Val	Leu	Glu	Asn	Leu	Leu	Tyr	Trp	Leu	Glu	Arg



## 17951

50                      55                      60  
 Ala Arg Glu Ser Leu Gly Val Glu Ile Leu Lys Ala Gly Thr Ser Asp  
 65                      70                      75                      80  
 Arg Arg Val Glu Ile Leu Ser Ile Glu Gln Arg Val Asn Leu Asn Ser  
                     85                      90                      95  
 Cys Leu Cys Ser Val Gly Gln Cys Thr Leu Gly Thr Leu Ala Gly Arg  
                     100                      105                      110  
 Ser Gln Thr Ala Lys Ser Ser Gly Ile Ala  
                     115                      120

&lt;210&gt; 40857

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40857

Glu Ile Leu Ser Ser Leu Leu Leu Glu Phe Leu Leu Glu Val Phe Lys  
 1                      5                      10                      15  
 Glu Val Gly Val Lys Ile Leu Ser Thr Glu Met Ser Ile Thr Gly Cys  
                     20                      25                      30  
 Gly Leu Asp Ser Glu Asn Thr Ser Leu Asp Val Glu Lys Arg His Ile  
                     35                      40                      45  
 Glu Ser Thr Ser Thr Lys Ile Ile Asp Gln Asp Ile Thr Leu Phe Phe  
                     50                      55                      60  
 Gly Phe Ser Gly Ala Glu Ser Ile Gly Asp Ser Gly Gly Ser Gly Leu  
 65                      70                      75                      80  
 Ile Asp Asp Ala Glu Asn Ile  
                     85

&lt;210&gt; 40858

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40858

Phe Val Ile Tyr Leu His Gln Asp His Arg Arg Asp Phe Leu Gly Arg  
 1                      5                      10                      15  
 Lys Cys Leu Gly Phe Thr Gln Ile Phe Asn Leu Asp Asn Gly Val Ser  
                     20                      25                      30  
 Ala Leu Val Asn Tyr Leu Glu Arg Pro Arg Leu Asn Ile Leu Leu His  
                     35                      40                      45  
 Asp Arg Ile Phe Ile Thr Ser Thr Asn Glu Thr Pro Arg Leu Val Ser  
                     50                      55                      60  
 Lys Arg Thr Ser  
 65

&lt;210&gt; 40859

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40859

Val Arg Thr Lys Gln Val Ser Cys His Val Tyr Leu Ser His Ser Arg  
 1                      5                      10                      15  
 Ser Ser Leu Thr Asp Gln Pro Arg Arg Leu Ile Gly Arg Arg Tyr Glu  
                     20                      25                      30

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	

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<210> 40860
<211> 255
<212> PRT
<213> A.fumigatus
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<210> 40861
<211> 176
<212> PRT
<213> A.fumigatus
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<400> 40861
Ser Ile Asn Pro Asp Glu Ala Val Ala Tyr Gly Ala Ala Val Gln Ala
1             5             10             15
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## 17953

Gly Ile Leu Ser Gly Lys Ala Thr Ser Ala Glu Thr Gln Asp Leu Leu  
                   20                  25                  30  
 Leu Leu Asp Val Val Pro Leu Ser Leu Gly Val Ala Met Glu Gly Asn  
                   35                  40                  45  
 Ile Phe Ala Pro Val Val Pro Arg Gly Gln Thr Val Pro Thr Ile Lys  
                   50                  55                  60  
 Lys Arg Thr Phe Thr Thr Val Val Asp Asn Gln Thr Thr Val Gln Phe  
 65                  70                  75                  80  
 Pro Val Tyr Gln Gly Glu Arg Thr Asn Cys Ala Asp Asn Thr Ser Leu  
                   85                  90                  95  
 Gly Glu Phe Thr Leu Ala Pro Ile Pro Pro Met Lys Ala Gly Glu Ala  
                   100                  105                  110  
 Ala Leu Glu Val Val Phe Glu Val Asp Val Asn Gly Ile Leu Lys Val  
                   115                  120                  125  
 Thr Ala Thr Glu Lys Ser Ser Gly Arg Ser Ala Asn Ile Thr Ile Ser  
                   130                  135                  140  
 Asn Ala Val Gly Lys Leu Ser Thr Thr Glu Ile Glu Gln Met Ile Asn  
 145                  150                  155                  160  
 Gly Thr Ser Thr Ala Leu Ser His Cys Val Leu Thr Arg Lys Gln Thr  
                   165                  170                  175

&lt;210&gt; 40862

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40862

Leu Met Val Arg Leu Leu Arg Cys Leu Thr Val Phe Leu Gln Gly Asn  
 1                  5                  10                  15  
 Lys Pro Asn Ala Val Ile Asp Ala Ala Lys Phe Lys Ser Ser Asp Glu  
                   20                  25                  30  
 Ala Phe Thr Lys Lys Phe Glu Ser Arg Gln Gln Leu Glu Ser Tyr Ile  
                   35                  40                  45  
 Ser Arg Val Glu Glu Ile Ile Ser Asp Pro Thr Met Ser Leu Lys Leu  
                   50                  55                  60  
 Lys Arg Gly Asn Lys Glu Lys Ile Glu Ser Ala Leu Ser Asp Ala Met  
 65                  70                  75                  80  
 Ala Gln Leu Glu Ile Glu Asp Ser Ala Pro Glu Asp Tyr Lys Lys Lys  
                   85                  90                  95  
 Glu Leu Ala Leu Lys Arg Leu Ile Thr Lys Ala Met Ala Thr Arg  
                   100                  105                  110

&lt;210&gt; 40863

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40863

Asp Phe Val Leu Ile Gln Ala Asp Cys Ser Gln Gly Asn Cys Met Gln  
 1                  5                  10                  15  
 Gln Val Val Tyr Ser Gly Leu Tyr Ser Gly Leu Leu Met Ile Phe Ser  
                   20                  25                  30  
 Ser Gln His Val Lys Pro Ile Thr Ser Ala Ile Leu Ser Ser Asp Leu  
                   35                  40                  45  
 Ser Leu Thr Pro Gln Pro Asp Pro His Asn Ile Leu Gln Leu Asn Ile  
                   50                  55                  60

## 17954

Ser Ile Pro Pro Pro Thr Lys Glu Leu Arg Glu Gln Thr Val Val Ala  
 65 70 75 80  
 Ala Arg Ala Ala Met Glu Lys Ala Ala Gly Ala Val Arg Glu Ser Arg  
 85 90 95  
 Ser Val Ser His Lys Arg Leu Gln Asp Met Gln Lys Lys Lys Leu Ala  
 100 105 110  
 Arg Pro Asp Asp Val Arg Lys Ala Gln Asp His Met Glu Arg Leu Thr  
 115 120 125  
 Glu Lys Gly Gln Lys Glu Val Lys Glu Leu Phe Asp Ala Ala Lys Arg  
 130 135 140  
 Ala Leu Glu Arg Val  
 145

&lt;210&gt; 40864

&lt;211&gt; 305

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40864

Cys Ser Val Asn Gly Val Leu Glu Leu Gly Phe Arg Pro Arg Val Pro  
 1 5 10 15  
 Trp Cys Gly Trp Glu Ala Thr Arg Cys Phe Trp Glu Lys Met Thr Ser  
 20 25 30  
 Asn Trp Val Leu Leu Gly Pro Tyr Thr Pro Arg Gln Trp Gly Ser Leu  
 35 40 45  
 Arg Trp Ser Leu Gly Ile Val Ala Arg Val Gly Lys His Ala Lys Val  
 50 55 60  
 Ala Asp Leu Ala Lys His Ser Thr Val Pro Val Ile Asn Ala Leu Cys  
 65 70 75 80  
 Asp Ser Phe His Pro Leu Gln Ala Ile Ala Asp Phe Gln Thr Met His  
 85 90 95  
 Glu Thr Phe Thr Pro Lys Ala His Gly Leu Ser Ser Leu Gly Leu Glu  
 100 105 110  
 Gly Leu Lys Ile Ala Trp Val Gly Asp Ala Asn Asn Val Leu Phe Asp  
 115 120 125  
 Met Ala Ile Ala Ala Ala Lys Met Gly Ile Asp Leu Ala Val Ala Thr  
 130 135 140  
 Pro Lys Gly Tyr Glu Ile Pro Ala His Met Leu Glu Ile Ile Glu Lys  
 145 150 155 160  
 Ala Gly Glu Gly Val Ser Ser Pro Gly Lys Leu Ile Gln Thr Asn Val  
 165 170 175  
 Pro Glu Glu Ala Val Lys Gly Ala Asp Val Leu Val Thr Asp Thr Trp  
 180 185 190  
 Val Ser Met Gly Gln Glu Ala Glu Ser Ile Lys Arg Leu Lys Asp Phe  
 195 200 205  
 Glu Gly Phe Gln Ile Thr Ala Asp Leu Ala Lys Arg Gly Gly Ala Lys  
 210 215 220  
 Glu Gly Trp Lys Phe Met His Cys Leu Pro Arg His Pro Glu Glu Val  
 225 230 235 240  
 Asn Asp Glu Val Phe Tyr Ser Gln Arg Ser Leu Val Phe Pro Glu Ala  
 245 250 255  
 Glu Asn Arg Leu Trp Ala Ala Ile Ser Ala Ile Glu Ala Phe Cys Cys  
 260 265 270  
 Gln Gln Arg Glu Asn Ser Tyr Glu Asn Arg Met Val Ser Ile Glu Lys  
 275 280 285  
 Ala Ser Arg Asn Gln Ile Ser Lys Val Asp Arg Ile Pro Phe Cys Pro

290 295 300  
 Asn  
 305  
 <210> 40865  
 <211> 431  
 <212> PRT  
 <213> A.fumigatus  
 <400> 40865  
 Glu Leu Val Lys Leu Ser Pro Ser Ser Gln Glu Pro Phe His Arg Ser  
 1 5 10 15  
 Leu Arg Asn Arg Ser Asn Gly Cys Met Gly Leu Ser Phe His Leu Tyr  
 20 25 30  
 Ser Phe Tyr Pro Leu Thr Gln Ala Pro Gln Gly Ser Ala Ser Gln Ser  
 35 40 45  
 Gly Ser Gly Phe Pro Ser Arg Arg Ser Tyr Pro Ser Leu Asn His Val  
 50 55 60  
 Ser Leu Ala Pro Leu Thr Asn Arg Phe Pro Ile Asp Asp Asp Thr Glu  
 65 70 75 80  
 Pro Glu Asp Tyr Phe Ser Pro Arg Asp Glu Arg Ser Ala Asp Thr Ser  
 85 90 95  
 Thr Arg Thr Ser Tyr Leu Ser Ser Phe Ser Val Pro Gly Thr Pro Gly  
 100 105 110  
 Val Leu Ser Tyr Ser Arg Ser Gly Ser Arg Val Arg Leu His Ser Arg  
 115 120 125  
 Ser Lys Ser Ser Ser Arg Ile His Arg Ser Asp Ser Ser Leu Gln Ser  
 130 135 140  
 Gln Asp Asp Ala Arg Pro Leu His His His Gln His Ala His Gly Pro  
 145 150 155 160  
 Lys Lys Lys His Thr Ser Ser Ser Arg His Gln Pro Ser Glu Ser Ala  
 165 170 175  
 Gly Arg Arg Asp Ala Glu Trp Met Leu Arg Ala Gly Ile Ala Leu Ala  
 180 185 190  
 Ser Ser Thr Arg Glu Glu Lys Gly Ser Trp Ile Val Lys Arg Glu  
 195 200 205  
 Ser Ser Thr Ser Leu Val Ser Glu Thr Asn Val Asp Ser Pro Val Leu  
 210 215 220  
 Ala Arg Arg Ser Arg Ser Gly Arg Ser Thr Pro Ala Ala His Ser Arg  
 225 230 235 240  
 Trp Gly Ser Arg Ala Ala Ser Arg Arg Asn Ser Arg His Asp Leu Ala  
 245 250 255  
 Met Thr Ser Leu Asp Ala Leu Pro Thr Gly Ser Gly Ser Asn Ala Arg  
 260 265 270  
 Asp Ser Thr Arg Pro His Glu Glu Thr Arg His Phe Ile Pro Asp Phe  
 275 280 285  
 Val Asp Glu Arg Ile Arg Ala Glu Met Ala Phe Ile Gln Gln Phe Glu  
 290 295 300  
 Asp Gly Tyr Ala Ser Ala Ser Asp Glu Glu Ser Asp Ser Glu Asp Glu  
 305 310 315 320  
 Ile Asp Glu Gln Glu Leu Gln Arg Leu Thr Arg Glu Arg Gly Phe Gly  
 325 330 335  
 Leu Gly Gly Trp Ile Asp Arg Met Val Glu Trp Thr Leu Phe Gly Val  
 340 345 350  
 Glu Asp Leu Pro Leu Ser Ala Asn Val Gln Ser Ala Glu Leu Ala Lys  
 355 360 365

## 17956

His Pro Asp Ser Ser Pro Asp Asn Asp Ser Val Arg Asp Asp His Ser  
 370 375 380  
 Ser Ala Ala Glu Leu Thr Asp Asp Asn Ala Ser Val Ser Ala Asp Glu  
 385 390 395 400  
 Ser Ile Ala Ser Thr Val Val Glu Lys Pro Gly Glu Asn Gly Gly Trp  
 405 410 415  
 Ala Asp Val Gly Trp Phe Leu Arg Val Met Lys Arg Ala Leu Ser  
 420 425 430

<210> 40866  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 40866  
 His Phe Gly Ser Ser Ala Lys Pro Ser Arg Ile Asp Ser Phe Leu Lys  
 1 5 10 15  
 Leu Ile Ser Pro Phe Gly Ile Leu Glu Ser Thr Arg Thr Gly Leu Met  
 20 25 30  
 Ala Leu Pro Arg Ser Pro Leu Ser Ser Glu Pro Ser Glu Glu Leu Glu  
 35 40 45  
 Lys Glu Ala Ala Asp Val Val Asp Ala Ser Thr Leu Pro Pro Gly  
 50 55 60

<210> 40867  
 <211> 211  
 <212> PRT  
 <213> A.fumigatus

<400> 40867  
 Trp His Pro Leu Arg Gly Cys Phe Gly Ser Leu Gly Glu Asp Pro Thr  
 1 5 10 15  
 Ala Val Ser Ser Ile Leu Tyr Glu Thr Pro Val Thr Pro Thr Asn Pro  
 20 25 30  
 Pro Lys Arg His Ile Leu Asn Cys Leu Val Gln Asn Glu Pro Gly Val  
 35 40 45  
 Leu Ser Arg Val Ser Gly Ile Leu Ala Ala Arg Gly Phe Asn Ile Asp  
 50 55 60  
 Ser Leu Val Val Cys Asn Thr Glu Val Glu Asp Leu Ser Arg Met Thr  
 65 70 75 80  
 Ile Val Leu Gln Gly Gln Asp Gly Val Val Glu Gln Ala Arg Arg Gln  
 85 90 95  
 Leu Asp Asp Leu Val Pro Val Trp Ala Val Leu Asp Tyr Thr Asp Ser  
 100 105 110  
 Ala Leu Val Gln Arg Glu Leu Leu Leu Ala Lys Val Ser Ile Leu Gly  
 115 120 125  
 Pro Glu Phe Phe Glu Glu Leu Leu Gln His His Arg Glu Ile Thr Thr  
 130 135 140  
 Pro Gly Asp Ala Leu Glu Gly Gln Lys Glu Asn Lys Ala Gly Asp Ala  
 145 150 155 160  
 Gln Ala Lys Lys Ala Glu Phe His Pro Arg His Leu Pro Pro Ser Gln  
 165 170 175  
 Ala Leu Arg His Lys His Glu His Leu Asp Ala Ile Thr Arg Leu Thr  
 180 185 190  
 His Gln Phe Gly Gly Lys Val Leu Asp Ile Ser Thr Asn Asn Cys Ile  
 195 200 205

17957

Val Glu Val  
210

<210> 40868  
<211> 199  
<212> PRT  
<213> A.fumigatus

<400> 40868  
Val Ile Pro Ser Thr Asp Phe Tyr Thr Ala Lys Phe Thr Pro Tyr Ser  
1 5 10 15  
Val Val Gly Phe Ser Gln Phe His Ile Ser Thr Ser Phe Thr Met Ala  
20 25 30  
Cys Gly Leu Lys Leu Ala Ala Ala Arg Phe Gly Ala Leu Asn Gly Gln  
35 40 45  
His Leu Arg Gln Arg Val Ser Leu Asn Gly Leu Arg Gln Tyr Ser Ser  
50 55 60  
Gln Thr Thr Pro Pro Ile Ser Pro Phe Ala Pro Arg His Phe Leu Ser  
65 70 75 80  
Ile Ala Asp Leu Thr His Thr Glu Phe Ala Thr Leu Val Arg Asn Ala  
85 90 95  
Ser Ser Tyr Lys Arg Ser Ile Lys Ser Gly Ser Val Pro Gln Asn Leu  
100 105 110  
Leu Gly Ala Leu Asn Gly Lys Thr Val Ala Met Met Phe Ser Lys Arg  
115 120 125  
Ser Thr Arg Thr Arg Ile Ser Thr Glu Gly Ala Val Val Arg Met Gly  
130 135 140  
Gly His Pro Met Phe Leu Gly Lys Asp Asp Ile Gln Leu Gly Val Ile  
145 150 155 160  
Gly Pro Leu Tyr Ala Thr Ala Val Gly Val Ser Ser Met Val Ser Trp  
165 170 175  
His Arg Gly Ser Arg Arg Gln Ala Cys Glu Ser Cys Arg Pro Arg Glu  
180 185 190  
Ala Leu Asn Arg Ser Cys Asp  
195

<210> 40869  
<211> 62  
<212> PRT  
<213> A.fumigatus

<400> 40869  
Ile His Tyr Leu Thr Leu Phe Cys Ala Gln Glu Ala Ser Ala His Thr  
1 5 10 15  
Asp Thr Trp Leu Gly His Tyr Lys Ser Arg Met Arg Arg Lys Phe His  
20 25 30  
Thr Ala Ala Arg Arg Gln Phe Ile Leu Leu Phe Lys Lys Ala Cys Leu  
35 40 45  
Arg Ile Val Asn Ala Thr Tyr Phe Ile Lys Pro Arg Ala Gly  
50 55 60

<210> 40870  
<211> 64  
<212> PRT  
<213> A.fumigatus

&lt;400&gt; 40870

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Arg Glu His Lys Thr Thr Gly Ile Thr Ser Val Ile Ala Ser Phe Leu
1          5          10          15
Pro Val Lys Leu His His Asn Thr Thr Asp Thr Asn Leu His Lys Pro
          20          25          30
Leu Pro Phe Pro Ser Phe Ile Leu Leu Thr Phe Pro Ser His Phe Cys
          35          40          45
Phe Tyr Ser Ala Thr Ala Ala Phe Phe Ser Leu Asp Phe Cys Ala Ile
          50          55          60

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&lt;210&gt; 40871

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (58)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40871

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Trp Leu Glu Thr Leu Glu His Arg Cys Leu Gly Gly Gly Tyr Tyr Val
1          5          10          15
Gln Met Gly Glu Arg His Pro Val Leu Val Asp Glu Val Ile His Lys
          20          25          30
Ser Pro Arg Arg Ser Val Ser Ser Ala Leu Gln Val Leu Arg Asn Tyr
          35          40          45
Gln Ser Thr Leu Gln Asn Ser Phe Pro Xaa Gly Gly Asn Pro Glu Ser
          50          55          60
Asp Tyr Ala Tyr Asn Arg Val Arg Gln Pro Leu Gly Asn Leu Leu Asp
          65          70          75          80
Ala Leu Ser Asp Phe Thr Pro His Phe Leu Pro Pro Gln Glu Thr Gln
          85          90          95
Ala Ser Val Ser Leu Ser Tyr Leu Asp Gly Ala Thr Asp Ile Ile His
          100          105          110
Ala Leu Pro Arg Trp His Ser Pro Gln Asn Asn Ile Glu Arg Asp Ser
          115          120          125
Ala Tyr Asp Glu Ile Cys Lys Ala Trp Ile Leu Val Ile Arg Glu Ala
          130          135          140
Ala Lys Arg Gly Gly Gly Ile Gln Leu Gln Tyr Gly Gly Trp Asp Gln
          145          150          155          160
Lys Leu Ala Lys His Asn Gln Asn Ala Gly Gly Arg Leu Gln Ala Ala
          165          170          175
Val Asn Glu Leu Gly Asn Ser Leu Gly Trp Met His Gly Pro Asp Ser
          180          185          190
Gln Gly Tyr Gly Ser Ser Thr Gly Gly Asp Leu Val Ser Val Arg Glu
          195          200          205
Gln Leu Leu Ser Gly Thr Tyr Gly Leu Gly Thr Pro Val Lys Val Gly
          210          215          220
Pro Trp
225

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&lt;210&gt; 40872

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus



&lt;400&gt; 40872

Leu His Leu Trp Ser Ser Thr Ala Glu Phe Thr Leu Phe Ser Pro Leu  
 1 5 10 15  
 Pro Arg Thr Leu Ile Asp Ile Met Ser Val Gln Ala His Ala Tyr Tyr  
 20 25 30  
 Ala Glu His Glu Glu Val Gly Ser Ile Asn Tyr Ser Val Pro Phe Gln  
 35 40 45  
 Val Pro Pro Gly Val Ser Lys Thr Pro Arg Leu Pro Val Glu Met Asn  
 50 55 60  
 Pro Asp Gly Ile Gly Tyr Asp Ala Leu Lys Arg Ala Leu Gly Gly Ser  
 65 70 75 80  
 Leu Glu Leu Asp Ala Met Ala Thr Val Gly Val Arg Val Gly His Tyr  
 85 90 95  
 Thr Ala Thr Ile Asp Tyr His Ser Lys Gly Ile Arg Ala Asn Val Lys  
 100 105 110  
 Ile

&lt;210&gt; 40873

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40873

Leu Pro Thr Arg Asn Met Gly Ala Glu Asn Gln Gln Ile Met Arg Tyr  
 1 5 10 15  
 Asp Ile Ile Gln Lys Gln Ala Val Ala Ala Leu Met Asn Glu Val Glu  
 20 25 30  
 Lys Glu Asn Lys Glu Pro Val Lys Gly His Gly Asn Arg Ala Gly Ser  
 35 40 45  
 Trp Ala Gln Ile Ala Gly Ser Met Thr Lys Val Gln Cys Gln Pro Lys  
 50 55 60  
 Glu Thr Leu His Tyr Leu Ser Pro Met Ser Met Ser Ser Val Ser Gly  
 65 70 75 80  
 Ser Lys Gln Ser His Ser Ile Asp Gly Glu Asn Gly Ala Arg Ala Met  
 85 90 95  
 Asn Phe Ser Gly Ala Pro Leu Ser Pro Glu Ile Ala Glu Ala Lys Ala  
 100 105 110  
 Gly Val Val Arg Ile Tyr Gly Arg Val Thr Arg Glu Ala Ile Arg Phe  
 115 120 125  
 Val Thr Thr Arg Ile His Glu Gly Pro Leu Gln Glu Ile Arg Ile Glu  
 130 135 140  
 Thr Asn Glu Arg Thr Arg Val Thr Phe Gln Tyr Ala Ser His Ala Leu  
 145 150 155 160  
 Ala Phe Val Lys Ser Asn Gln Asp Met Glu Glu Met Leu Gly Tyr Gly  
 165 170 175  
 Arg Phe Gly Thr Gly Tyr Thr Val Glu Met Ala Glu Ile Ile Asn Trp  
 180 185 190  
 Asn Asp Glu His Arg Arg Met Asn Gln Pro Ile Arg Glu Arg Arg Arg  
 195 200 205  
 Leu Ser Phe Ala Arg Lys Arg Leu Phe Ala Asp Asn Met Ser Pro Glu  
 210 215 220  
 Lys Trp Lys Ser Asp Val Arg Ala Val Ala Gly Leu Gly Asn Ile Asp  
 225 230 235 240  
 Phe Leu Trp Val Phe Asn Ser Gly Asn Gly Glu Phe His Val Ile Gly

## 17960

245  
Ser Leu Tyr Thr His Glu Gly  
260

250

255

<210> 40874  
<211> 84  
<212> PRT  
<213> A.fumigatus

<400> 40874  
Phe Phe Thr Val Leu His Pro Phe Thr Leu Leu Val Ile Phe Leu Cys  
1 5 10 15  
Leu Ser Ile Ile Leu Phe Thr Gly Val Cys Thr Tyr Leu Phe Ser Tyr  
20 25 30  
Thr Ile Ser Ala Thr Met Val Arg Ile Gly Ser Ser Leu Leu Ala  
35 40 45  
Thr Leu Ala Ala Thr Thr Val Ser Ala Ala Ser Asp Pro Pro Lys Cys  
50 55 60  
Ser Gln Asp Ser His Cys Pro Glu Glu Trp Pro Cys Cys Ser Arg Lys  
65 70 75 80  
Phe Lys Thr Thr

<210> 40875  
<211> 217  
<212> PRT  
<213> A.fumigatus

<400> 40875  
Val Gln Leu Trp Ile Pro Asp His Gly Phe Leu Gln Phe Asn Ser His  
1 5 10 15  
Met Phe Phe Leu Phe Leu Asp Asn His Gly Gly Asn Ala Ser Val Ser  
20 25 30  
Gly Gly Asn Thr Phe Gly Asp Trp His Glu Tyr Thr Ile Asp Trp Lys  
35 40 45  
Pro Asp Ala Ile Thr Trp Ser Val Asp Gly Glu Val Lys Arg Thr Leu  
50 55 60  
Lys Lys Glu Ser Thr Tyr Asn Glu Thr Ser Lys Gln Tyr Met Tyr Pro  
65 70 75 80  
Gln Thr Pro Ser Arg Met Gln Leu Ser Leu Trp Pro Ala Gly Gln Ala  
85 90 95  
Ser Asn Ala Pro Gly Thr Ile Ala Trp Ala Gly Gly Glu Ile Asp Trp  
100 105 110  
Asp Ser Glu Asp Ile Lys Asp Pro Gly Tyr Tyr Tyr Ala Thr Phe Gly  
115 120 125  
Glu Ile Thr Val Glu Cys Tyr Asp Pro Pro Ser Gly Ala Asp Ile Lys  
130 135 140  
Gly Thr Lys Ala Tyr Ile Phe Lys Asp Lys Ala Gly Leu Glu Ser Ser  
145 150 155 160  
Val Gln Ile Thr Asn Asn Lys Thr Val Leu Ala Ser Phe Gly Ala Thr  
165 170 175  
Gly Leu Asp Met Asp Val Gly Ala Ser Ser Ser Ala Ser Gly Ser Ala  
180 185 190  
Asn Lys Thr Ser Ser Ser Ala Asn Thr Val Pro Ser Gly Asn Gly Gly  
195 200 205  
Ser Gly Asn Glu Pro Trp Gln Leu Pro

210

215

<210> 40876  
 <211> 109  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40876

Leu	Met	Ala	Phe	Ala	Pro	Ser	Ala	Ile	Arg	Ser	Thr	Leu	Phe	Ser	Arg
1				5					10					15	
Tyr	Phe	Arg	Ala	Phe	Ser	Thr	Ile	Ser	Thr	Phe	Leu	Ser	Leu	Thr	Ser
			20					25					30		
Glu	Ser	Thr	Ala	Arg	Asn	Met	Ser	Glu	Ile	Thr	Gln	Thr	Ala	Thr	Leu
		35					40					45			
Ala	Ala	Gly	Cys	Phe	Trp	Gly	Val	Glu	His	Leu	Phe	Arg	Lys	His	Phe
	50					55					60				
Gly	Asn	Gly	Lys	Gly	Leu	Glu	Ala	Lys	Val	Gly	Tyr	Cys	Gly	Gly	
65					70				75					80	
Ser	Thr	Ser	Ser	Pro	Ser	Tyr	Arg	Ala	Val	Cys	Thr	Gly	Thr	Thr	Gly
			85					90						95	
Arg	Met	Leu	Pro	Phe	Leu	Gly	Thr	Cys	Trp	Ser	Lys	Leu			
			100					105							

<210> 40877  
 <211> 117  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40877

Cys	Ser	Arg	Tyr	Ser	Phe	Phe	Ser	Val	Thr	Asp	Ala	Glu	Ala	Val	Gln
1				5					10					15	
Leu	Thr	Phe	Asp	Pro	Ser	Val	Val	Ser	Tyr	Gly	Ser	Leu	Leu	Glu	Phe
			20					25					30		
Phe	Tyr	Arg	Met	His	Asp	Pro	Thr	Thr	Lys	Asp	Arg	Gln	Gly	Pro	Asp
		35					40					45			
Val	Gly	Thr	Gln	Tyr	Arg	Ser	Ala	Ile	Phe	Thr	His	Gly	Glu	Glu	Gln
	50					55					60				
His	Lys	Ile	Ala	Glu	Glu	Ile	Thr	Asp	Lys	Val	Ser	Lys	Gln	Trp	Tyr
65					70				75					80	
Lys	Gln	Pro	Val	Ser	Thr	Gln	Ile	Ile	Pro	Ala	Gly	Gln	Trp	Trp	Asp
			85					90						95	
Ala	Glu	Glu	Tyr	His	Gln	Leu	Tyr	Leu	Thr	Lys	Asn	Pro	Ser	Gly	Tyr
			100					105						110	
Glu	Cys	Pro	Ala	Gln											
			115												

<210> 40878  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 40878

Arg	Leu	Thr	Ile	Asn	Ile	Ala	Thr	Ala	Val	Phe	Thr	Ser	Thr	Ala	Val
1				5					10					15	
Ala	Arg	Arg	Val	Leu	Glu	Ala	Phe	Asn	Lys	Trp	Lys	Asp	Thr	Arg	Ala
			20					25						30	

17962

Val Tyr Ser Gly Val Ser Val Thr Tyr Ser Ser Asp Pro Cys Glu Lys  
 35 40 45  
 Glu Leu Val Leu Val Asn Asp Thr Ala Arg Ser Gly Phe Ala Lys Asn  
 50 55 60  
 Leu Asn Phe Ala Lys Lys Ser Met Arg  
 65 70

<210> 40879  
 <211> 177  
 <212> PRT  
 <213> A.fumigatus

<400> 40879  
 Pro Asn His Ser Ser Thr Ser Val Tyr Gly Gln Cys Gly Thr Gly Ala  
 1 5 10 15  
 Tyr Cys Leu Gly Gly Cys Asp Pro Leu Met Ser Phe Ser Leu Asp Ser  
 20 25 30  
 Cys Thr Pro Glu Pro Ile Cys Gln Gly Lys Thr Tyr Lys Asp Trp Ser  
 35 40 45  
 Asn Leu Asp Asn Leu Ala Ser Asn Thr Lys Tyr Leu Gly Asp Ala Ser  
 50 55 60  
 Lys Ser Asp Trp Val Tyr Ser Gly Tyr Pro Lys Val Glu Asp Gly Asn  
 65 70 75 80  
 Leu Leu Leu Thr Met Pro Lys Asn Ser Val Gly Thr Leu Ile Ala Asn  
 85 90 95  
 Asn His Tyr Ile Trp Tyr Gly Lys Ile Thr Ala Lys Ile Lys Ser Ser  
 100 105 110  
 Arg Gly Ala Gly Val Val Thr Gly Phe Ile Leu Leu Ser Asp Thr Lys  
 115 120 125  
 Asp Glu Ile Asp Tyr Glu Phe Val Gly Ala Asp Leu Thr Asn Val Gln  
 130 135 140  
 Thr Asn Tyr Tyr Phe Gln Gly Val Leu Asp Cys Lys Phe Asn Cys Gly  
 145 150 155 160  
 Ser Arg Thr Met Val Phe Cys Asn Leu Thr His Ile Cys Phe Phe Phe  
 165 170 175  
 Phe

<210> 40880  
 <211> 217  
 <212> PRT  
 <213> A.fumigatus

<400> 40880  
 Arg Glu Leu Leu Lys Arg Asn Pro Pro Thr Thr Arg Pro Ala Asn Asn  
 1 5 10 15  
 Thr Cys Thr Leu Arg Arg Pro Pro Glu Cys Ser Cys Pro Cys Gly Pro  
 20 25 30  
 Leu Val Lys Pro Ala Thr Pro Arg Val Pro Leu Pro Gly Pro Ala Val  
 35 40 45  
 Arg Ser Thr Gly Ile Ala Arg Thr Ser Arg Thr Pro Val Thr Thr Thr  
 50 55 60  
 Pro Pro Leu Ala Lys Ser Pro Ser Asn Ala Thr Thr Leu Pro Val Ala  
 65 70 75 80  
 Arg Ile Ser Arg Ala Pro Arg His Thr Ser Ser Arg Thr Lys Pro Ala  
 85 90 95

## 17963

Ser Lys Ala Pro Ser Lys Ser Pro Thr Thr Lys Pro Cys Ser Pro Pro  
 100 105 110  
 Leu Ala Leu Leu Asp Leu Thr Trp Thr Leu Ala Pro Ala Leu Pro Leu  
 115 120 125  
 Arg Asp Leu Arg Thr Arg Pro Ala Ala Ala Pro Thr Leu Phe Pro Leu  
 130 135 140  
 Ala Met Val Ala Leu Glu Thr Ser Pro Gly Asn Ser His Ser Gly Ser  
 145 150 155 160  
 Ser Gly Ser Gly Thr Ser Thr Ser Asp Gly Ser Gly Ser Ser Thr Gly  
 165 170 175  
 Phe Ser Gln Gly Ser Glu Thr Phe Ala Ser Ser Asn Lys Asn Ala Ala  
 180 185 190  
 Pro Ser Gln Asn Glu Arg Val Leu Asn Gly Ser Phe Phe Ala Val Leu  
 195 200 205  
 Val Ala Val Val Ala Leu Val Thr Leu  
 210 215

&lt;210&gt; 40881

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40881

Pro Leu Asn His His Lys Val Thr Tyr Ser Thr Phe His Val Thr Asn  
 1 5 10 15  
 Lys Gln Lys Thr Val Arg Asn Thr Trp Pro Ser Phe His Asp Pro Ser  
 20 25 30  
 Ile His Ile Val Glu Gln Ser Tyr Ile Pro Thr Asp Ile Ile Trp Thr  
 35 40 45  
 Pro Tyr Leu Arg His Ser Gln Ile Ile Leu Ser Pro Leu Met Met Asn  
 50 55 60  
 Ile Ala Gly Cys Ile Val Leu  
 65 70

&lt;210&gt; 40882

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40882

Ile Glu Glu Asn Asn Cys Arg Ile Ile Ser Lys Gly Tyr Ala Gly Arg  
 1 5 10 15  
 Pro Leu Ser Leu Val Ser His Gln Thr Ser Pro Thr Ala Ser His Leu  
 20 25 30  
 Asp Ser His Phe Ser Ile Leu Gln Ser Gln Tyr Thr Asn His Arg Met  
 35 40 45  
 Lys Pro Phe Thr Ala Arg Ser Ala Phe Thr Ala Ser Val Leu Leu Leu  
 50 55 60  
 Thr Thr Asn Leu Pro Ala Val Phe Ala Ala Glu Met Val Ser Gln Gly  
 65 70 75 80  
 Cys Phe Ser Asp Ser Thr Pro Leu Val Asp Gln Gly Pro Tyr Thr Tyr  
 85 90 95  
 Gln Ser Asn Gly Tyr Cys Gln Gln Leu Cys Met Lys Thr Ser Asn Asn  
 100 105 110  
 Leu Val Phe Ala Leu Thr Lys Gly Ser Asn Cys Leu Cys Gly Asn Gln  
 115 120 125

## 17964

Leu Pro Ala Lys Ser Ala Lys Thr Ala Asp Ser Asp Cys Asn Val Lys  
 130 135 140  
 Cys Ala Gly Trp Pro Asp Val Met Cys Met Val Phe Ser Ile Thr Phe  
 145 150 155 160  
 Arg Gly Ser Val Ala Val Leu Thr  
 165

<210> 40883  
 <211> 160  
 <212> PRT  
 <213> A.fumigatus

<400> 40883  
 Lys Phe Tyr Phe His Asp Glu Gln Ile Ser His Ile Glu Lys Met Thr  
 1 5 10 15  
 Ser Gly Asp Leu Asp Glu Gly Val His Glu Ile Thr Ser Ala Glu Thr  
 20 25 30  
 Ala Tyr Thr Asp Ala Pro Thr Val Lys Arg Pro Gly Asp Glu Asp Leu  
 35 40 45  
 Tyr Ala Glu Lys Asp Ala His Ser Ser Leu Ala Gly Ser Pro Ala Gln  
 50 55 60  
 Ser Ala Met Asp Val Lys Gly Thr Ala Ile Asp Ile Pro Tyr Ala Glu  
 65 70 75 80  
 His Glu Ser Leu Pro Ile Ala Val Pro Arg Leu Lys His Arg Gly Leu  
 85 90 95  
 Phe Gly Gln Leu Thr Leu Leu Ala Glu Val Glu Asn Pro Lys Thr Tyr  
 100 105 110  
 Leu Arg Lys Thr Lys Trp Phe Ile Thr Phe Ile Val Ala Leu Ala Gly  
 115 120 125  
 Ser Thr Ala Pro Met Gly Ser Ser Ile Leu Phe Arg Lys Ser Leu Pro  
 130 135 140  
 Ala Gln Met Ala Asn Pro Leu Val Asp Ala Leu Ser Leu Ser Ala Asn  
 145 150 155 160

<210> 40884  
 <211> 410  
 <212> PRT  
 <213> A.fumigatus

<400> 40884  
 Lys Ala Cys Arg Arg Thr Ile Tyr Leu Val Ser Phe Ser Leu Phe Val  
 1 5 10 15  
 Leu Phe Asn Val Leu Ser Ala Val Ala His Ser Ile Ser Met Leu Ile  
 20 25 30  
 Val Met Arg Met Leu Ser Gly Gly Ala Ser Ala Ser Val Gln Ala Val  
 35 40 45  
 Gly Ala Gly Thr Ile Ala Asp Leu Trp Asp Pro His Glu Arg Gly Arg  
 50 55 60  
 Ala Met Ser Ile Phe Tyr Leu Gly Pro Leu Cys Gly Pro Leu Leu Ala  
 65 70 75 80  
 Pro Ile Val Gly Gly Ala Leu Ala Glu Arg Trp Arg Trp Arg Ser Thr  
 85 90 95  
 Met Trp Phe Leu Ala Val Tyr Gly Gly Ile Leu Val Ile Phe Ile Phe  
 100 105 110  
 Phe Ala Leu Pro Glu Thr Leu Ala Asn Arg Lys Gln Pro His Gly Asp  
 115 120 125

## 17965

Glu Gln Ala Pro Val Glu Gln Gln Leu Ser Arg Met Ser Ser Arg Gln  
 130 135 140  
 Val Val His Phe Thr Ala Lys Trp Leu Lys Ala Leu Lys Met Val Phe  
 145 150 155 160  
 Leu Asp Pro Leu Lys Ile Val Leu Tyr Leu Arg Tyr Pro Ala Val Leu  
 165 170 175  
 Leu Thr Val Tyr Tyr Ala Ser Ile Thr Phe Gly Ser Leu Tyr Val Leu  
 180 185 190  
 Asn Val Ser Val Glu His Thr Phe Ser Thr Asn Pro Tyr Asn Phe Ser  
 195 200 205  
 Thr Ile Ile Val Gly Cys Leu Tyr Ile Pro Asn Ser Leu Gly Tyr Ile  
 210 215 220  
 Ala Ala Ser Val Phe Gly Gly Arg Trp Met Asp Gln Ile Met Gln Arg  
 225 230 235 240  
 Glu Ala Arg Lys Ala Gly Arg Tyr Asp Glu His Gly Glu Leu Ile Tyr  
 245 250 255  
 Arg Pro Glu Asp Arg Met Arg Glu Asn Ala Trp Leu Gly Ala Phe Leu  
 260 265 270  
 Tyr Pro Ala Ala Leu Ile Trp Tyr Gly Trp Thr Ala Asp Lys Gly Val  
 275 280 285  
 Phe Trp Phe Ala Pro Val Ser Gly Leu Gly Phe Cys Ser Thr Gly Trp  
 290 295 300  
 Gly Lys Thr Asn Leu Val Phe Gln Met Ala Ala Asn Phe Phe Phe Gly  
 305 310 315 320  
 Ile Gly Ser Met Leu Ile Phe Ser Met Ser Thr Thr Met Leu Thr Glu  
 325 330 335  
 Phe Met Pro Asn Lys Ser Ser Thr Gly Val Ala Leu Asn Asn Phe Met  
 340 345 350  
 Arg Asn Ile Phe Ser Cys Ile Gly Ser Leu Val Thr Ala Pro Ile Ile  
 355 360 365  
 Asp Ala Ile Gly Asn Gly Trp Leu Phe Thr Ile Leu Gly Leu Val Ala  
 370 375 380  
 Phe Ala Ser Ser Ser Val Ile Leu Ala Met Lys Val Phe Gly Pro Arg  
 385 390 395 400  
 Trp Arg Lys Ser Met Asp Ala Val Ser His  
 405 410

&lt;210&gt; 40885

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40885

Leu Asp Gly Leu Thr Gly Gly Gly Gln Asn Thr Phe Ser Val Tyr Leu  
 1 5 10 15  
 Thr Gly Leu Ser Ser Asn Val Ala Tyr Tyr His Asp Asp Asp Ala Ser  
 20 25 30  
 Thr Ser Ala Asn Ala Asn Ser Ser Ser Thr Ser Thr Thr Asn Gly Gly  
 35 40 45  
 Ser Thr Val Thr Thr Gly Ser Gln Gly Gln Val Val Thr Gln Gly Glu  
 50 55 60  
 Gln Thr Val Val Val Thr Ala Pro Ala Gly Asn Gly Val Gly Ala Thr  
 65 70 75 80  
 Asn Gly Leu Asn Glu Glu Lys Asn Lys Asp Gly Pro Asn Thr Ala Ala  
 85 90 95  
 Ile Ala Ala Gly Val Val Val Gly Val Val Gly Phe Cys Ser Leu Val

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      100              105              110
Gly Ala Gly Phe Phe Leu Trp Arg Phe Arg Lys Arg Thr Asn Val Arg
      115              120              125
Pro Gln Tyr Ser Asn Asn Ala Gly Ala Thr Glu His Phe Gly Lys Pro
      130              135              140
Met Ser Gln Asp Ser Met Ser Asp Ser Arg Phe Asp Gly Asp Phe Met
145              150              155              160
Ala Gln Arg Arg Gln Ser Asn Gly Ser Ile Asp Asp Asp Gln Asp Phe
      165              170              175
Ser Arg Arg Ile Leu Gln Val Arg Leu Phe Ser Ser Ala Leu Gly Ile
      180              185              190
Ser

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<210> 40886
<211> 68
<212> PRT
<213> A.fumigatus

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<400> 40886
Arg Ser Arg His Ile Leu Pro Leu Gln Asn Gly Leu Gly Leu Phe Leu
1      5      10      15
Thr Arg Ser Tyr Ala Ser Asn Val Thr Ile Phe Val Lys Ser Pro Arg
      20      25      30
Asp Arg Glu Met Thr Gly Pro Val Thr His Val Gln Leu Ile Val Ser
      35      40      45
Gly Tyr Leu Val Glu Ser Val Gly Phe Leu Asp Gly Ser Pro Leu Ser
      50      55      60
Arg Ser Ala Leu
65

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<210> 40887
<211> 397
<212> PRT
<213> A.fumigatus

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<400> 40887
Phe Arg Gly Ser Arg Glu Asp Asp Ser Leu Gly Ser Phe Thr Phe Leu
1      5      10      15
His Phe Cys Phe Asn Phe Ser Ala Trp Phe Ser Leu Ser Leu Gln Asp
      20      25      30
Gln Thr Ser Leu Arg Met Pro Ala Ser Asp Ile Ser Asp Ala Glu Leu
      35      40      45
Pro Pro Arg Tyr Asn Phe Ile Asp Asp Tyr Ser Glu Gly Ala His Pro
      50      55      60
Gln Ile Leu Glu Ser Leu Leu Arg Ser Asn Thr Thr Gln Gln Ser Ser
      65      70      75      80
Tyr Gly Thr Asp Glu Phe Ser Asn Glu Ala Arg Arg Leu Ile Arg Glu
      85      90      95
Lys Leu His Ala Ser Glu Asp Glu Val Ala Ile His Phe Val Pro Ser
      100      105      110
Gly Thr Ser Ala Asn Leu Ile Ser Ile Ala Ser Cys Leu Arg Pro Tyr
      115      120      125
Glu Ala Val Leu Ala Val Glu Ser Gly His Ile Val Ser Lys Glu Ala
      130      135      140
Gly Ala Ile Glu Ala Thr Gly His Lys Met Ile Leu Val Pro Gly Val

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<210> 40888
<211> 106
<212> PRT
<213> A.fumigatus
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Glu	Asn	Gly	Gln	Trp	Ala	Met	Gly	Asn	Leu	Asn	Val	Met	Ala	Ser	Tyr
1				5					10					15	
Asp	Ser	Cys	Phe	Thr	Leu	Gln	Asn	Met	Tyr	Lys	Lys	Leu	Ile	Met	Asp
			20					25					30		
Leu	Phe	Asn	His	Leu	Cys	Ser	Ala	Pro	Phe	Asn	Asn	Cys	Thr	Ser	Ile
			35				40					45			
Thr	Gly	Val	Phe	Lys	Gly	Thr	Lys	Gly	Arg	Leu	Cys	Leu	Met	Cys	Ser
	50					55					60				
Leu	Thr	His	Arg	Ile	Tyr	Ala	Ala	Asn	Ile	Pro	Ser	Leu	Ile	Ser	Gly
65					70					75					80
Thr	Ala	Phe	Trp	Leu	Val	Pro	Ile	Leu	Ser	Gln	Glu	Leu	Ala	Thr	Arg
				85					90					95	
Gly	Glu	Lys	Thr	Val	Gly	Ser	Phe	His	Gly						
			100					105							

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<210> 40889
<211> 471
<212> PRT
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&lt;213&gt; A.fumigatus

&lt;400&gt; 40889

Pro Pro Lys Arg Ala Asn Pro Leu Ala Trp Pro Gly Leu Thr Thr Arg  
 1 5 10 15  
 Ile Asp Ser Leu Ile Val Ile Val Val Leu Tyr Ser Gln Ala Lys Val  
 20 25 30  
 Lys Cys Ile His Glu Gly Gln Pro Pro Cys Arg Arg Cys Gln Arg Ala  
 35 40 45  
 Lys Arg Thr Asp Cys Gln Leu Thr Asp Thr Tyr Ser Ser Pro Ser Arg  
 50 55 60  
 Arg Ser Lys Arg Thr Thr Leu Lys Ser Gln Arg Gln Arg Arg Val Ile  
 65 70 75 80  
 Ser Gly Pro Thr Thr Ala Leu Asn Ser Pro Pro Leu Pro Pro Glu Pro  
 85 90 95  
 Gln Pro Asp Arg Pro Ser Pro Trp Cys Ala Glu Asn Pro Val Glu Ala  
 100 105 110  
 Leu Pro Ser Ser Thr Ile Ile Ala Cys Glu Thr Tyr Arg Lys Lys  
 115 120 125  
 Phe Pro Val Ala Asn Phe Leu His Tyr Pro Ser Leu Ile Ala Glu Leu  
 130 135 140  
 Ser Ser Asn Pro Ala Ser Val Asp Pro Val Phe Val Ala Ala Leu Leu  
 145 150 155 160  
 Ser Leu Cys Val Arg Phe Met Pro Asp His Arg Leu Glu Ala Ala Glu  
 165 170 175  
 Thr Tyr Ala Glu Tyr Ala Cys Lys Gln Leu Ala His Arg Ala Phe Glu  
 180 185 190  
 Ala Pro Ser Leu Tyr Leu Ala Gln Ser Leu Val Met Ile Thr Phe Tyr  
 195 200 205  
 Glu Trp Gly Ser Gly Arg Pro Tyr Lys Ala Trp Met Tyr Ser Gly Met  
 210 215 220  
 Pro Ala Leu His Val Pro Tyr Thr Arg Leu Met Met Ser Gly Met Ala  
 225 230 235 240  
 Thr Tyr Met Ile Gln Ser Leu Leu Lys Thr Ala Asp Asp Ser Met Glu  
 245 250 255  
 His Asn Pro Gln Asp Phe Gln Ala Ser Gln Thr Gln Tyr Glu Gln Leu  
 260 265 270  
 Val Arg Thr Tyr Trp Cys Cys Phe Ala Gln Asp Cys Glu Leu Ser Ser  
 275 280 285  
 Gly Ala Arg Gln His Phe Ala Leu Ser Phe Arg Gln Ile Ser Val Pro  
 290 295 300  
 Leu Pro Thr Ser Asp Arg Asp Phe Asn Phe Gly Arg Leu Ser Ser His  
 305 310 315 320  
 Arg Leu Met Pro Ser Asp Met Ser Lys His Ser Pro Leu Ser Arg Asn  
 325 330 335  
 Leu Thr Ile Asp Tyr Gly Leu Thr Ile Val Thr Arg Gly Phe Asp Ile  
 340 345 350  
 Phe Val Arg Ile Leu Arg Phe Ala Asn Glu Ser Arg Arg Gly Arg Thr  
 355 360 365  
 Leu Thr Leu Pro Gln Asp Pro Ser Ser Pro Arg Val Val Trp Gln Arg  
 370 375 380  
 Leu Lys Glu Glu Leu Asp Glu Trp Arg Phe Leu Gln Asp Val Thr Val  
 385 390 395 400  
 Arg Tyr Pro Ala Thr Ser Ala Gln Ala His Val Ala Leu Gly Tyr Gly  
 405 410 415  
 Glu Leu Phe Ala Tyr Ile Asn Leu Val Tyr Phe Met Arg Tyr Leu Pro

## 17969

420 425 430  
 Asp Ser Leu Pro Arg Leu Ala His Ser Asn Ser Ser Leu Val Ser Ser  
 435 440 445  
 Phe Tyr Ile Glu Thr Ser Ser Tyr Pro Val Ser Asn Leu Met Pro Thr  
 450 455 460  
 Cys Ser Met Ile Arg Ser Pro  
 465 470

<210> 40890  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 40890  
 Asp Tyr Leu Pro Pro Pro His His His Arg Val Thr Ala Tyr Cys Cys  
 1 5 10 15  
 Ile His Leu Thr Phe Pro Arg Ile Glu Cys Asp Gln Tyr Ser Thr Tyr  
 20 25 30  
 Asn Gly Asp Gly Thr Leu Ala Leu Asp Gly His Arg Asp Pro Ser Asn  
 35 40 45  
 Met Phe Pro Gly Ile Leu Ser Phe Phe Pro Asn Ile Gly Ser Phe Tyr  
 50 55 60  
 Leu Phe Gln Phe Leu Glu Gly Leu Glu Val His Gln Ala Ser Thr Asn  
 65 70 75 80  
 Thr Ile Val Ile Ser Glu Leu Pro Ala Leu  
 85 90

<210> 40891  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 40891  
 Thr Arg Arg Asn Arg Val Met His Lys Ala Ile Lys Pro Pro Pro Ala  
 1 5 10 15  
 Cys Val Lys Gln Gln Asp Thr Lys Thr Gln Asn Ser Glu Ala Val Arg  
 20 25 30  
 Pro Thr Met Thr Gly Lys Asn Pro Arg Val Thr Gln Met Gln Ala Glu  
 35 40 45  
 Asn Gln Asp Asn Glu Leu Ile Phe Leu Leu Ser Gly  
 50 55 60

<210> 40892  
 <211> 466  
 <212> PRT  
 <213> A.fumigatus

<400> 40892  
 Ala Leu Ser Trp Phe Ala Pro Leu Thr Ser Lys Leu Ala Arg Asp Thr  
 1 5 10 15  
 Asn Arg Trp Thr Phe Ser Gln Asp Ile Arg Phe Ala Val Arg Ala Glu  
 20 25 30  
 Val Gln His Arg Glu Pro Phe Val Ala Phe Phe Ser Tyr Leu Arg Ser  
 35 40 45  
 Lys Phe Asp Arg Ile Thr Ser Ser Lys Ser Asn Thr Thr Leu Ser Ile  
 50 55 60

## 17970

Leu Ile Ala Leu Leu Ser Ile Ala Phe Met Arg Ala Leu Phe Leu Pro  
 65 70 75 80  
 Ser Leu Pro Gln Ser Ile Pro Asp Leu Val Lys Leu Ser Ser Phe Ala  
 85 90 95  
 Arg Ser Phe Glu Pro Leu Ile Tyr Tyr Ser Glu Asn Gly Val Gln Gln  
 100 105 110  
 Ile Gly Thr Leu Gln Glu Thr Gly Val Ala Val Trp Asp Leu Ser Glu  
 115 120 125  
 Ser Val Arg Gly Thr Asn Met Thr Ser Ala Pro Ile Ile Val Arg Gln  
 130 135 140  
 Leu Asp Glu Leu Ser Glu Ser Leu Lys Thr Leu Ser Leu Glu Leu Thr  
 145 150 155 160  
 Arg Phe Phe Ala Asn Val Asp Ser Asp Val Asp Ser Ile Leu Ile Val  
 165 170 175  
 Met Asp Trp Ala Lys Arg Glu Leu Glu Thr Leu Ser Ser Gln Pro Pro  
 180 185 190  
 Ser Ser Leu Pro Ser Ile Val Leu Asp Asn Val His Asp Leu Leu Ser  
 195 200 205  
 Arg Leu Gly Thr Leu Glu Arg Thr Asp Ala Pro Ser Gly Glu Ala Thr  
 210 215 220  
 Ser Ser Gln Leu Thr Thr Thr Pro Thr Thr Phe Gly Arg Val Val Thr  
 225 230 235 240  
 Ala Val Leu Gly Gln Thr Ser Ala Gln Arg Thr Gln Ala Thr Leu Met  
 245 250 255  
 Arg Thr Phe Thr Glu Phe Leu Ser Val Leu Glu Glu Ser Ile Asn Ser  
 260 265 270  
 Glu Leu Thr His Ser Thr Ala Leu Phe Ala Leu Phe Glu Ser Ile Asp  
 275 280 285  
 Arg Gln Phe Leu Asn Leu Gln Arg Thr Val Val Arg Glu Ser Asp Ala  
 290 295 300  
 Gln Glu Arg Ala Glu Gly Glu Met Leu Ser Ser Leu Trp Thr Arg Val  
 305 310 315 320  
 Leu Gly Pro Asp Ala Ala Met Val Arg Lys Tyr Glu Lys Asn Lys Arg  
 325 330 335  
 Leu Leu Ala Asn Val Arg Ser Arg Thr Val Ala Asn Lys His Leu Leu  
 340 345 350  
 Met Asp His Arg Gly Arg Leu Leu Thr Leu Lys Val Asn Leu Glu Thr  
 355 360 365  
 Leu Arg Arg Lys Leu Val Ser Pro Leu Val Arg Arg Asn Asp Ser Val  
 370 375 380  
 Ser Phe Val Gly Ala Val Glu Gly Gly Ser Gly Arg Ser His Gly Arg  
 385 390 395 400  
 Met Leu Gly Pro Val Glu Ala Val Ile Glu Gly Gln Ile Arg Gly Leu  
 405 410 415  
 Glu Ser Thr Tyr Asp Tyr Leu Arg Ser Val Arg Glu Lys Gln Lys Ala  
 420 425 430  
 Lys Leu Met Glu Met Val Tyr Gly Ser Gly Arg Lys Ile Pro Ser Pro  
 435 440 445  
 Ser Met Leu Pro Asp Gly Ser Asp Asp Leu Gly Ser Asp Thr Ile Glu  
 450 455 460  
 Gly Val  
 465

&lt;210&gt; 40893

&lt;211&gt; 184

&lt;212&gt; PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (177)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40893

Gly	Gly	Lys	Thr	Asn	Val	Ser	Leu	Gln	Ser	Leu	Glu	Ala	Cys	Gly	Arg
1				5					10					15	
Arg	Ser	Cys	Arg	Ser	Ser	Glu	Met	Ser	Ser	Ser	Thr	Thr	Ser	Thr	Pro
			20					25					30		
Asp	Lys	Lys	Leu	Ile	Tyr	Pro	Glu	Ser	Leu	Gly	Tyr	Gly	Ser	Lys	Gly
		35					40					45			
Glu	Arg	Leu	Val	Ala	Gly	Val	Val	Pro	Leu	Ser	His	Asp	Lys	Thr	Arg
	50					55					60				
Val	Leu	Met	Ile	Gln	Ser	Val	Gly	Ser	Gly	Gly	Trp	Val	Leu	Pro	Lys
65				70					75						80
Gly	Gly	Trp	Glu	Thr	Asp	Glu	Ala	Leu	Ala	Gln	Gln	Ala	Ala	Cys	Arg
				85				90						95	
Glu	Ala	Trp	Glu	Glu	Ala	Gly	Val	Ile	Cys	Thr	Val	His	Lys	Asp	Leu
			100				105						110		
Gly	Leu	Ile	Pro	Asp	Met	Arg	Pro	Ser	Ser	Val	Leu	Thr	Ser	Ser	Ala
		115				120						125			
Pro	Lys	Ala	Ser	Tyr	Gln	Phe	Phe	Glu	Val	Thr	Val	Asp	Arg	Glu	Glu
		130				135					140				
Asp	Gln	Trp	Pro	Glu	Met	His	Lys	Arg	Lys	Arg	Gln	Trp	Val	Thr	Tyr
145					150				155						160
Ala	Gln	Ala	Ala	Ala	Ala	Leu	Ala	Ser	Arg	Pro	Glu	Leu	Leu	Glu	Ala
				165				170						175	
Xaa	Asn	Arg	Ser	Ser	Leu	Lys	Arg								
				180											

<210> 40894

<211> 79

<212> PRT

<213> A.fumigatus

<400> 40894

Met	Asn	Thr	Ala	Gln	Leu	Ala	Thr	Pro	Asp	Gln	Pro	Val	Ile	Ser	Asn
1				5					10					15	
Gly	Ser	Gln	Tyr	Thr	His	Asn	Arg	Leu	Pro	Val	Pro	Leu	Ala	Ser	Met
			20					25				30			
Tyr	Tyr	Ser	Leu	Asp	Ile	Ser	Gln	Asn	Ser	Arg	Val	Gly	Ala	Ser	Pro
		35				40					45				
Leu	Val	Pro	Arg	Leu	Ser	Ser	Glu	Val	Ile	Leu	His	Ser	Tyr	Phe	Met
	50				55					60					
Ile	Asn	Ser	Met	Glu	Cys	Lys	Asp	His	Glu	Gly	Asp	Cys	Ile	Met	
65					70				75						

<210> 40895

<211> 260

<212> PRT

<213> A.fumigatus

<220>

&lt;221&gt; UNSURE

&lt;222&gt; (61), (64), (93)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40895

```

Asp Phe Ile Ala Lys Met Asp Tyr Glu Met Asp Ile Glu Pro Thr Gly
1           5           10           15
Pro Gln Val Thr Val Arg Glu Val Cys Ser Ser Cys Leu Arg Lys Asn
           20           25           30
Val Glu Ser Ser Ser Ser Ser Arg Glu Asp Ala Val Asp Gly Phe Phe
           35           40           45
Gln Ala Glu Pro Tyr Arg Val Asp Phe Lys Leu Ser Xaa Val Asp Xaa
           50           55           60
Ala Phe Ala Asn Ser Phe Arg Arg Val Ile Phe Ala Glu Val Pro Thr
65           70           75           80
Met Ala Ile Asp Leu Val Glu Val Glu Lys Asn Thr Xaa Val Leu Pro
           85           90           95
Asp Glu Phe Phe Ala His Arg Val Gly Leu Ile Pro Leu Asn Ser Lys
           100          105          110
Asn Cys Asp Gln Asp Val Glu Tyr Thr Arg Asp Cys Asp Cys Glu Asp
           115          120          125
His Cys Ala Arg Cys Ser Val Thr Leu Thr Leu His Ala Arg Cys Thr
           130          135          140
Gly Asp Glu Ile Met Pro Val Tyr Ala Arg Asp Leu Val Val Ser Gly
145          150          155          160
Glu Arg Ala Asn Glu Trp Val Gly Asp Pro Val Ile Thr Asp Pro Glu
           165          170          175
Gly Lys Gly Pro Leu Ile Cys Lys Leu Arg Arg Gly Gln Glu Leu Lys
           180          185          190
Met Thr Cys Val Ala Lys Lys Gly Ile Ala Lys Glu His Ala Lys Trp
           195          200          205
Ala Pro Thr Ala Ala Val Gly Phe Glu Tyr Asp Pro His Asn Asn Leu
           210          215          220
Arg His Val Asp Tyr Trp Tyr Glu Glu Asp Pro Ile Lys Glu Trp Tyr
225          230          235          240
Val Leu Ile Phe Arg Phe Phe Phe Gly Leu Val Pro Phe Leu Arg Cys
           245          250          255
Lys Ser Ser Arg
           260

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&lt;210&gt; 40896

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40896

```

Phe Phe Val Ser Phe Ser Gly Ser Ser His Phe Tyr Ala Ala Lys Ala
1           5           10           15
Val Ala Asn Asp Leu Pro Arg Pro Val Ser Ala Asn Ala Ala Trp Glu
           20           25           30
His Ala Ala Pro Pro Asp Gln Pro Phe Asp Tyr Asp Ala Gln Pro Asn
           35           40           45
Asn Phe Tyr Ile Asp Val Glu Ser Ile Gly Asn Leu Glu Pro Asp Met
           50           55           60
Ile Ile Gln Gln Gly Ile Val Val Leu Gln Arg Lys Leu Ala Thr Val
65           70           75           80

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17973

Ile	Ser	Ser	Leu	Ser	Gly	Ala	Gly	Asn	Gly	Gly	Arg	Asn	Gly	Leu	Pro
			85					90						95	
Glu	Asp	Glu	Asp	Met	Leu	Gly	Val	Arg	Ser	Pro	Asp	Ala	Tyr	Glu	Pro
			100					105						110	
Pro	Glu	Gly	Met	Asp	Gly	Gly	Phe	Thr	Ala	Tyr	Ala	Asn	Gly	Gly	Thr
			115				120					125			
Ser	Ala	Trp	Gly	Ala	Ser	Ala	Ala	Thr	Pro	Tyr	Gly	Ala	Thr	Pro	Tyr
			130				135					140			
Gly	Gly	Gly	Gly	Tyr	Gly	Phe									
145						150									

<210> 40897

<211> 107

<212> PRT

<213> A.fumigatus

<400> 40897

Pro	Pro	Pro	Phe	Ala	Ala	Leu	Leu	Pro	Arg	Gly	Glu	Asn	Gln	Thr	Val
1			5					10						15	
Gly	Ser	Ala	Lys	Glu	Ser	Leu	Gly	Asn	Leu	Ile	Gly	Asn	Asp	Asn	Leu
			20					25					30		
Arg	Arg	Glu	Gly	Gln	Glu	Gln	Asn	Ala	Ser	Gly	Lys	Ala	Gln	Glu	Ala
			35				40					45			
Lys	Gly	Gln	Leu	Gln	Asp	Trp	Gly	Glu	Gly	Ala	Ala	Asp	Arg	Ala	Lys
			50			55					60				
Gly	Ala	Leu	Gly	Ser	Val	Gly	Ala	Ala	Val	Lys	Gly	Asp	Arg	Thr	Glu
65					70					75					80
Glu	Asp	Asn	Trp	Arg	Asp	Val	His	Asp	Glu	Gly	Lys	Val	Arg	His	Ile
				85				90						95	
Gly	Ala	Glu	Val	Asp	Met	Glu	Lys	Arg	Tyr	Asp					
			100					105							

<210> 40898

<211> 311

<212> PRT

<213> A.fumigatus

<400> 40898

Ser	Arg	Cys	Val	Phe	Phe	His	Arg	Asn	Leu	Met	Thr	Ser	Gly	Gly	Ser
1				5				10						15	
Ser	Val	Ile	Arg	His	Ser	Gly	Thr	Thr	Lys	Ser	Asn	Val	Glu	Leu	Ile
			20					25					30		
Asn	Ser	Leu	Arg	Ala	Asn	Phe	Gln	Ala	Ala	Gln	Gln	Leu	Ala	Ala	Ala
			35				40					45			
Ala	Glu	Ala	Glu	Ala	Lys	Pro	Thr	Glu	Arg	Tyr	Lys	Ala	Trp	Thr	Ser
			50			55					60				
Met	Gln	Asp	Asp	Ala	Leu	Tyr	Ile	Pro	Ala	Ile	Asp	Phe	Ser	Gln	His
65					70					75					80
Gly	Leu	Ala	Glu	Glu	Arg	Ser	Gln	Tyr	Asp	Ile	Thr	Val	Lys	Leu	Phe
				85				90						95	
Tyr	Leu	Pro	Gly	Ile	Pro	Val	Ser	Arg	Arg	Cys	Ala	His	Thr	Arg	Gln
			100				105						110		
Ala	Ile	Asp	Leu	Val	Leu	Lys	Glu	Leu	His	Val	Asp	Ser	Ile	Asp	Leu
			115				120					125			
Leu	Ile	Val	Ser	Phe	Pro	Gly	Ile	Leu	Phe	Asp	Ala	Glu	Asp	Asp	Ser
			130				135					140			

## 17974

Glu Gly Glu Val Ser Ser Asp Asp Gly Ser Glu Glu Pro Asp Asp Phe  
 145 150 155 160  
 Asp Ser Ile Ile Gln Ser Trp Arg Thr Leu Glu Gly Leu His Glu Gln  
 165 170 175  
 Gly Met Ile Ala Gln Leu Gly Val Ala Glu Phe Gly Ser Asp Arg Leu  
 180 185 190  
 Ala Arg Phe Leu Pro His Thr Lys Val Lys Pro Ser Val Asp Gln Ile  
 195 200 205  
 Asn Leu Lys Asp Cys Cys Val Val Pro Lys Ser Leu Ile Leu Tyr Ala  
 210 215 220  
 Lys Gln Glu Asn Ile Gln Leu Leu Thr His Asn Asp Cys Asn Asp Ile  
 225 230 235 240  
 Leu Pro Val Gly Thr Thr Arg Glu Leu Leu Gly Pro Gly Glu Lys Gly  
 245 250 255  
 Ala Gly Ile Leu Ala Ser Ala Pro Asp Ala Asp Asp Gly Ile Lys Gly  
 260 265 270  
 Asp Val Glu Pro Gln Trp Val Val Lys Tyr Thr Ser Val Val Lys Asp  
 275 280 285  
 Arg Gly Val Val Glu Asn Lys Gly Tyr Phe Ala Leu Ala Asp Val Gly  
 290 295 300  
 Thr Cys Ile Gln Thr Ser Ser  
 305 310

&lt;210&gt; 40899

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40899

Val Asp Ser Ala Ile Met Tyr Arg Asn Glu Lys Ala Cys Gly Arg Ala  
 1 5 10 15  
 Ile Gln Asn Ser Gly Leu Asp Arg Ser Glu Val Phe Phe Thr Thr Lys  
 20 25 30  
 Ile Pro Pro Gly Ser Met Gly Tyr Glu Arg Thr Lys Arg Ala Val Asp  
 35 40 45  
 Ala Ser Leu Gln Glu Ala Glu Val Asp Tyr Phe Asp Leu  
 50 55 60

&lt;210&gt; 40900

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40900

Thr Leu Arg Ser Cys Thr Ala Met Lys Lys Pro Ala Val Ala Gln Ser  
 1 5 10 15  
 Arg Thr Leu Val Ser Ile Ala Pro Lys Ser Ser Ser Arg Arg Ser  
 20 25 30  
 Arg Gln Ala Arg Trp Gly Thr Ser Ala Gln Ser Ala Gln Leu Thr Leu  
 35 40 45  
 Val Cys Lys Arg Pro Arg Trp Ile Ile Leu Ile Cys Arg Tyr Leu Pro  
 50 55 60  
 Val His Gly Pro Asp Ala Cys Thr Glu Ser Tyr Asp Arg Ile Leu Ile  
 65 70 75 80  
 His Ala Pro Tyr Gly Gly Lys Asp Ala Arg Leu Gly Ser Trp Arg Ala  
 85 90 95



## 17975

Leu Val Glu Ala Gln Lys Ala Gly Lys Thr Arg Ser Ile Gly Val Ser  
                   100                  105                  110  
 His Tyr Gly Ile His His Leu Asp Glu Leu Glu Glu Tyr Ile Lys Gly  
                   115                  120                  125  
 Gly Glu Gly Arg Gly Lys Ile Asp Val Gly Gln Tyr Glu Leu His Pro  
                   130                  135                  140  
 Trp Leu Asp Arg Ser Glu Ile Val Glu Trp Leu Lys Lys Arg Asp Ile  
 145                  150                  155                  160  
 Val Val Glu Ala Tyr Ser Pro Leu Ala His Gly Tyr Arg Leu Asn Glu  
                   165                  170                  175  
 Leu Ile Leu Lys Thr Leu Gly Lys Ile His Gly Lys Ser Pro Ala Gln  
                   180                  185                  190  
 Ile Met Ile Arg Trp Ser Leu Gln Lys Val Ser Val Leu Ser Val Tyr  
                   195                  200                  205  
 Ile

&lt;210&gt; 40901

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40901

Arg Lys Ile Pro Leu Val Leu His His Ser Ala Val Phe Asp His Arg  
 1                  5                  10                  15  
 Arg Val Leu Asp His Pro Leu Trp Leu Asn Ile Ala Phe Asp Pro Val  
                   20                  25                  30  
 Val Gly Ile Trp Ser Gly Arg Lys Asp Ser Ser Ala Leu Leu Ala Trp  
                   35                  40                  45  
 Thr Gln Gln Leu Pro Cys Arg Ala Tyr Trp Gln Asn Ile Ile Ala Val  
                   50                  55                  60  
 Val Met Arg Lys Gln Leu Asp Ile Leu Leu Leu Arg Ile Glu Asn Gln  
 65                  70                  75                  80

&lt;210&gt; 40902

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40902

Glu Lys Tyr Asp Trp Met Ser Gly Leu Leu Glu Ala Phe Met Ile Tyr  
 1                  5                  10                  15  
 Thr His Asp Ser Val Val Tyr Leu Ser Tyr Glu Lys Ile Asn Ile His  
                   20                  25                  30  
 Val Gln Ser Phe Val Ile Ile Glu Glu Pro Gly Tyr Cys Ala Thr Leu  
                   35                  40                  45  
 Tyr Arg Thr Met Gln Arg Arg Lys Met Cys Thr Leu Gln Glu  
                   50                  55                  60

&lt;210&gt; 40903

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40903

Asp Tyr Leu Val Leu Pro Ser Thr Glu Ala Arg His Gln Val Asp Val

## 17976

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1           5           10           15
Leu Arg Gln Asn Leu Ala Lys Asp Asn Asp Tyr Tyr Ser Tyr Ser Ser
                20                25                30
Arg Ile His Pro Asp Arg Val Ile Thr Glu Thr Asn Ala Thr Asp Ser
                35                40                45
Tyr Gln Asn Val Leu Phe Ser Leu Leu Arg Phe Arg Ser Tyr Val Gly
                50                55                60
Ala Tyr Pro Arg Lys Ile Thr Val Val Thr His Glu Phe Lys Arg Gln
65                70                75                80
Arg Phe Met Glu Cys His Phe Pro Ala Leu Gly Leu Arg Ala Gly Gly
                85                90                95
Gln Ala Ser Cys Pro Gly Ala Val Val Gly Ile Asn Pro Pro Glu Glu
                100                105                110
Val Thr Pro Leu Ala Ser Leu Ile Ser Gly Glu Glu Lys Ser Gly Ile
                115                120                125
Gly Leu Trp Arg Leu Asp Pro Tyr Gly Val Gly Glu Glu Leu Ala Ala
130                135                140
Lys Arg Val Lys Arg Gly Trp Lys Pro Gly Lys Gly Ser Arg Thr Val
145                150                155                160
Cys Trp Asp Glu Val Gly Arg Cys Arg
                165

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&lt;210&gt; 40904

&lt;211&gt; 282

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40904

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Gln Gln Ser Arg Thr Met Ala Ser Thr Asp Pro Tyr Thr Pro Pro Pro
1           5           10           15
Leu Pro Ser Pro Phe Thr Asn Thr Thr Pro Pro Pro Gln Leu Leu Thr
                20                25                30
Gln Gly Ala Glu Ala His Leu Tyr Lys Thr Val Phe Leu Ser Pro Ser
                35                40                45
Thr Pro Ala Ala Leu Lys Val Arg Pro Ser Lys Pro Tyr Arg His Pro
50                55                60
Ile Leu Asp Arg Arg Leu Thr Arg Gln Arg Ile Leu Gln Glu Ala Arg
65                70                75                80
Cys Leu Val Lys Leu Val Arg Glu Gly Val Asn Val Pro Ala Val Leu
                85                90                95
Ala Leu Asp Trp Glu Gly Gln Ser Gly Glu Lys Gly Phe Gly Gly Ala
                100                105                110
Trp Leu Met Met Glu Trp Ile Glu Gly Met Val Val Arg Val Val Leu
115                120                125
Glu Arg Trp Glu Lys Tyr Met Lys Arg Asn Gln Ala Gly Leu Gly Ala
130                135                140
Glu Glu Leu Glu Lys Glu Glu Ala Arg Val Arg Asp Leu Met Lys Arg
145                150                155                160
Ile Gly His Ala Val Gly Ala Leu His Lys Ala Gly Val Ile His Gly
                165                170                175
Asp Leu Thr Thr Ser Asn Leu Ile Leu Arg Pro Pro Thr Arg Ala Glu
                180                185                190
Gln Gln Pro Ala Ala Asp Glu Thr Asn Pro Ser Met Glu Gly Asp Val
                195                200                205
Val Leu Ile Asp Phe Gly Leu Ala Ser Gln Ser Leu Gln Asp Glu Asp
210                215                220

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## 17977

Arg Ala Val Asp Leu Tyr Val Leu Glu Arg Ala Phe Gly Ser Thr His  
 225 230 235 240  
 Pro Arg Thr Glu Pro Leu Phe Thr Glu Val Leu Ser Gly Tyr Lys Glu  
 245 250 255  
 Ser Tyr Lys Gly Ala Ser Ser Ala Leu Lys Arg Leu Glu Glu Val Arg  
 260 265 270  
 Met Arg Gly Arg Lys Arg Ser Met Ile Gly  
 275 280

<210> 40905  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 40905  
 Ala Pro Ile Lys Trp Glu Pro Val Asp Val Thr Pro Ile Leu Lys Asp  
 1 5 10 15  
 Gly Lys Thr Thr Ile Pro Glu Glu Ala Ile Lys Ser Val Gln Lys Asn  
 20 25 30  
 Tyr Val Ala Leu Lys Gly Pro Leu Ala Val Ser Gln Pro Arg Ala Leu  
 35 40 45  
 Ala Val His Ile Ser Ile Ile Leu Arg Trp Asn Leu Ala Asp Ser Cys  
 50 55 60  
 Trp Gln Gly Ser Cys Phe Pro  
 65 70

<210> 40906  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 40906  
 Ala Ala Cys Val Ser Leu Arg Leu Val Leu Phe Ala Phe Phe Leu Arg  
 1 5 10 15  
 Pro Ile Arg Pro Phe Leu Val Ala Phe Phe Val Cys Pro Gly Leu Leu  
 20 25 30  
 Gly Pro Tyr Val Phe Phe Pro Gly Thr Gly Ser Phe Thr Ser Phe Asn  
 35 40 45  
 Leu Asp Leu Glu Ser His Arg Thr Gly Ala Ser Arg Ser Leu Ala Ser  
 50 55 60  
 Ile Ala Gly Ser Phe Ser Ala Ser  
 65 70

<210> 40907  
 <211> 250  
 <212> PRT  
 <213> A.fumigatus

<400> 40907  
 Asp Gly Ile Leu Gln Thr Pro Val Gly Lys Gly His Val Ser Leu Asn  
 1 5 10 15  
 Leu Thr Leu Arg Arg Thr Phe Asn Leu Phe Ala Asn Leu Arg Pro Cys  
 20 25 30  
 Arg Ser Val Ala Gly Tyr Lys Thr Pro Tyr Asp Asn Val Asp Thr Val  
 35 40 45  
 Leu Ile Arg Glu Asn Thr Glu Gly Glu Tyr Ser Gly Ile Glu His Val

## 17978

50		55		60
Val Val Asp Gly Val Val Gln Ser Ile Lys Leu Ile Thr Arg Glu Ala				
65		70		75
Ser Glu Arg Val Leu Arg Phe Ala Phe Gln Tyr Ala Arg Ser Val Asn				80
	85		90	95
Lys Lys Lys Val Arg Val Val His Lys Ala Thr Ile Met Lys Met Ser				
	100		105	110
Asp Gly Leu Phe Leu Asn Thr Ala Arg Glu Ile Ala Lys Glu Phe Pro				
	115		120	125
Asp Ile Glu Phe Asp Ala Glu Leu Leu Asp Asn Ser Cys Leu Lys Ile				
	130		135	140
Val Thr Asp Pro Thr Pro Tyr Asn Asp Lys Val Leu Val Met Pro Asn				
145		150		155
Leu Tyr Gly Asp Ile Leu Ser Asp Met Cys Ala Gly Leu Ile Gly Gly				160
	165		170	175
Leu Gly Leu Thr Pro Ser Gly Asn Ile Gly Asp Glu Cys Ser Ile Phe				
	180		185	190
Glu Ala Val His Gly Ser Ala Pro Asp Ile Ala Gly Lys Gly Leu Ala				
	195		200	205
Asn Pro Thr Ala Leu Leu Leu Ser Ser Ile Met Met Leu Gln His Met				
	210		215	220
Gly Leu His Glu His Ala Ala Arg Ile Gln Lys Ala Thr Phe Asp Thr				
225		230		235
Leu Ala Glu Gly Lys Val Cys Ser Ile Pro				240
	245		250	

&lt;210&gt; 40908

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40908

Lys Arg Thr Gln Gly Ala Glu Ser Tyr Arg Arg Arg Pro Pro Leu Leu		
1	5	10
Val Pro Val Pro Pro Leu Pro Pro Phe Cys Leu Asp Leu Val Val		
	20	25
Cys Ala Arg Val Leu Leu Val Val Gly Glu Pro Pro Val Ser Pro Ser		
	35	40
Ala Ser Ser Ser Ser Leu Ser Ser Cys Ala Pro Ser Asp Pro Ser Ser		
	50	55
Ser Pro Ser Ser Phe Ala Pro Val Ser Ser Asp Pro Thr Ser Ser Ser		
65	70	75
Pro Ala Pro Asp Pro Leu Arg Ala Ser Ile Ser Thr Trp Ser Leu Ile		
	85	90
Glu Arg Val Pro Arg Val Pro Trp Arg Ala Leu Arg Val Pro Phe Leu		
	100	105
Pro Arg Asp Gly Ala Gly Asp Glu Arg Gly Ser Ile Thr Gly Gln Glu		
	115	120
Leu Glu Ser Cys Glu		
130		

&lt;210&gt; 40909

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40909

Gly	Lys	Tyr	Thr	Val	Thr	Leu	Ile	Glu	Gly	Asp	Gly	Ile	Gly	Pro	Glu
1				5					10					15	
Ile	Ala	Gln	Ser	Val	Lys	Asp	Ile	Phe	Ala	Ala	Ala	Lys	Val	Lys	Leu
			20					25					30		
Val	Leu	Leu	Val	Cys	Pro	Arg	Ala	Glu	Glu	Leu	Arg	Thr	Lys	Ile	Val
			35				40					45			
Val	Gly	Pro	His	Gln	Val	Gly	Ala	Arg	Arg	Arg	His	Pro	His	Leu	Glu
			50			55					60				
Gly	Arg	Lys	Asp	His	Tyr	Pro	Arg	Arg	Gly	His	Gln	Lys	Arg	Ala	Glu
65					70					75					80
Glu	Leu	Cys	Arg	Ser	Gln	Gly	Ser	Ser	Cys	Cys					
				85						90					

&lt;210&gt; 40910

&lt;211&gt; 649

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40910

Gln	Leu	Leu	Leu	Glu	Asp	Leu	Asn	Glu	Gly	Leu	Phe	Lys	Ser	His	Leu
1				5					10					15	
Lys	Leu	His	Val	Glu	Asp	Ala	Asp	Pro	Leu	Pro	Gln	Leu	Asp	Asn	Ile
			20					25					30		
Glu	Gly	His	Asn	Phe	Phe	Leu	Phe	Asp	Gln	Pro	Ala	Glu	Ser	Val	Thr
			35				40					45			
Asp	Ala	Phe	Ser	Asp	Thr	Gln	Val	Asp	Asp	Asn	Leu	Ser	His	Gln	Asn
			50			55					60				
Asn	Asp	Ile	Ser	Glu	Ala	Gly	Ser	Asp	Ser	Ile	Trp	Thr	Leu	Glu	Asn
65					70					75					80
Leu	Gln	Asn	Thr	Thr	Ile	Pro	Glu	Ile	Ala	Arg	Arg	Ser	Trp	Glu	Arg
			85						90					95	
Tyr	His	Asp	Arg	Ser	Ser	Leu	Glu	Pro	Met	Ser	Ala	Tyr	Phe	Ser	Glu
			100					105					110		
Ser	Gly	Gly	Lys	Gly	Phe	Asp	Ser	Ala	Leu	Thr	Arg	Gln	Tyr	Ser	Arg
			115				120					125			
Asn	Gly	Ser	Lys	Asp	Ala	Gly	Arg	Val	Ala	Arg	Asn	Asp	Val	Phe	Phe
			130			135					140				
His	Ala	Leu	Phe	Arg	Leu	Gly	Leu	Gly	Trp	Asn	Ser	Val	Phe	Phe	Arg
145					150					155					160
Tyr	Asn	Lys	Gln	Arg	Lys	Ala	Phe	Glu	Arg	Val	Ser	Asp	Asn	Ile	Arg
				165					170					175	
Val	Ser	Gly	Val	Ser	Leu	Ala	Val	Val	Asn	Gly	Leu	Thr	Glu	Glu	Val
			180					185					190		
Leu	Arg	Cys	Gly	Thr	Ala	Met	Tyr	Asn	Leu	Arg	Asp	Phe	Ala	Arg	Arg
			195				200					205			
Thr	Arg	Ile	Lys	Pro	Glu	Gly	Phe	Ser	Ala	Arg	Ser	Ala	Phe	Ala	Ser
			210			215						220			
Ala	Val	Ala	Met	Ile	Ile	Tyr	Thr	Leu	Glu	Lys	Gln	Ile	Ile	Asn	Tyr
225					230					235					240
Phe	Lys	Glu	Val	Ser	Leu	Ile	Gln	Ile	Met	Thr	Leu	Phe	Gln	Arg	
			245					250					255		
Cys	Gly	Asp	Leu	Val	Gly	Ala	Leu	Ser	Asn	Ile	Val	Glu	Ala	Val	Gln
			260					265				270			
Lys	Ala	Ala	Ser	Asp	Ala	Gln	Val	Ile	Ser	Ala	Val	Ile	Glu	Lys	Ala
			275				280						285		

## 17980

Ala His Tyr Ser Glu Ala Phe Gly Ser Met Glu Asn Leu Phe Arg Glu  
 290 295 300  
 Leu Val Ala Arg Val Ile Ala Pro Trp Leu Gln Tyr Val Glu Ala Trp  
 305 310 315 320  
 Val Gly Leu Arg Thr Glu Thr Pro Ala Leu Val Asp Leu Ala Ala Lys  
 325 330 335  
 Ser Glu Gly Phe Val Ala Val Glu Arg Tyr Glu Gly Arg Ala Gly Ser  
 340 345 350  
 Arg Ser Met Lys Ala Ser Ser Leu Gln Tyr Arg Tyr His Pro Glu Gln  
 355 360 365  
 Met Pro Thr Phe Ile Pro Ala Glu Gln Ala Asp Leu Ile Phe Glu Thr  
 370 375 380  
 Gly Arg Ser Leu Arg Leu Leu Arg Arg Tyr His Pro Gln His Pro Ile  
 385 390 395 400  
 Ala Asn Asp Ala Ile Leu Thr Lys Asp Ser Pro Asn Leu Arg Cys Ala  
 405 410 415  
 Gly Ser Trp Ser Asp Ile Glu Arg Ile Gln Lys Lys Ala Gln Gln Tyr  
 420 425 430  
 Glu Thr Gln Leu Arg Ser Glu Ile Leu Lys Tyr Ser Gln Gly Gln Arg  
 435 440 445  
 Val Gly Gln Val Glu Met Asp Lys Val Leu Ala Glu Glu Gln Met Gln  
 450 455 460  
 Lys Phe Val Ser Ala Gly Asp Asp Pro Ala Ile Ser Pro Ala Phe Glu  
 465 470 475 480  
 Leu Phe Asp Ile Asp Asp Ser Lys His Thr Thr Gly Leu Leu Ala Ser  
 485 490 495  
 Asp Ser Ser Leu Glu Asn Asp Glu Leu Gly Pro Leu Phe Asp Ala Ser  
 500 505 510  
 Thr Leu Glu Val Ser Arg Pro Ile His Pro His Arg Lys Asn Phe Gly  
 515 520 525  
 Pro Glu Met Ile Ser Ala Val Ser Leu Ser Leu Ala Pro Leu Leu Ser  
 530 535 540  
 Ser Gln Ala Leu Leu Val Asp Phe Ser Cys Leu His Leu Leu Phe Lys  
 545 550 555 560  
 Glu His Lys Leu Arg Tyr His Leu Thr Leu Gln Trp Arg Phe Gln Leu  
 565 570 575  
 Leu Gly Asp Gly Phe Phe Ala Ser Arg Leu Ser His Ser Leu Phe Asp  
 580 585 590  
 Pro Glu Met Glu Ser Gly Glu Arg Arg Ser Gly Val Val Arg Ser Gly  
 595 600 605  
 Val His Thr Gly Leu Arg Leu Gly Asn Arg Asp Thr Trp Pro Pro Ala  
 610 615 620  
 Ser Ser Glu Leu Arg Leu Val Leu Ile Gly Leu Leu Val Phe Thr Thr  
 625 630 635 640  
 Gly Leu Asp Gly Ser Glu Leu Arg Ile  
 645

&lt;210&gt; 40911

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40911

Arg Ile Gln Met Val Arg Asn Phe Tyr Asn Asp Tyr Ser His Asp Ser  
 1 5 10 15  
 Asn Ser Cys Pro Val Ile Glu Pro Arg Ser Ser Pro Ala Pro Ser Arg

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<210> 40912
<211> 88
<212> PRT
<213> A.fumigatus
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<210> 40913
<211> 261
<212> PRT
<213> A.fumigatus
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<400> 40913															
Thr	Tyr	Leu	Ala	Leu	Ser	Gln	Gly	Val	Glu	Gly	Gly	Leu	Leu	Asn	Thr
1				5					10					15	
Ser	Ser	Val	Leu	Val	Glu	Thr	His	Val	Leu	Gln	His	His	Asn	Thr	Gly
			20					25					30		
Gln	Glu	Gln	Ser	Ser	Gly	Val	Cys	Glu	Ala	Leu	Ala	Ser	Asn	Ile	Gly
		35					40					45			
Ser	Arg	Ala	Val	Asn	Gly	Leu	Glu	Asp	Gly	Ala	Phe	Ile	Thr	Asn	Val
	50					55					60				
Thr	Gly	Arg	Ser	Glu	Ala	Glu	Thr	Thr	Asp	Gln	Ala	Gly	Ala	His	Val
65					70					75				80	
Gly	Gln	Asn	Val	Thr	Val	Gln	Val	Gly	His	Asp	Lys	Asp	Leu	Val	Val
				85					90					95	
Val	Arg	Ser	Gly	Ile	Gly	Asn	Asp	Leu	Gln	Ala	Arg	Val	Val	Gln	Gln
			100					105					110		
Leu	Ser	Ile	Lys	Leu	Asp	Ile	Gly	Glu	Leu	Leu	Gly	Asn	Phe	Ala	Gly

115	120	125
Ser Val Glu Glu Gln Thr Ile Gly His Leu His Asp Gly Gly Leu Val		
130	135	140
His Asn Thr Asp Leu Leu Leu Val Asp Arg Thr Ser Val Leu Glu Gly		
145	150	155
Glu Thr Glu Asn Pro Leu Arg Ser Phe Ser Gly Asp Glu Leu Asp Ala		
	165	170
Leu Asp Asn Thr Ile Asp Asn Asn Val Leu Asn Ala Arg Val Phe Thr		
	180	185
Leu Gly Val Leu Thr Asn Gln Asn Ser Ile Asp Val Val Val Arg Ser		
	195	200
Phe Val Thr Gly Asp Arg Ala Ala Gly Thr Gln Val Arg Lys Gln Val		
	210	215
Glu Ser Thr Thr Glu Ser Lys Val Lys Gly Asn Met Thr Leu Ala Asn		
225	230	235
Arg Ser Leu Gln Asp Ser Ile Leu Val Leu Tyr Leu Cys Gly Pro Gln		
	245	250
Gly Arg Glu Val Asp		255
260		

&lt;210&gt; 40914

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40914

Gly Arg Arg Arg His Cys Ile Lys Cys Phe Leu Gly Ala Gly Tyr Ala		
1	5	10
Leu Ser Pro His Ile Phe Arg Pro Leu Phe Ile Thr Thr Ile Lys Trp		
	20	25
Val Ser Ser Thr Asn Ile Ser Leu Val Tyr Asn Met Ala Gln Leu Ser		
	35	40
Leu Ser Thr Glu Ser Ile Ser Thr Leu Ser Ser Glu Met Ser His Phe		
	50	55
Gly Gly Ser Arg Ser Glu Ser Phe Gly Thr Ser Tyr Ser Glu Asp Glu		
65	70	75
Asp Ala Asp His Phe Val His Asp Ala Ala Ser Val Tyr Asp Ser		
	85	90
Leu Lys Asp Gly Val Thr Ser Asp Val Val Gln Leu Glu Leu Val Ser		
	100	105
Leu Arg Met Thr Ala Asn Ala Ser Asp His Gln Val Arg Arg Ala Val		
	115	120
Val Thr Ala Phe Met Lys Arg Thr Gln Gln Leu Ile Glu Gly Gly Lys		
	130	135
Gly Ala Gly Glu Ala Ile Arg Asp Leu Phe Gly Thr Tyr Arg Glu Val		
145	150	155
Val Glu Arg Cys Met Phe Asp Arg Asp Ser Asp Glu Lys Thr Asp Gln		
	165	170
Val Asp Phe Leu Leu Leu Gln Gln Asp Leu Val His Arg Pro Arg		
	180	185
Gly Glu Thr Val Leu Leu Phe Ala Ala Lys Glu Leu Tyr Asp Leu Glu		
	195	200
Leu Phe Glu Glu Glu Ala Tyr Glu Gln Trp Trp Ala Asp Glu Arg Ser		
	210	215
Ser Ala Ser Glu Glu Met Arg Gln Val Arg Ser Gln Thr Gln Gln Phe		
225	230	235
		240



## 17983

Val Asp Trp Leu Ala Asn Ala Glu Glu Glu Glu Ser Thr Glu Glu Glu  
                           245                          250                          255  
 Glu Ser Glu Glu Asp Ser Asp Glu Glu  
                           260                          265

<210> 40915  
 <211> 330  
 <212> PRT  
 <213> A.fumigatus

<400> 40915

Arg Glu Pro Cys Arg Tyr Gln Thr Leu Leu Met Arg Thr Tyr Val Asp  
 1                          5                          10                          15  
 Asp Lys Glu Asn Leu Lys Trp Cys Pro Ala Pro Asn Cys Glu Tyr Ala  
                           20                          25                          30  
 Val Asp Cys Pro Val Lys Gln Arg Asp Leu Asn Arg Ile Val Pro Thr  
                           35                          40                          45  
 Val Gln Cys Ala Cys Lys His Phe Phe Cys Phe Gly Cys Thr Leu Asn  
                           50                          55                          60  
 Asp His Leu Pro Ser Pro Cys Lys Leu Val Lys Met Trp Leu Lys Lys  
 65                          70                          75                          80  
 Cys Glu Asp Asp Ser Glu Thr Ala Asn Trp Ile Ser Ala Asn Thr Lys  
                           85                          90                          95  
 Glu Cys Pro Lys Cys His Ser Thr Ile Glu Lys Asn Gly Gly Cys Asn  
                           100                          105                          110  
 His Met Thr Cys Arg Lys Cys Lys His Glu Phe Cys Trp Met Cys Met  
                           115                          120                          125  
 Gly Leu Trp Ser Glu His Gly Thr Ser Trp Tyr Asn Cys Asn Arg Tyr  
                           130                          135                          140  
 Glu Glu Lys Ser Gly Ser Glu Ala Arg Ser Ala Gln Ala Lys Ser Arg  
 145                          150                          155                          160  
 Ala Ser Leu Glu Arg Tyr Leu His Tyr Tyr Asn Arg Tyr Ala Asn His  
                           165                          170                          175  
 Glu Gln Ser Ala Lys Leu Asp Lys Asp Leu Tyr Leu Lys Thr Glu Lys  
                           180                          185                          190  
 Lys Met Thr Ser Leu Gln Ser Gln Ser Gly Leu Ser Trp Ile Glu Val  
                           195                          200                          205  
 Gln Phe Leu Asp Thr Ala Ser Gln Ala Leu Gln Gln Cys Arg Gln Thr  
                           210                          215                          220  
 Leu Lys Trp Thr Tyr Ala Phe Ala Tyr Tyr Leu Ala Arg Asn Asn Leu  
 225                          230                          235                          240  
 Thr Glu Ile Phe Glu Asp Asn Gln Lys Asp Leu Glu Leu Ala Val Glu  
                           245                          250                          255  
 Ser Leu Ser Glu Met Phe Glu Lys Pro Val Pro Glu Leu Ala Asn Leu  
                           260                          265                          270  
 Lys Val Asp Ile Leu Asp Lys Thr Ala Tyr Cys Asn Lys Arg Arg Val  
                           275                          280                          285  
 Ile Leu Leu Ser Asp Thr Ala Gln Lys Leu Lys Gln Gly Lys Leu Tyr  
                           290                          295                          300  
 Ser Leu His Asn Val Asp Ala Trp His Lys Ala Asp Asn His Ile Ser  
 305                          310                          315                          320  
 Ser Gly Val Trp Ser Phe Asn Val Glu Trp  
                           325                          330

<210> 40916  
 <211> 237

17984

<212> PRT

<213> A.fumigatus

<400> 40916

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Leu Ala Arg Pro Ser Thr Arg Gly Glu Asp Asp His Tyr Ala Ala Arg
1      5      10      15
Val Arg Asn Leu Lys Ala Tyr Asp Ala Val Ser Lys Asp Ile Ile Ser
      20      25      30
Arg Trp Thr Tyr Pro Leu Cys Pro Asp Thr Asn Leu Leu Pro Gly His
      35      40      45
Thr Tyr Asp Leu Arg Lys Gly Asn Leu Tyr Ala Glu Gln Gly Val Thr
      50      55      60
Leu Ala Arg Ser Cys Val Val Gly Arg Gln Thr Val Ile Gly Lys Gly
65      70      75      80
Thr Ser Ile Gly Asp Lys Thr Thr Val Lys Asn Thr Val Leu Gly Arg
      85      90      95
Asp Cys Lys Ile Gly Lys Asn Val Thr Leu Asp Gly Ala Tyr Ile Trp
      100     105     110
Asp Gly Val Val Ile Gly Asp Gly Thr Thr Val Arg Gln Ala Ile Ile
      115     120     125
Ala Asp Lys Val Val Val Gly Lys Asn Cys Ser Val Lys Pro Gly Ala
      130     135     140
Leu Leu Ser Tyr Glu Val Arg Ile Ala Asp Gly Val Thr Val Ser Glu
145     150     155     160
Gly Arg Arg Ile Thr Lys Ala Ser Arg Glu Glu Asp Gly Gly Leu Pro
      165     170     175
Ala Asn Asp Leu Asp Val Val Gly Glu Gly Gly Glu Gly His Glu Tyr
      180     185     190
Phe Gln Glu Glu Asp Glu Asp Glu Asp Asp Thr Val Ser Asn Ala Ser
      195     200     205
Ser Gly Leu Gly Met His Tyr Leu Pro Thr Phe Ser Gly Pro Ser Leu
210     215     220
Ser Pro Leu Ser Asn Gly Cys Gln Val Leu Ile Ser Pro
225     230     235

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<210> 40917

<211> 85

<212> PRT

<213> A.fumigatus

<400> 40917

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Gly Arg Ala Asp Asn Pro Gly Ser Ala Gly Pro Ala His Ala Val Tyr
1      5      10      15
Phe Gly Thr Tyr Glu Val Val Lys Glu Met Ala Gly Gly Asn Val Asp
      20      25      30
Glu Gly His His Pro Leu Ala Ala Gly Lys Cys Ser Asn Ser Asn Ser
      35      40      45
Ile Asp Ala Gly Lys Asn Thr Asp Ile Leu Gln Ala Ala Ser Gly Ala
      50      55      60
Ala Ala Thr Ile Ala Ser Asp Ala Leu Met Asn Pro Phe Asp Gly Lys
65      70      75      80
Ser Ser Ser Met Asp
      85

```

<210> 40918

<211> 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40918

His Leu Glu Ile Val Ile Lys Gln Arg Met Gln Val His Gly Ser Val  
 1 5 10 15  
 His Lys Ser Leu Leu Gln Cys Ala Thr Ser Val Tyr Arg Ala Glu Gly  
 20 25 30  
 Leu His Ala Phe Tyr Val Ser Tyr Pro Thr Thr Leu Leu His Asp Gly  
 35 40 45  
 Ala Phe His Gly Tyr Ser Ile Arg Gly Val Arg Val Asn Leu Glu Ser  
 50 55 60  
 Asp Glu Pro Ile Ser  
 65

&lt;210&gt; 40919

&lt;211&gt; 317

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40919

Ile Phe Thr Thr Pro Pro Leu Thr Arg Lys Arg Lys Ala Ala Glu Ala  
 1 5 10 15  
 Ala Ile Thr Asp Gln Glu Pro Ser Ile Thr Ala Thr Glu Val Ser Val  
 20 25 30  
 Ala Asp Ser Arg Thr Ala Thr Gly Lys Thr Ser Ser Asn Lys Arg Pro  
 35 40 45  
 Thr Arg Arg Arg Asp Lys Leu Thr Asp Gln Gly Pro Asp Ala Asp Ser  
 50 55 60  
 Val Ser Val Ala Ser Ala Ser Ile Thr Val Gln Asn Lys Gln Lys Ala  
 65 70 75 80  
 Thr Asp Leu Val Thr Pro Ala Ser Thr Ser Met Asp Ser Asp Asp  
 85 90 95  
 Phe Met Thr Asp Ala Ser Ser Ala Asp Asp Phe Leu Asp Thr Gln Gly  
 100 105 110  
 Ser Glu Asp Glu Ser Leu Gly Glu Gly Met Leu Gln Arg Phe Ser Val  
 115 120 125  
 Ser Tyr Ser Thr Asp Ala Val Phe Leu Leu Leu Leu Glu Phe Gly Asp  
 130 135 140  
 Glu Phe Asp Gly Gly Phe Ser Gln Asp Lys Asp Leu Leu Gly Asn Thr  
 145 150 155 160  
 Lys Lys Pro Tyr Glu Val Asp Phe Arg Val Leu Ser Pro Glu Asp Ile  
 165 170 175  
 Asp Arg Glu Gln Ser Gln Gln Val Asn Glu Val Ser Gln Ile Leu Gly  
 180 185 190  
 Leu Pro Pro Glu Ser Ser Ala Ile Leu Leu Arg Phe Gly Arg Trp Asn  
 195 200 205  
 Arg Glu Lys Leu Ile Glu Ser Tyr Met Asp His Pro Glu Glu Thr Leu  
 210 215 220  
 Glu Glu Ala Gly Leu Gly Thr Asn Phe Asp Met Thr Pro Lys Thr Glu  
 225 230 235 240  
 Val Val Pro Gly Phe Met Cys Asp Ile Cys Cys Glu Asp Gly Asp Asp  
 245 250 255  
 Leu Glu Thr Tyr Ala Met Arg Cys Gly His Arg Phe Cys Val Asp Cys  
 260 265 270  
 Tyr Arg His Tyr Leu Ala Gln Lys Ile Arg Glu Glu Gly Glu Ala Ala

## 17986

	275		280		285										
Arg	Ile	Glu	Cys	Pro	Gly	Asp	Gly	Cys	His	Met	Ile	Val	Asp	Ser	Lys
	290					295					300				
Ser	Leu	Ser	Leu	Leu	Val	Ala	Asp	Asp	Leu	Lys	Glu	Arg			
305					310					315					

<210> 40920  
 <211> 155  
 <212> PRT  
 <213> A.fumigatus

<400> 40920

Ser	Ser	Ser	Asn	Gly	Cys	Lys	Tyr	Met	Ala	Pro	Tyr	Ile	Arg	Ala	Phe
1			5						10					15	
Tyr	Asn	Ala	Pro	Arg	Pro	Phe	Thr	Ala	Pro	Arg	Val	Cys	Met	His	Ser
		20						25				30			
Thr	Ser	His	Thr	Leu	Leu	His	Phe	Cys	Met	Thr	Val	Pro	Phe	Thr	Ala
		35					40					45			
Thr	Gln	Phe	Val	Ala	Tyr	Glu	Ser	Ile	Ser	Lys	Val	Met	Asn	Pro	Ser
	50					55					60				
His	Glu	Tyr	Asp	Pro	Phe	Thr	His	Cys	Ile	Ala	Gly	Gly	Leu	Ala	Gly
65					70					75				80	
Ala	Phe	Ala	Ala	Gly	Leu	Thr	Thr	Pro	Leu	Asp	Val	Val	Lys	Thr	Leu
				85					90				95		
Leu	Gln	Thr	Arg	Gly	Leu	Ala	Gln	Asn	Glu	Glu	Ile	Arg	Ser	Ala	Arg
			100					105					110		
Gly	Leu	Phe	Asn	Ala	Ala	Ala	Ile	Ile	Lys	Arg	Gln	Phe	Gly	Trp	Arg
		115					120					125			
Gly	Phe	Leu	Arg	Gly	Ala	Arg	Pro	Arg	Ile	Ile	Ser	Thr	Met	Pro	Ser
	130					135					140				
Thr	Ala	Ile	Cys	Trp	Tyr	Val	Val	Ile	Arg	Ala					
145					150					155					

<210> 40921  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 40921

Arg	Trp	Cys	Arg	Gln	Arg	Trp	Lys	Gly	Lys	Leu	Asn	Tyr	Glu	Ala	Leu
1				5					10					15	
Ala	Pro	Lys	Gly	Ala	Val	Thr	Ser	Leu	Ile	Lys	Phe	Ser	Val	Lys	Gly
		20						25				30			
Glu	Glu	Arg	Gly	Val	Ile	Val	Leu	Ser	Tyr	His	Val	Trp	Ser	Leu	Asp
		35					40					45			
Val	Thr	Gly	Val	Gly	Arg	Leu	Lys	Ser	Leu	Glu	Ala	Ser	Met	His	Cys
	50					55					60				
Tyr	Pro	Arg	His	Gln											
65															

<210> 40922  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<220>

&lt;221&gt; UNSURE

&lt;222&gt; (53)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40922

Pro	Gln	Gly	Lys	Leu	Ser	Cys	Leu	Pro	Asn	Ala	Ser	Thr	Ser	Ile	Gly
1				5					10					15	
Tyr	Ile	Gly	Gln	Ala	Ala	Glu	His	Phe	Asp	Leu	Gly	Ala	His	Ile	Phe
			20					25					30		
Val	Leu	Lys	Ile	Ser	Leu	Arg	Gly	Ala	Ala	Ala	Ser	Met	Ser	Pro	Met
		35					40					45			
Lys	Glu	Ala	Leu	Xaa	Tyr	Gln	Ala	Gln	Asn	Thr	Arg	Pro	Lys	Glu	Asn
	50					55					60				
Leu	Cys	Thr	Gln	Tyr	Leu	Asn	Pro								
65					70										

&lt;210&gt; 40923

&lt;211&gt; 420

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40923

Leu	Asp	Ser	Ala	Val	Asp	Arg	Thr	Tyr	Arg	Asn	Lys	His	Phe	Ala	Ala
1				5					10					15	
Ala	Trp	Lys	Lys	Ser	Thr	His	Gly	Gly	Pro	Lys	Thr	Ser	Thr	Ala	Asn
			20					25					30		
Gly	Ala	Pro	Ala	Ser	Gly	Gln	Asp	Ser	Gln	Asp	Glu	Pro	Val	Val	Leu
		35					40					45			
Pro	Thr	Pro	Glu	Leu	Ile	Ala	Ser	Phe	Ala	His	Leu	Pro	Ile	Pro	Arg
	50					55					60				
Ala	Glu	Pro	Glu	Ile	Glu	Gly	Thr	Pro	Pro	Pro	Pro	Cys	Pro	Ile	Ala
65				70					75					80	
Asn	Ile	Pro	Thr	Glu	Val	Leu	Leu	Val	Ile	Leu	Arg	His	Val	Ala	Leu
				85					90					95	
Met	Asp	Pro	Ala	Ser	Phe	Cys	Arg	Met	Ala	Leu	Val	Cys	Lys	Arg	Leu
			100					105					110		
Ala	Tyr	His	Phe	Ala	Asn	Glu	Gln	His	Ile	Trp	Lys	Arg	Leu	Cys	Gln
		115					120					125			
Gly	Phe	Glu	Phe	Gly	Phe	Lys	Ser	Met	His	Tyr	Ser	Phe	Ala	Cys	Asp
	130					135					140				
Ile	His	Gly	Asn	Pro	Glu	Tyr	Thr	Met	Arg	Gln	Arg	Tyr	Thr	Pro	Phe
145					150					155					160
Pro	Phe	Ser	Val	Pro	Val	Gln	Ile	Pro	Lys	Pro	Leu	Ser	Ser	Trp	Ser
				165					170					175	
Gln	Val	Phe	Gln	Met	Phe	Pro	Arg	Ile	Arg	Phe	Thr	Gly	Val	Tyr	Leu
		180					185						190		
Ser	Thr	Val	Asn	Tyr	Thr	Arg	Pro	Gly	Ala	Ala	Ser	Ser	Tyr	His	Asn
		195					200					205			
Ile	Ser	Trp	Asp	Ser	Pro	Ile	His	Ile	Val	Thr	Tyr	Tyr	Arg	Tyr	Leu
	210					215					220				
Arg	Phe	Tyr	Ser	Asp	Gly	Ser	Val	Ile	Ser	Ile	Leu	Thr	Thr	Ala	Glu
225					230					235					240
Pro	Leu	Asp	Val	Val	Pro	Tyr	Ile	Ser	Lys	Glu	Asn	Met	Lys	Ala	Ala
				245					250					255	
Arg	Ala	Thr	Ser	Ser	His	Arg	His	His	Gln	Arg	Asn	Thr	Ser	Asp	Pro
			260					265						270	

## 17988

Gly Ile Thr Leu Ala Gly Gly Ala Glu Pro Ile Pro Pro Val Ala Leu  
 275 280 285  
 Ser Ala Leu Lys Glu Ala Arg Arg Gly Arg Trp His Leu Val Lys Pro  
 290 295 300  
 Leu Ala Ala Ser Glu Ser Glu Asp Asp Asn Arg Ile Pro Ser Val Ser  
 305 310 315 320  
 Asp Arg Pro Pro Phe Pro Val Arg Thr Val His Thr Pro Ala Leu Asp  
 325 330 335  
 Pro Arg Asp Val Ile Ile Glu Thr Glu Gly Val Gly Ser Lys Tyr Thr  
 340 345 350  
 Tyr Thr Met His Leu Ser Leu Arg Ser Ser Ser Gly Gly Ser Lys Pro  
 355 360 365  
 Ala Asn Pro Thr Ala Thr Pro Ala Asn Thr Ser Lys Asn Thr Lys Leu  
 370 375 380  
 Val Trp Lys Gly Phe Trp Ser His Asn Lys Leu Thr Asp Asp Trp Ala  
 385 390 395 400  
 Glu Phe Gly Leu Arg Asn Asp Arg Ala Phe Val Phe Arg Arg Val Arg  
 405 410 415  
 Gly Trp Gly Met  
 420

&lt;210&gt; 40924

&lt;211&gt; 730

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40924

Tyr Phe Leu Cys Gln Gln Lys Arg Ser His Thr Arg Leu Ile Met Pro  
 1 5 10 15  
 Glu Arg Val Arg Ile Val Phe Asp Asp Ser Asp Asp Ala Pro Val Pro  
 20 25 30  
 Lys Lys Val Pro Glu Ala Glu Gln Ile Gln Gly Ser Glu Pro Val Lys  
 35 40 45  
 Arg Lys Asp Gln Pro Thr Asp His Pro Lys Lys Lys Ser Lys Lys Arg  
 50 55 60  
 Lys Val Glu Trp Pro Ser Asp Thr Arg Ser Gln Glu Ser Pro Ser Ser  
 65 70 75 80  
 Asn Glu Thr Gln Ser Glu Pro Val Ser Arg Asp Thr Asn Glu Lys Asp  
 85 90 95  
 Ala Val Asn Gly Val Ala Asn Gly Thr Tyr His His Ser Lys Asn Lys  
 100 105 110  
 Lys His Lys Met Lys Asn Gln Ala Pro Gln Gly Ala Lys His Lys Phe  
 115 120 125  
 Thr Ser Leu Arg Glu Lys Ala Lys Ala Leu Tyr Glu Thr Arg Lys Asn  
 130 135 140  
 Leu Pro Ile Phe Pro His Gly Asp Glu Ile Arg Gln Lys Leu Arg Val  
 145 150 155 160  
 Asn Asp Val Met Leu Leu Val Gly Glu Thr Gly Ser Gly Lys Ser Thr  
 165 170 175  
 Gln Ile Pro Gln Phe Leu Val Asp Glu Arg Trp Cys Arg Pro Thr Lys  
 180 185 190  
 Ala Thr Val Thr Gln Asp Asn Gly Ser Lys Lys Glu Leu Thr Val Gly  
 195 200 205  
 Gly Cys Val Ala Ile Thr Gln Pro Arg Arg Val Ala Ala Ile Ser Leu  
 210 215 220  
 Ala Arg Arg Val Ala Glu Glu Met Gly Thr Pro Leu Gly Ser Ser Ser

225					230				235				240			
Pro	Ala	Ser	Lys	Val	Gly	Tyr	Ser	Val	Arg	Phe	Asp	Thr	Ser	Thr	Ser	
				245					250					255		
Pro	Ser	Thr	Arg	Ile	Lys	Phe	Leu	Thr	Glu	Gly	Met	Leu	Leu	Gln	Glu	
			260					265					270			
Met	Leu	His	Asp	Pro	Ser	Leu	Thr	Lys	Tyr	Ser	Ala	Ile	Val	Val	Asp	
		275					280					285				
Glu	Val	His	Glu	Arg	Gly	Val	Asn	Val	Asp	Leu	Val	Leu	Gly	Phe	Leu	
	290				295					300						
Arg	Asn	Leu	Val	Ser	Gly	Lys	Lys	Glu	Gly	Arg	Gly	Gly	Val	Pro	Leu	
305					310					315					320	
Lys	Val	Val	Val	Met	Ser	Ala	Thr	Ala	Asp	Met	Glu	Ser	Leu	Ile	Asp	
				325					330					335		
Phe	Phe	Lys	Glu	Gly	Leu	Gln	Gly	Gln	Gly	Asp	Thr	Lys	Thr	Thr	Lys	
			340					345					350			
Gly	Asn	Asn	Asp	Gln	Gln	Asp	Ser	Pro	Gln	Ala	Asn	Gly	Glu	Asp	Lys	
		355					360					365				
Val	Ser	Val	Cys	His	Ile	Lys	Gly	Arg	Gln	Phe	Pro	Val	Lys	Thr	Ile	
	370					375					380					
Tyr	Ser	Pro	Ala	Pro	Val	His	Asp	Phe	Val	Asp	Ala	Ala	Leu	Lys	Val	
385					390					395					400	
Ile	Phe	Gln	Ile	His	Tyr	Lys	Glu	Pro	Met	Pro	Gly	Asp	Ile	Leu	Val	
				405					410					415		
Phe	Leu	Thr	Gly	Gln	Glu	Thr	Val	Glu	Ala	Leu	Glu	His	Leu	Val	Asn	
			420					425					430			
Glu	Tyr	Ala	Ala	Gly	Met	Asp	Pro	Ala	Leu	Pro	Lys	Val	Gln	Val	Leu	
		435					440					445				
Pro	Leu	Phe	Ala	Ala	Leu	Pro	Gln	Val	Ala	Gln	Gln	Arg	Val	Phe	Leu	
	450					455				460						
Pro	Ala	Pro	Pro	Arg	Thr	Arg	Lys	Ile	Ile	Leu	Ala	Thr	Asn	Ile	Ala	
465					470					475					480	
Glu	Thr	Ser	Val	Thr	Val	Ser	Gly	Val	Arg	Phe	Val	Val	Asp	Cys	Gly	
				485					490					495		
Lys	Ala	Lys	Ile	Lys	Gln	Phe	Arg	Thr	Arg	Leu	Gly	Leu	Asp	Ser	Leu	
			500					505					510			
Leu	Val	Lys	Pro	Ile	Ser	Lys	Ser	Ala	Ala	Ile	Gln	Arg	Lys	Gly	Arg	
		515					520					525				
Ala	Gly	Arg	Glu	Ala	Pro	Gly	Gln	Cys	Tyr	Arg	Leu	Tyr	Thr	Glu	Lys	
	530					535					540					
Asp	Tyr	Leu	Ala	Leu	Asp	Glu	Thr	Asn	Thr	Pro	Glu	Ile	Leu	Arg	Cys	
545					550					555					560	
Asp	Leu	Ser	Gln	Ala	Leu	Leu	Asn	Met	Lys	Ala	Arg	Gly	Val	Asp	Asp	
				565					570					575		
Val	Met	Gly	Phe	Pro	Phe	Leu	Thr	Arg	Pro	Pro	Arg	Glu	Ser	Leu	Glu	
			580					585								

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<210> 40925
<211> 120
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17)
<223> Identity of amino acid sequences at the above locations are unknown.
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<210> 40926
<211> 101
<212> PRT
<213> A.fumigatus
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<400> 40926
Ala Pro Tyr His Thr Ala Val Phe Ser Ser Lys Glu Gln Gly Ala Ser
1 5 10 15
Asn Thr Lys Val Leu Ile Val Lys Gln Ala Lys Trp Arg Ser Ser His
20 25 30
Pro Leu Ala Asp Leu Thr Asp Met Ser Ser Ile Arg Ile Gly Leu Val
35 40 45
Thr Ser Tyr Phe Ile Ala Ala Ser Leu Trp Gln Glu Cys Ile Ser Asp
50 55 60
Val Pro Met Leu Ser Glu Gly Arg Lys Leu Ser Val Leu Gln Cys Glu
65 70 75 80
Arg Lys Gln Phe Cys Thr Pro Glu Phe Ile Thr Glu Gln Ile Arg Gly
85 90 95
Thr Phe Cys Gly Leu
100

```



<210> 40927  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 40927

```

Leu Cys Ser Ala Thr Pro Leu Asp Val Val Arg Val Arg Leu Gln Ser
1          5          10          15
Gln Ser Ser Val His Asn Ala Ser Pro Tyr Thr Ser His Thr Thr Gln
          20          25          30
Thr Leu Lys His Leu Pro Pro Asn Leu Gly Val Thr Ala Cys Cys Arg
          35          40          45
Glu Val Phe Trp Phe Gly Gln Asp Pro Gln Val Cys Met Val Gly Pro
          50          55          60
Gly Thr Gly Thr Leu Gly Leu Phe Ile Thr Ile Ala Lys Gly Arg Asp
65          70          75          80
Met Gln

```

<210> 40928  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 40928

```

Leu Glu Ile Asp Phe Phe Leu Cys Ile Tyr Gln Asn Asp Lys Gly Pro
1          5          10          15
Gly Glu Pro His Asp Glu Val Tyr Ser Pro Glu Ala Leu Phe Arg Ser
          20          25          30
Asp Trp Leu Gln Thr Phe Asp Ile His Phe Asp Asn Glu Leu Ala His
          35          40          45
Asp Tyr Tyr Gly Asp Gly Lys Lys Leu Ala Glu Lys Tyr Glu Thr
          50          55          60

```

<210> 40929  
 <211> 185  
 <212> PRT  
 <213> A.fumigatus

<400> 40929

```

Ala Thr Arg Arg Thr Gly Thr Leu Gly Leu Tyr Phe Ala Met Lys Ile
1          5          10          15
Leu Gly Tyr Thr Pro Tyr His Met Tyr Glu Val Ala Leu Val Gln Gly
          20          25          30
Thr Pro Gly Met Ala Ala Leu Leu Glu Ala Val Ile Ala Glu His Asn
          35          40          45
Arg Leu Ser Gly Ile Lys Arg Phe Asp Lys Gly Asp Leu Asp Lys Leu
          50          55          60
Thr Ala Asp Tyr Asp Val Arg Val His Val Pro Ile Ala Phe Trp Ile
65          70          75          80
Leu Thr Met Leu Gln Cys Leu Ile Glu Ile Pro Ser Phe Leu Gly Pro
          85          90          95
Ala Leu Leu Asp Glu Tyr Ala Gln Asp Pro Glu Val Lys Ile Ile Leu
          100          105          110
Thr Glu Arg Asp Pro Asp Arg Trp Ala Lys Ser Val Asn Gly Thr Ala

```



17993

	275					280						285							
Lys	Asn	Lys	Ala	Val	Gly	Tyr	Val	Thr	Thr	Ala	Ala	Phe	Gly	Tyr	Thr				
	290					295						300							
Ile	Arg	Lys	Pro	Ile	Ala	Tyr	Ala	Gly	Phe	Phe	Ile	Arg	Ser	Glu	Thr				
305					310					315					320				
Val	Xaa	Arg	Trp	Thr	Trp	Asn	Ile	Ser	Gly	Gly	Arg	Ser	Gly	Xaa	Arg				
				325					330					335					

<210> 40931  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 40931

Val	Ala	Pro	Gly	Glu	Tyr	Trp	Gly	Asp	Leu	Leu	Lys	Phe	Phe	Lys	Lys				
1				5					10					15					
Leu	Thr	Gly	Phe	Gly	Asn	Gln	Val	Leu	Phe	Leu	Phe	Thr	Val	Ala	Ala				
		20						25					30						
Gln	His	Phe	Gly	Gly	Met	Arg	His	Asn	Gln	Ile	Ala	Ala	Glu	Lys	Ser				
		35					40					45							
Ala	Asn	Ser	Thr	Ser	Ser	Pro	His	Cys	Pro	Ala	Phe	His	Ile	Leu	Gln				
	50					55					60								
Ser	Ala	Lys	Ser	Lys	Asn	Thr	Gly	Arg	Arg	Arg									
65					70					75									

<210> 40932  
 <211> 328  
 <212> PRT  
 <213> A.fumigatus

<400> 40932

Gly	Glu	Phe	Ser	Ile	Asp	Leu	Ala	Ile	Ser	Glu	Arg	Pro	Ser	Ser	Ile				
1				5					10					15					
Asn	Asp	Pro	Leu	Leu	Glu	Glu	Pro	His	Leu	Leu	Tyr	Cys	Ser	Val	Cys				
		20						25					30						
Gly	Thr	Pro	Thr	Thr	Asp	Ile	Ser	Asp	Ser	Gly	Pro	Thr	Glu	Glu	Gln				
		35				40						45							
Gly	Val	Glu	Arg	Lys	Lys	Gly	Lys	Gly	Ile	Tyr	Gln	Lys	Arg	Leu	Arg				
	50					55					60								
Tyr	Met	Val	Met	Ala	Ala	Glu	Ala	Ser	Ser	Gln	Leu	Ala	Leu	Leu	Ser				
65				70						75					80				
Asp	Leu	Thr	Pro	Pro	Ser	Leu	Glu	Arg	Thr	Trp	Leu	Thr	Ala	Pro	His				
			85						90					95					
Pro	Thr	Leu	Pro	Ile	Val	Ala	Thr	Cys	Ser	Ser	Asp	Lys	Thr	Val	Arg				
		100						105					110						
Val	Tyr	Ser	Leu	Thr	Asn	Phe	Arg	Leu	Leu	Ser	Thr	Ile	Ser	Gly	Gly				
		115					120						125						
His	Lys	Arg	Ser	Val	Arg	Thr	Cys	Ala	Trp	Lys	Pro	His	Val	Lys	Gly				
	130					135					140								
Glu	Ser	Val	Leu	Ala	Thr	Gly	Ser	Phe	Asp	Ala	Thr	Val	Gly	Ile	Trp				
145					150					155					160				
Arg	Arg	Trp	Asp	Ser	Tyr	Gly	Gln	Thr	Glu	Arg	Gly	Ile	Glu	Asp	Trp				
			165						170					175					
Arg	His	Ala	Asp	Ser	His	Asp	His	Val	Asp	Gly	Met	Gly	Ala	Ala	Gly				
		180						185					190						
Ile	Asn	Asn	Gly	Gly	Gly	Asp	Ser	Ala	Asp	Glu	Asp	Asp	Glu	Glu	Trp				

17994

```

      195              200              205
Arg Phe Ala Val Leu Leu Asp Gly His Asp Ser Glu Val Lys Ser Val
  210              215              220
Ser Trp Ser Pro Ser Gly Met Leu Leu Ala Thr Cys Ser Arg Asp Lys
225              230              235              240
Ser Ile Trp Ile Trp Glu Asp Leu Asp Asp Gly Asp Asn Asn Phe Glu
      245              250              255
Thr Val Ala Val Met Gln Glu His Gln Gly Asp Val Lys Cys Val Ala
      260              265              270
Trp His Pro Val Glu Glu Cys Leu Ala Ser Ala Ser Tyr Val Asp Thr
      275              280              285
Ile Arg Leu Trp Arg Glu Asp Leu Asp Asp Trp Gly Gln Val Ala Cys
      290              295              300
Ile Lys Gly Pro Pro Gly His Gly Met Val Arg Arg Leu Gly Gly Arg
305              310              315              320
Arg Glu Cys Ala Val Arg Thr Asn
      325

```

<210> 40933

<211> 103

<212> PRT

<213> A.fumigatus

<400> 40933

```

Arg Arg Tyr Glu Trp Phe Glu Cys Ala Cys Cys Pro Pro Asn Val Thr
  1              5              10              15
Arg Thr Leu Gly Cys Leu Gly Gly Tyr Leu Trp Ser Tyr Lys Val Asn
      20              25              30
Asn Glu Thr Gln Lys Ala Thr Val Asn Val His Leu Tyr Thr Ser Ala
      35              40              45
Thr Leu Arg Phe Glu Val Ala Asp Ser Arg Ile Glu Ile Thr Gln Lys
      50              55              60
Thr Gln Trp Pro Trp Asn Gly Asp Val Thr Phe Ser Val Asn Ile Asp
65              70              75              80
Gly Pro Pro Val Asn Leu Glu Leu Arg Leu Arg Ile Pro Gly Trp Ala
      85              90              95
Ser Thr Trp Glu Val Ser Gly
      100

```

<210> 40934

<211> 223

<212> PRT

<213> A.fumigatus

<400> 40934

```

Leu Ala Ser Lys Gly His Gln Gly Thr Val Trp Cys Val Asp Trp Glu
  1              5              10              15
Gly Ala Glu Asn Val Pro Ser Ala Pro Thr Asp Leu Pro Asp Asp Asp
      20              25              30
Pro Val Thr Ala Gln Trp Lys Lys Ala His Ala Leu Ser Gly Pro Arg
      35              40              45
Leu Val Ser Cys Ser Asp Asp Arg Thr Val Arg Ile Trp Arg Arg Gln
      50              55              60
Pro Lys Glu Gln His Gln His Gln Ala Gln Pro Ser Pro Ser Gly Gly
65              70              75              80
Ser Gly Ile Pro Ser Ile Ile Arg Pro Thr Gly Ser Asp Glu Phe Trp

```

## 17995

				85					90					95			
Asp	Glu	Glu	Cys	Val	Leu	Pro	Gln	Ala	His	Asp	Leu	Ser	Ile	Tyr	Thr		
			100					105					110				
Val	Ala	Trp	Ser	Lys	Arg	Thr	Gly	Leu	Ile	Ala	Ser	Val	Gly	Ala	Asp		
		115					120					125					
Gly	Arg	Val	Val	Val	Tyr	Glu	Glu	Arg	Phe	Ile	Val	Gly	Ser	Thr	Ala		
		130				135					140						
Glu	Ala	Met	Glu	Thr	Asp	His	Pro	Thr	Ser	Ala	Asp	Gly	Thr	Ala	Ala		
145					150				155						160		
Asp	Ser	Pro	Ala	Ala	Leu	Arg	Thr	Glu	Trp	Arg	Val	Ile	Ala	Thr	Val		
			165					170						175			
Asp	Gly	Ala	His	Gly	Ile	Tyr	Glu	Ile	Asn	His	Val	Thr	Trp	Ala	Lys		
		180						185					190				
Arg	Ala	Asp	Arg	Gly	Arg	Ile	Glu	Gly	Thr	Asp	Glu	Glu	Val	Leu	Ile		
		195					200				205						
Thr	Thr	Ala	Asp	Asp	Gly	Thr	Val	Arg	Val	Trp	Thr	Leu	Lys	Met			
		210				215				220							

&lt;210&gt; 40935

&lt;211&gt; 602

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (531), (592)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40935

Thr	Ser	Ser	Ala	Thr	Gln	Ile	Met	Ile	Arg	Arg	Asn	Ser	Asp	Ile	Glu		
1			5					10					15				
Ile	Gln	Leu	Pro	Asp	Ala	Gly	Pro	Thr	Val	Ala	Pro	Glu	Ser	Val	Thr		
		20					25				30						
Glu	Pro	Asp	Val	Asp	Met	Leu	Pro	Asp	Glu	Gln	Lys	Pro	Pro	Leu	Asn		
		35				40					45						
Leu	Pro	Ala	Arg	Ile	Ala	Ala	Arg	Phe	Ser	Arg	Lys	Ser	Ser	Leu	Ala		
		50			55					60							
Arg	Arg	Ser	Ser	Ala	Thr	Ser	Ser	Arg	Arg	Ser	Ser	Ile	Ser	Ser	Leu		
65				70				75							80		
His	Ser	His	His	Ser	Asn	Ala	Ser	Ser	Asn	Gly	Ser	Ser	Ser	Thr	Asp		
			85					90					95				
His	Val	Ala	Gln	His	Leu	Arg	Arg	Thr	Ser	Ile	Leu	Glu	Asn	Arg	Lys		
		100					105					110					
Ala	Arg	Leu	Ala	Asp	Arg	Ala	Leu	His	Ala	Glu	Lys	Val	Arg	Leu	Arg		
		115				120					125						
Ala	Ala	Leu	Ala	Ala	Ala	Thr	Lys	Asn	Leu	Gln	Arg	Glu	Glu	Arg	Ala		
		130				135				140							
Leu	Ala	Ala	Gln	Gln	Ser	Arg	Glu	Arg	Leu	Leu	Ala	Gln	Ile	Thr	Ala		
145				150				155							160		
Lys	Cys	Glu	Glu	Glu	Val	Arg	Arg	Ala	Lys	Lys	Lys	Ala	Glu	Asp	Asn		
			165					170						175			
Arg	Glu	Arg	Leu	Ala	Ala	Glu	His	Ala	Arg	Leu	Arg	Leu	Glu	Met	Ala		
		180					185						190				
Glu	Lys	Phe	Ala	Glu	Ala	Glu	Lys	Arg	Arg	Leu	Leu	Tyr	Gln	Gln	Thr		
		195				200						205					
Gln	Arg	Arg	His	Arg	Thr	Ser	Ser	Leu	Pro	Ala	Thr	Glu	Glu	Gln	Lys		

## 17996

210	215	220
Met Ala Gln Val Val Thr Lys Ser Leu Thr Arg Asp Ala Ala Ala Arg		
225	230	235
Thr Ile Gln Arg Val Trp Arg Ala His His Ala Lys Leu Val Met Gln		240
	245	250
Glu Phe Arg Ser Leu Asn Leu Thr Val Asn Arg Ile Arg Thr Met Ser		255
	260	265
Phe Glu Asp Val Gly Ala Met Leu Ser Asp Glu Asn Val Leu Ser Ala		270
	275	280
Thr Ala Arg Val Leu Arg Leu Cys Gly Leu Gln Asp Met Glu Ser Gly		285
	290	295
Thr Val Gly Gly Arg Gly Ala Val Arg Thr Phe Leu Ser Ser Tyr Leu		300
305	310	315
Ile Val Thr His Pro Ala Glu Val Leu Ser Ser Asn Gly Glu Gln Glu		320
	325	330
Gln Asp Leu Ile Ser Lys Ala Arg Glu Leu Leu Glu Glu Phe Glu Gln		335
	340	345
Val Thr Pro Ile Leu Ala Gly Cys Tyr Ser Pro Thr Val Ile Ser Thr		350
	355	360
Asp Leu Gln Thr Phe Cys Glu Ala Tyr Ser Val Phe Phe Ser Ala Phe		365
	370	375
His Ala Trp Lys Thr His Asp Ser Ser Val Leu Ile Glu Ile Met Leu		380
385	390	395
Ala Gln Phe Val Glu Leu Glu Leu Ile Trp Gln Thr Val Lys Asp Asp		400
	405	410
Arg Ala Gly Gly Val Ala Asp Asp Tyr Trp Gln Gly Ile Arg Gln Asn		415
	420	425
Gln Ile Leu Leu Leu Ala Arg Leu Lys Arg Leu Ala Gly Ser Asp Lys		430
	435	440
Ala Met Gln Met Val Arg Asp Ser Leu Lys Lys Ala Lys Arg Glu Arg		445
	450	455
Lys Arg Thr Thr Ser Lys Gln Ala Ile Pro Arg Ser Ala Glu Val Ala		460
465	470	475
Pro Ser Ser Ala Glu Ala Leu Thr Glu Ser Val Ala Ser Pro Leu Ser		480
	485	490
Glu Ser Phe Asn Asn Val Glu Ser Pro Val Phe Arg Glu Leu Asp Lys		495
	500	505
Gln Arg Ile Ser Pro His Glu Arg Phe Thr Gln Val Leu Thr Ala Leu		510
	515	520
Pro Glu Xaa Arg Ala Leu Val His Glu Leu Leu Ile Asn Lys Glu Tyr		525
	530	535
Lys Val Asp Glu Thr Gln Tyr Thr Thr Pro Arg Lys Gln Ile Met Lys		540
545	550	555
His Met Cys Asp Met Met Arg Arg Asp Val Asp Ala Gly Met Gly Ala		560
	565	570
Asn Gly Thr Val Ala Met Ala Thr Val Ile Gln Asp Arg Leu Leu Xaa		575
	580	585
Cys Cys Asp Pro Glu Thr His Phe Thr Phe		590
	595	600

&lt;210&gt; 40936

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40936

## 17997

```

Pro Tyr Cys Gly Thr Val Thr Gln Ser Ile Tyr Tyr Ala Tyr Phe Thr
1      5      10      15
Ser Tyr Leu Ser Ser Lys Leu Thr Tyr Ser Phe Phe Phe Ala Ala Gly
      20      25      30
Phe Asn Ser Phe Ala Ser Arg Ser Ala Lys Leu Ser Pro Leu Leu Ser
      35      40      45
Asn Tyr Gln Asn Pro Thr Val Ile Phe Asp Trp Tyr Gly Val Ala Thr
      50      55      60
Glu Ala Val Ile Gly Ala Val Ser Arg Ala Gly Arg Gln Ser His Arg
65      70      75      80
Leu Gln Asp Gly Glu Arg Gly Ile Pro Leu Ile Leu His Thr Leu Tyr
      85      90      95
Gly Asn Thr Thr Glu Tyr Phe Ser Asp Leu Pro Ser Thr Leu Pro Ile
      100     105     110
Ile Lys Lys Lys Gln Tyr Glu Trp Arg Trp Gln Asn Pro Phe Pro Val
      115     120     125
Gln Ala Thr Gln Gly Trp Leu Ile Gly Ala Gln Ser Ser Leu Phe Pro
      130     135     140
Gly Asp Glu Ala Ala Arg Ser Arg Thr His Phe Val Trp Ser Ile Leu
145     150     155     160

```

&lt;210&gt; 40937

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40937

```

Leu Leu Ser Leu Gly Gly Arg Lys Val Gly Pro Phe Ser Leu Ser Leu
1      5      10      15
Leu Tyr Pro Ser Ala Gly Asp Gly Gly Arg Leu His Ser Ile Ile Ile
      20      25      30
Met Cys Arg Phe Pro Pro Ser Asn Phe Pro His Leu Ile Leu Ile Tyr
      35      40      45
Tyr Tyr Ser Pro Pro Tyr Phe Pro Pro Thr Val Arg Phe Tyr Trp Ser
      50      55      60
Arg Ile Leu Ser Ile Thr Phe Pro Leu Ser Ala Asp Gly Val Leu Lys
65      70      75      80
Cys Phe Ile Phe Phe Ser Cys Val Pro Val
      85      90

```

&lt;210&gt; 40938

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40938

```

Leu His Leu Ala Tyr Arg Pro Ser Leu His Pro Asp Tyr Phe Pro Leu
1      5      10      15
Pro Ser Asn His Asn Ala Ile Thr Ile Ala Ser Ser Ser Ile Pro Leu
      20      25      30
Ser Gly Pro Leu Val Ala Ala Gln Ala Tyr Leu Thr Thr Gly Leu Pro
      35      40      45
Trp Val Ala Pro Pro Thr Arg Arg Pro Gln Leu Pro Ile Asn
      50      55      60

```

&lt;210&gt; 40939

&lt;211&gt; 484

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40939

```

Arg Asn Gly Lys Met Val Asn Gly Thr Ala Ala Val Leu Glu Pro Thr
1      5      10      15
Phe Thr Gly Tyr Val Ala Thr Thr Gln Asp Ala Leu Ile Leu Phe Glu
20      25      30
Ala Cys Leu Thr Gly Ile Leu His His Val Pro Arg Arg Pro His Asp
35      40      45
Arg Glu Arg Ser His Leu Val Arg Ser Gly Ser Val Phe Ile Tyr Glu
50      55      60
Glu Asn Ser Ser Gly Ile Lys Arg Trp Thr Asp Gly Val Thr Trp Ser
65      70      75      80
Pro Ser Arg Ile Leu Gly Asn Phe Leu Val Tyr Arg Glu Leu Glu Lys
85      90      95
Pro Phe Pro Pro Gly Glu Lys Lys Arg Ala Met Lys Lys Ala Asn Arg
100     105     110
Arg Pro Val Pro Ser Ala Arg Pro Gly Glu Pro Tyr Pro Arg His Asp
115     120     125
Ser Asn Gly Gly Ser Tyr Ser Pro Ser Ser Thr Ser Gly Ser Phe Gly
130     135     140
Asp Arg Ser His Gln Ser Asp Val Glu Arg Ala Leu Val Gly Ser Leu
145     150     155     160
Val Asp Ser Tyr Gly Phe Lys Asp Ser Gly Leu Val Lys Lys Thr Met
165     170     175
Ser Val Thr Val Ser Gly Val Thr His His Leu Val Ser Tyr Tyr Ser
180     185     190
Val Glu Asp Val Met Arg Gly Val Leu Asn Pro Pro Ser Met Val Glu
195     200     205
Ser Leu Arg Tyr Ile Arg Pro Arg Ala Glu Leu Thr Gln Lys Gln Ser
210     215     220
Phe Arg Ala Pro Ile Asp Asp Leu Glu Thr Gly Gly Leu Glu Asn Pro
225     230     235     240
Asn Asp Pro Ser His Ala Ile Tyr Gly Tyr Arg Pro Gln Leu Met Ala
245     250     255
Pro Pro Gly Tyr Ala Met Pro Asn Pro His Pro Glu Phe Tyr Leu His
260     265     270
Thr Ala Pro Tyr Thr Ala Phe His Ala Pro Gln Phe Ala Pro Ile Pro
275     280     285
Gly Tyr Ser Ile Gly Ser Ser Met Pro Ala Gln Pro Ala Pro Asn Pro
290     295     300
Tyr Leu Pro Ala Pro Ser Ala Pro Ala His Val Gln Gln Lys Thr Glu
305     310     315     320
Asp Tyr Pro Gln Tyr Arg Asn Pro Asn Pro Ala Pro Ser Ala Tyr Gly
325     330     335
Thr Ser Phe Asp Ser Ile Ser His Ala Pro Leu Ser Ser Ser Met Pro
340     345     350
Ser Thr Leu Asn Ser Ser Ile Pro Ser Ser Leu Ser Glu Arg Asn Arg
355     360     365
Ser Thr Ser Asp Gln Ser Val Ser Ala Tyr Arg Asn Ser Ser Ile Ser
370     375     380
Ser Arg Ser Val Ala Thr Asp Val Thr Ser Pro Ile Asp Pro Ser Thr
385     390     395     400
Pro Ala Thr Phe Ser Arg Gly Asn Ser Phe Ser Leu Ser Gly His Met

```



## 17999

```

                405                410                415
Asp Gly Pro Ser Gln Gln Pro Pro Glu Gln Arg Gly Ile Ala Pro Ala
                420                425                430
Phe Asp Pro Ser Ile Pro Arg Arg Glu Ser Ile Pro Ala His Tyr Tyr
                435                440                445
Ala Gly Ser Asp Arg Pro Gln Tyr Tyr Met Gly Ala Thr Ala Pro Ala
                450                455                460
Ala His Ala Ser Tyr Pro Val Ser Thr Trp Thr Thr Ala Ala Pro Ala
465                470                475                480
Gln Pro Gln Met

```

<210> 40940  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40940
Ser Gly Cys Leu Ile Glu Ala Ile Phe Asp Val Ile Asp Cys Val Arg
1                5                10                15
Leu Val Ala Lys Pro Thr Phe Met Glu Gly Glu Asp Val Ile Asn Ile
                20                25                30
Arg Ile Asp Arg Gly Ile Ser Arg Ile Pro Arg His Val Asp Trp Asp
                35                40                45
Val Leu Ile Phe Gln Leu Met Asp Phe Gln Gly Gln Arg Pro Val Ile
                50                55                60
Gln Ala Gln Val Pro Leu Leu Ile
65                70

```

<210> 40941  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40941
Thr Lys Pro Pro Leu Arg Leu Ala Met Arg Phe Ser Leu Ala Ala Thr
1                5                10                15
Thr Leu Leu Ala Gly Leu Ala Thr Ala Ala Pro Ser Ser Ser Lys Asn
                20                25                30
Asp Val Asn Leu Asp Lys Leu Ala Arg Arg Asn Gly Met Leu Trp Phe
                35                40                45
Gly Thr Ala Ala Asp Ile Pro Gly Thr Ser Glu Thr Thr Asp Lys Ser
                50                55                60
Tyr Leu Ser Ile Leu Arg Lys Lys Phe Gly Glu Met Thr Pro Ala Asn
65                70                75                80
Ala Leu Lys Val Ser Gln Ser Asp Ser Thr Pro Leu Leu Val Ser Ala
                85                90                95
Leu Thr Asp Asp Val Ile His Ile Val His Val Tyr Arg Ala Arg Ala
                100                105                110
Lys Cys Leu Gln Leu His Ser Arg Gly Leu Leu His Gly Leu Gly Arg
                115                120                125
Ser Leu Trp Ser Arg Arg Ala Leu Pro
130                135

```

<210> 40942  
 <211> 284

18000

<212> PRT

<213> A.fumigatus

<400> 40942

```
Phe Met Tyr Thr Glu Pro Glu Gln Asn Val Phe Asn Phe Thr Gln Gly
1          5          10          15
Asp Tyr Phe Met Asp Leu Ala Asp His Tyr Gly His Ala Val Arg Cys
          20          25          30
His Asn Leu Val Trp Ala Ser Gln Val Ser Asp Trp Val Thr Ser Arg
          35          40          45
Asn Trp Thr Ala Thr Glu Leu Lys Glu Val Met Lys Asn His Ile Phe
          50          55          60
Lys Thr Val Gln His Phe Gly Lys Arg Cys Tyr Ala Trp Asp Val Val
65          70          75          80
Asn Glu Ala Val Asn Gly Asp Gly Thr Phe Ser Ser Ser Val Trp Tyr
          85          90          95
Asp Thr Ile Gly Glu Glu Tyr Phe Tyr Leu Ala Phe Gln Tyr Ala Gln
          100          105          110
Glu Ala Leu Ala Gln Ile His Ala Asn Gln Val Lys Leu Tyr Tyr Asn
          115          120          125
Asp Tyr Gly Ile Glu Asn Pro Gly Pro Lys Ala Asp Ala Val Leu Lys
          130          135          140
Leu Val Ala Glu Leu Arg Lys Arg Gly Ile Arg Ile Asp Gly Val Gly
145          150          155          160
Leu Glu Ser His Phe Ile Val Gly Glu Thr Pro Ser Leu Ala Asp Gln
          165          170          175
Leu Ala Thr Lys Lys Ala Tyr Ile Glu Ala Gly Leu Glu Val Ala Ile
          180          185          190
Thr Glu Leu Asp Val Arg Phe Ser Gln Ala Pro Phe Tyr Thr Ala Glu
          195          200          205
Ala Gln Lys Gln Gln Ala Ala Asp Tyr Tyr Ala Ser Val Ala Ser Cys
          210          215          220
Lys His Ala Gly Pro Arg Cys Val Gly Val Val Trp Asp Phe Asp
225          230          235          240
Asp Ala Tyr Ser Trp Ile Pro Gly Thr Phe Glu Gly Gln Gly Gly Ala
          245          250          255
Cys Leu Tyr Asn Glu Thr Leu Glu Val Lys Gln Ala Phe Tyr Ala Ala
          260          265          270
Ala Glu Ala Leu Glu Asn Lys Pro Cys Thr Val Cys
          275          280
```

<210> 40943

<211> 363

<212> PRT

<213> A.fumigatus

<400> 40943

```
Phe Thr Val Leu Asp His Val Pro Phe Ile Thr Arg Val Ile Gln Arg
1          5          10          15
Leu Arg Arg Cys Leu Leu Asn Trp Leu Lys Tyr Pro Ser Pro Ser Pro
          20          25          30
Tyr Val Gln His Gln Thr Lys Asp Gln Asn Val Leu Gly Thr Pro Tyr
          35          40          45
Leu Leu Ile Glu Tyr Ile Asp Pro Met Arg Gly Lys Met Leu Ser Glu
          50          55          60
Thr Trp Glu Glu Gly Arg His Asn Thr Thr Leu Arg Thr Asn Leu Phe
```

18001

```

65          70          75          80
Arg Gly Leu Ser Arg Ile Met Leu Thr Leu Ala Arg Ile Pro Leu Pro
          85          90          95
Lys Ile Gly Ser Phe Thr Leu Asp Glu Lys Gly Tyr Leu Ser Leu Asn
          100          105          110
Asn Arg Pro Leu Thr Leu Glu Ile His Gln Leu Glu Asn Glu His Ile
          115          120          125
Pro Val Asp Met Pro Arg Asn Ala Thr Tyr Ala Thr Val Asp Ser Tyr
          130          135          140
Val Asn Asp Ile Leu Ala Phe His Glu Ser Arg Leu Arg His Gln Pro
          145          150          155          160
Asn Ala Val Asn Asn Ile Glu Asp Gly Phe Tyr Gln Thr Ser Ala Leu
          165          170          175
Met Val Met Arg Ser Val Trp Ser Cys Phe Phe Arg Arg Asp Leu Leu
          180          185          190
Arg Gly Pro Phe Phe Leu Asn Leu Thr Asp Leu Asn Gln Thr Asn Ile
          195          200          205
Phe Val Asp Glu Asp Trp Asn Ile Lys Cys Leu Ile Asp Leu Glu Trp
          210          215          220
Ala Cys Ser His Pro Val Glu Met Ile His Pro Pro His Trp Leu Thr
          225          230          235          240
Asn Gln Ala Val Asp Leu Ile Ser Ile Gly Asp Tyr Glu Ile Leu Arg
          245          250          255
Lys Glu Phe Met Met Ala Phe Ala Glu Glu Glu Thr Lys Ile Glu Leu
          260          265          270
Pro Val Arg Leu Tyr Pro Ile Leu Gln Gly Gly Trp Glu Arg Gly Thr
          275          280          285
Phe Trp Tyr Ser Leu Ala Leu Ser Ser Pro Thr Ala Leu Phe Lys Ile
          290          295          300
Phe Tyr Asp Phe Ile Gln Gln Arg Phe Ser Thr Ala His Asp Asp Pro
          305          310          315          320
Ala Phe Trp Lys Ile Thr Met Pro Tyr Trp Thr Phe Asn Thr Tyr Glu
          325          330          335
Phe Ile Lys Asn Lys Val Arg Asp Lys Glu Gln Tyr Asp Val Cys Leu
          340          345          350
Arg Glu Ala Phe Glu Ile Gly Asp Pro His Gly
          355          360

```

&lt;210&gt; 40944

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40944

```

Gly Thr Arg Ser Asn Thr Met Ser Val Tyr Val Lys Pro Leu Arg Leu
1          5          10          15
Glu Ile Leu Met Ala Arg Pro Tyr Lys Leu Asn Ala Leu His Ser Leu
          20          25          30
Pro Phe Thr Leu Ala Pro Leu Thr Thr Leu Phe Phe Pro Leu Glu
          35          40          45
Val Leu Tyr Cys Ser Leu Lys Val Leu Asn Gly Leu Leu Pro Ser Val
          50          55          60
Leu Leu Cys Ser Phe Ala Arg Arg Arg Glu Leu Val Glu Gly Leu Gly
          65          70          75          80
Val His Leu His Ser His Leu Arg Leu Phe Asn Phe Thr Ile Ile Thr
          85          90          95

```

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09/417507



<210> 40945  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 40945  
 Thr Thr Phe Asn Leu Leu His Pro Leu Leu Thr Asp Ile Tyr Ala Phe  
 1 5 10 15  
 Arg Ser Thr Val Thr Phe Pro Val Phe Thr Ser Thr Ile His Phe Cys  
 20 25 30  
 Ile Phe Ile Ser Pro Ala Glu Met Val Arg Lys Arg Arg Thr Arg Lys  
 35 40 45  
 Leu Phe Thr Ser Glu Ile Ile Ser Leu Leu Glu Ser  
 50 55 60

<210> 40946  
 <211> 500  
 <212> PRT  
 <213> A.fumigatus

<400> 40946  
 Pro Lys Met Leu Ser Arg Met Gly Ser Met Leu Asp Asp Ser Ser Leu  
 1 5 10 15  
 Ala Ala Asp Ala Ser Val Leu Val Ser Leu Arg Ser Ile Thr Thr His  
 20 25 30  
 Val Ser Arg Thr Leu Ala Thr Ala Leu Gly Thr Thr Thr Met Val Cys  
 35 40 45  
 Val Leu Ser Met Met Met Ala Gly Pro Trp Thr Arg Val Leu Phe Ser  
 50 55 60  
 Ser Leu Ser Ser Arg Tyr Thr Gly Val Ser Met Arg Ala Arg Val Ala  
 65 70 75 80  
 Ile Glu Val Cys Leu Gly Asp Ile Ile Arg Arg Val Thr Asp Val Phe  
 85 90 95  
 Gln Arg Arg Leu Leu Gln Leu Gly Arg Val Asp Ser Phe Pro Cys Ala  
 100 105 110  
 Leu Trp Glu Ala Ala Ile Val Arg Thr Ala Asp Val Ile Asn Glu Asp  
 115 120 125  
 Cys Ser Leu Arg Ile Glu Ala Glu Phe Ser Ala Met Thr Val Ser Glu  
 130 135 140  
 Leu Val Glu Glu Thr Arg Val Phe Leu Arg Leu Gln Asp His Gln Ala  
 145 150 155 160  
 Gly Val Arg Pro Phe Ile Ser His Val Glu Val Gln Phe Met Met Asp  
 165 170 175  
 Leu Ile Gly Thr Glu Ala Leu Cys His His Leu Leu Gly Ser Ser Leu  
 180 185 190  
 Gly His Gly Val Lys Ser Phe Leu Gln Arg Arg Leu Arg Gly Val Val  
 195 200 205  
 Val Gly Arg Asp Trp Leu Leu Arg Leu Leu Asp Asp Phe Ser Gln Gly  
 210 215 220  
 Gln Ala Val Ser Arg Gln Asp Gly Gly Val Leu Val Asp Asp Asp Ala  
 225 230 235 240  
 Gly Asp Ser Lys Gly Arg Ser Asn Gly Thr Gly Val Leu Ala Thr Gly  
 245 250 255  
 Thr Thr Lys Ala Ser Gln Met Met Gly Ser Ser Phe Ile Ser Ala Ser  
 260 265 270

## 18003

Leu Gly Gln Ile Ala Asn Arg Thr Gly His Gly Leu Ile Arg His Leu  
 275 280 285  
 Gln Glu Thr Gln Arg Asp Leu Phe Arg Arg Val Leu Gly Leu Ala Leu  
 290 295 300  
 Phe Ser Pro Phe Gly Val Asp Leu Val Arg Gln Phe Val Glu Gln Leu  
 305 310 315 320  
 Arg Ser Asn Phe Lys Val Glu Arg Leu Val Leu Val Arg Thr Lys Asp  
 325 330 335  
 Val Trp Glu Val Leu Arg Gln Gln Ala Thr Lys Glu Gln Ile Gly Ile  
 340 345 350  
 Arg His Arg Gln Arg Ala Thr Leu Ala Ile Thr Ser Gly Thr Gly Val  
 355 360 365  
 Gly Arg Ser Arg Phe Gly Thr Asn Ile Glu Gln Thr Ile Pro Pro Gly  
 370 375 380  
 Glu Asp Gly Ala Ser Thr Arg Cys His Gly Val Asp Val Glu Leu Gly  
 385 390 395 400  
 Gly Leu Asp Gln Asn Ala Ser Asn Leu Gly Ser Glu His Met Leu Gln  
 405 410 415  
 Met Ala Gly Glu Ala Arg Asn Val Cys Gly Cys Ala Thr His Val Glu  
 420 425 430  
 Thr Asn Asp Gly Asn Leu Leu Ser Gly Ile Ile Ala Gly Gly Arg Glu  
 435 440 445  
 Thr Asp His Thr Ser Ser Arg Thr Arg Gln Asp Arg Leu Gln Pro Ala  
 450 455 460  
 Glu Ala Thr Lys Val Asn Gln Ala Thr Val Gly Leu His Lys Phe Glu  
 465 470 475 480  
 Ala Thr Leu Ser Leu Leu Phe Gln Thr Pro Phe Lys Gly Gly Arg Asp  
 485 490 495  
 Gly Ile Asn Val  
 500

&lt;210&gt; 40947

&lt;211&gt; 708

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40947

Val His Phe Leu Ser Pro Ser Ile Pro Leu Arg Val Phe Thr Ser Ser  
 1 5 10 15  
 Pro His Thr Tyr Thr Asn Thr Met Glu Glu Glu Ser Gly Lys Ile Thr  
 20 25 30  
 Ile Ser Ile Asp Arg Gly Gly Thr Phe Thr Asp Val His Ala Ile Val  
 35 40 45  
 Pro Gly Arg Pro Asp Ile Ile Leu Lys Leu Leu Ser Val Asp Pro Gly  
 50 55 60  
 His Tyr Glu Asp Ala Pro Thr Glu Gly Val Arg Gln Ile Leu Glu Leu  
 65 70 75 80  
 Val Thr Gly Glu Pro His Pro Arg Gly Gln Pro Leu Lys Leu Asp Arg  
 85 90 95  
 Ile Arg Cys Leu Arg Met Gly Thr Thr Val Ala Thr Asn Ala Leu Leu  
 100 105 110  
 Glu Arg Lys Gly Ala Arg Ser Val Leu Phe Thr Thr Lys Gly Phe Arg  
 115 120 125  
 Asp Leu Leu Lys Ile Gly Asp Gln Ser Arg Pro Ser Ile Phe Asp Leu  
 130 135 140  
 Thr Met Ala Arg Pro Gly Val Leu Pro Glu Ser Val Val Glu Val Asn

## 18004

145		150		155		160
Glu Arg Val Val	Pro Cys His Pro Ser	Ala Asp Lys Asp Cys Phe Pro				
	165	170	175			
Gly Ala Arg Ile Val	Glu Gly Val Thr Gly Glu Lys Phe Arg Val Val					
	180	185	190			
Gln Glu Leu Asp Leu Asp	Ala Val Arg Val Glu Leu Gln Arg Leu Lys					
	195	200	205			
Glu Gln Gly Tyr Gln Ser	Leu Ser Val Ala Leu Val His Ser Tyr Ala					
	210	215	220			
Tyr Pro Glu His Glu Arg	Leu Ile Gly Glu Leu Ala Glu Ser Met Gly					
225	230	235	240			
Phe Ser Val Thr Leu Ser	Ser Lys Leu Gln Pro Met Ile Lys Val Val					
	245	250	255			
Pro Arg Gly Met Ser	Ala Ala Ala Asp Ala Tyr Leu Thr Pro Val Ile					
	260	265	270			
Lys Leu Tyr Ile Asp Ser	Ile Ser Ala Ala Phe Glu Gly Gly Leu Glu					
	275	280	285			
Gln Gln Arg Glu Cys Arg	Phe Glu Phe Met Gln Ser Asp Gly Gly Leu					
	290	295	300			
Val Asp Phe Arg Arg Phe	Ser Gly Leu Lys Ala Ile Leu Ser Gly Pro					
305	310	315	320			
Ala Ala Gly Val Val Gly	Phe Ala Ala Thr Ser Tyr Asp Pro Thr Glu					
	325	330	335			
Lys Ile Pro Val Ile Gly	Phe Asp Met Gly Gly Thr Ser Thr Asp Val					
	340	345	350			
Ser Arg Phe Ala Gly His	Leu Glu His Val Phe Gly Ser Lys Val Ala					
	355	360	365			
Gly Val Leu Ile Gln Ser	Pro Gln Leu Asp Ile Asn Thr Val Ala Ala					
	370	375	380			
Gly Gly Gly Ser Ile Leu	Thr Trp Arg Asn Gly Leu Phe Tyr Val Gly					
385	390	395	400			
Pro Glu Ser Ala Ser Ala	His Pro Gly Pro Ala Cys Tyr Arg Lys Gly					
	405	410	415			
Gly Pro Leu Thr Val Thr	Asp Ala Asn Leu Phe Leu Gly Arg Leu Leu					
	420	425	430			
Pro Glu Tyr Phe Pro His	Ile Phe Gly Pro Asn Glu Asp Gln Pro Leu					
	435	440	445			
Asp Leu Glu Val Thr Thr	Lys Leu Phe Asn Glu Leu Thr Asp Lys Ile					
	450	455	460			
Asn Ala Glu Arg Arg Glu	Lys Gly Gln Ser Glu Tyr Thr Ala Glu Glu					
465	470	475	480			
Ile Ala Leu Gly Phe Leu	Lys Val Ala Asp Glu Ser Met Ala Arg Pro					
	485	490	495			
Ile Arg Asn Leu Thr Glu	Ala Arg Gly Tyr Glu Thr Ala Ser His His					
	500	505	510			
Leu Ala Cys Phe Gly Gly	Ala Gly Gly Gln His Ala Cys Ser Val Ala					
	515	520	525			
Ala Ser Leu Gly Ile Ser	Arg Ile Ile Ile His Lys Tyr Ser Ser Val					
	530	535	540			
Leu Ser Ala Tyr Gly Leu	Ala Leu Ala Glu Val Val Lys Glu Ser Gln					
545	550	555	560			
Glu Pro Val Ser Ala Asp	Tyr His Ala Ser Gln Ser Thr Leu Gln Lys					
	565	570	575			
Arg Phe Asp Ala Met Thr	Gln Ala Ala Thr Glu Glu Met Val Thr Gln					
	580	585	590			
Gly Phe Arg Ala Asp Gln	Val His His Glu Leu Tyr Leu Asn Met Arg					

## 18005

```

      595              600              605
Tyr Glu Gly Ser Asp Thr Ser Leu Met Ile Leu Lys Pro Glu Glu Asp
    610              615              620
Ser Gly Phe Leu Asp Gln Phe Arg Asp Arg His Arg Arg Glu Phe Gly
625              630              635              640
Phe Asn Ser Glu Arg Ala Val Leu Val Asp Asp Ile Arg Arg Ala Tyr
      645              650              655
Asp Arg Arg Phe Pro Lys Cys Ala Arg Lys Arg Val His Ser Ser Gln
      660              665              670
Leu Lys Glu Ala Ser Leu Lys Asp Val Ser His Pro Pro Asp Asn Val
      675              680              685
Thr Lys Ala Tyr Phe Asp Gly Asn Ser Ser Pro His Arg Tyr Pro Ser
      690              695              700
Val Ser Ala Arg
705

```

&lt;210&gt; 40948

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40948

```

Val Ile Thr Pro Val Phe Asp Arg Pro Gly Gly Thr Glu Ile Met Phe
1              5              10              15
Tyr Val Ala Ser Arg Gly His His Ala Asp Ile Gly Gly Ile Leu Pro
      20              25              30
Gly Ser Met Pro Pro Lys Ser Thr Glu Leu Trp Gln Glu Gly Ala Ala
      35              40              45
Ile Glu Gly Asp Lys Ile Val Ser Asn Gly Val Phe Asp Glu Lys Arg
      50              55              60
Ile Met Glu Leu Leu Val Asp Gly Pro Ala Gln Tyr Glu Gly Cys Ser
65              70              75              80
Gly Ala Arg Cys Val Ser Asp Asn Ile Ser Asp Leu Lys Ala Gln Ile
      85              90              95
Ala Ala Asn Ala Arg Gly Ile Ser Leu Ile Gln Ala Leu Phe Ala Glu
      100              105              110
Tyr Gly Val Glu Thr Val Gln Lys Tyr Met Tyr Ala Ile Gln His Thr
      115              120              125
Ala Glu Arg Ala Val Arg Asp Leu Leu Lys Gly Leu His Lys Lys Phe
      130              135              140
Gly Gly Arg Pro Leu Glu Ala Val Asp Tyr Met Asp Asp Gly Thr Pro
145              150              155              160
Ile Lys Leu Lys Val Thr Ile Asp Gly Ser Asp Gly Ser Ala Val Phe
      165              170              175
Asp Phe Ala Gly Thr Gly Pro Glu Val Tyr Gly Gly Trp Asn Ala Pro
      180              185              190
Ile Ala Ile Thr His Ser Ala Ile Ile Tyr Cys Leu Arg Cys Met Ile
      195              200              205
Asn Ala Asp Val Pro Leu Asn Gln Gly Cys Leu Ala Pro Ile Asp Ile
210              215              220
Arg Val Pro Ser Pro Ser Ile Leu Ser Pro Thr Lys Thr Ala Ala Val
225              230              235              240
Val Gly Gly Asn Val Val Thr Ser Gln Arg Ile Thr Asp Val Val Leu
      245              250              255
Lys Ala Phe Arg Ala Cys Ala Ala Ser Gln Gly Cys Cys Asn Asn Leu
      260              265              270

```

## 18006

Thr Phe Gly Thr Asn Ala Arg Thr Asp Pro Thr Thr Gly Glu Thr Leu  
 275 280 285  
 Pro Gly Phe Gly Tyr Tyr Glu Thr Ile Ala Gly Gly Ser Gly Ala Gly  
 290 295 300  
 Pro Thr Trp Asp Gly Glu Ser Gly Val His Val His Met Thr Asn Thr  
 305 310 315 320  
 Arg Ile Thr Asp Pro Glu Ile Leu Glu Lys Arg Tyr Pro Thr Leu Leu  
 325 330 335  
 Arg Gln Phe Ser Leu Arg Pro Gly Ser Gly Gly Lys Gly Leu His Pro  
 340 345 350  
 Gly Gly Asp Gly Val Ile Arg Glu Ile Glu Phe Leu Ala Pro Met Gln  
 355 360 365  
 Cys Ser Ile Leu Ser Glu Arg Arg Val His Arg Pro Tyr Gly Leu Glu  
 370 375 380  
 Gly Gly Glu Asp Ala Gln Pro Gly Met Asn Leu Trp Val Thr Thr Asp  
 385 390 395 400  
 Lys Glu Thr Gly Val Glu Arg Gln Val Asn Ile Gly Gly Lys Asn Thr  
 405 410 415  
 Val Ser Val Gly Thr His Asp Arg Phe Val Ile Met Thr Ala Gly Gly  
 420 425 430  
 Gly Gly Trp Gly Ala Ala Gln Ala  
 435 440

&lt;210&gt; 40949

&lt;211&gt; 297

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (297)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40949

Gln Leu Asp Cys Arg His Gly Ala Arg Leu Asp Ala Ala Asp Lys Asn  
 1 5 10 15  
 Trp His Leu Thr Ser Pro Thr Pro Tyr Asp Pro Pro Leu Ser Tyr Gly  
 20 25 30  
 Gly Trp Leu Gln Ser Arg Ala Leu Gly Ala Arg Ile Ile Asn Leu Leu  
 35 40 45  
 Gln Ser Phe Asp Asp Gln Pro Pro Val Ser Ser Ile Val Pro Ser Asp  
 50 55 60  
 Glu Pro Lys Phe Pro Ser Ser Leu Pro Asn Ser Lys Lys Lys Arg Arg  
 65 70 75 80  
 Phe Ile Ile His Thr Ser Pro Tyr Leu Arg Cys Val Gln Thr Ala Ile  
 85 90 95  
 Ala Val Ser Ser Gly Ile Ser Gln His Tyr Thr Asp Ser Asp Ile Val  
 100 105 110  
 His Pro Ala Val Ala Ser Asn Ser Thr Gln Ala Asn Gly His Ser Met  
 115 120 125  
 Gly Ser Thr Ala Asp Ser Arg Ser Gly Ser Thr Ser Ser Pro Ile Thr  
 130 135 140  
 Ser Ser Pro Ser Leu Ser Gly Pro Asn Asn His Arg Cys Leu Leu Arg  
 145 150 155 160  
 Val Asp Ala Phe Leu Gly Glu Trp Leu Ser Pro Asp Tyr Phe Asp Gln  
 165 170 175



## 18007

```

Ile Ile Pro Pro Pro Lys Ser Glu Arg Leu Val Ala Ala Ala Lys Ala
      180                      185                      190
Glu Leu Leu Arg Arg Gly Asp Asp Val Val Pro Glu Ala Asp Thr Ala
      195                      200                      205
Asn Lys Pro Ser Thr Gly Asn Phe Pro Gly Gly Trp Gly Gly Phe Thr
      210                      215                      220
Asn Ser Asp Thr Ala Arg Val Asp Gly Thr Val Asn Ser Gly Gly Pro
225                      230                      235                      240
Ser Pro Gly Val Thr His Thr Pro Gly Gln Arg Thr Arg Ala Gly Ser
      245                      250                      255
Tyr Asp Ser Leu Asn Ser Ala Gln Thr Pro Arg Ala Arg Arg Ile Leu
      260                      265                      270
Gly Lys Ile Asn Thr Asp Leu Pro Pro Ile Pro Asp Gly Ala Tyr Val
      275                      280                      285
Pro Pro Thr Pro Ser Tyr Ala Ile Xaa
      290                      295

```

&lt;210&gt; 40950

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40950

```

Val Asn Leu Val Cys Ser Tyr Gln Leu Glu Pro Arg Ser His Ala Met
1      5      10      15
Ser Asp Pro Glu Pro Pro Arg Ile Ile Arg Cys Gly Ala Pro Arg Asp
      20      25      30
Asn Trp Arg Thr Gly Phe Val Ser Asp His Ser Gly Gln Ala Gly His
      35      40      45
Leu Ala Ile Gly Trp Ile Gly Ala Arg Gln Ala Arg Gln Trp Val Arg
      50      55      60
Pro Leu Asp His Val Glu Lys Val Lys Val Val Leu Ala Gly Ser Ser
65      70      75      80
Ile Val Arg Ala Ser Asp Thr Gln Asn Gln Glu Ile Leu Phe Ala Val
      85      90      95
Lys Gly Ala Ala Ala Ser Phe Gly Ile Val Thr Glu Phe Lys Val Arg
      100     105     110
Thr Glu Glu Ala Pro Gly Leu Ala Val Gln Tyr Ser Phe Thr Phe Asn
      115     120     125
Leu Gly Thr Ala Ala Glu Lys Ala Lys Leu Val Lys Asp Trp Gln Ala
      130     135     140
Phe Ile Ala Gln Glu Asp Leu Thr Trp Lys Phe Tyr Ser Asn Met Asn
145     150     155     160
Ile Ile Asp Gly Gln Ile Ile Leu Glu Gly Ile Tyr Phe Gly Ser Lys
      165     170     175
Ala Glu Tyr Asp Ala Leu Gly Leu Glu Lys Phe Pro Thr Ser Glu
      180     185     190
Pro Gly Thr Val Leu Val Leu Thr Asp Trp Leu Gly Met Val Gly His
      195     200     205
Gly Leu Glu Asp Val Ile Leu Arg Leu Val Gly Asn Ala Pro Thr Trp
      210     215     220
Phe Tyr Ala Lys Ser Leu Gly Phe Ala Pro Arg Ala Leu Ile Pro Asp
225     230     235     240
Ser Ala Ile Asp Asp Phe Phe Glu Tyr Ile His Lys Asn Asn Pro Gly
      245     250     255
Thr Val Ser Trp Phe Val Thr Leu Ser Leu Glu Gly Gly Ala Ile Asn

```

## 18008

```

          260          265          270
Lys Val Pro Glu Asp Ala Thr Ala Tyr Gly His Arg Asp Val Leu Phe
          275          280          285
Trp Val Gln Ile Phe Met Ile Asn Pro Leu Gly Pro Val Ser Gln Thr
          290          295          300
Ile Tyr Asp Phe Ala Asp Gly Leu Tyr Asp Val Leu Ala Lys Ala Val
305          310          315          320
Pro Glu Ser Ala Gly His Ala Tyr Leu Gly Cys Pro Asp Pro Arg Met
          325          330          335
Pro Asn Ala Gln Gln Ala Tyr Trp Arg Asn Asn Leu Pro Arg Leu Glu
          340          345          350
Glu Leu Lys Gly Asp Leu Asp Pro Lys Asp Ile Phe His Asn Pro Gln
          355          360          365
Gly Val Met Val Val Ser
          370

```

&lt;210&gt; 40951

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40951

```

Lys Thr Ser Val Thr Arg Leu Ile Met Ser Pro Arg His Thr Ser Met
1          5          10          15
Ala Thr Leu Ala Arg Ile Asp Thr Pro Val Tyr Leu Leu Asp Lys Leu
          20          25          30
Glu Lys Ser Thr Arg Val His Gly Pro Ala Ile Ile Ile Asp Lys Thr
          35          40          45
Gln Thr Ile Val Val Val Pro Asn Ala Val Ala Ser Val Leu Glu Thr
          50          55          60
Cys Val Val Ile Asp Leu Lys Asp Thr Lys Thr Asp Ala Ser Ala Ala
65          70          75          80
Ser Asp Glu Ser Ser Asn Ile Asp Pro Ile Arg Leu Ser Ile Phe Gly
          85          90          95
His Arg Phe Met Ser Ile Ala Glu Gln Met Gly Arg Thr Leu Gln Lys
          100          105          110
Thr Ser Val Ser Thr Asn Ile Lys Glu Arg Leu Asp Phe Ser Cys Ala
          115          120          125
Leu Phe Ser Pro Asp Gly Gly Leu Val Ala Asn Ala Pro His Val Pro
          130          135          140
Val His Leu Gly Ser Met Gln Phe Ala Val Arg Tyr Gln His Gln Lys
145          150          155          160
Trp Leu Gly Asn Leu Lys Asp Gly Asp Val Leu Val Ala Asn His Pro
          165          170          175
Ser Cys Gly Gly Thr His Leu Pro Asp Ile Thr Val Arg Ser Thr Ile
          180          185          190
Arg Ser Ala Ile Leu Phe Thr Asp Ser Ile Arg Leu Leu Arg Pro Ser
          195          200          205
Leu Thr Ala Pro Ala Ala Pro Arg Ser Cys Ser Thr Trp Arg Leu Ala
          210          215          220
Ala Ile Thr Arg Thr Leu Glu Ala Ser Phe Leu Asp Arg Cys Arg Pro
225          230          235          240
Asn Pro Pro Ser Tyr Gly Lys Lys Glu Leu Leu Ser Arg Ala Thr Arg
          245          250          255
Ser Ser Ala Thr Ala Phe Ser Thr Lys Asn Ala Ser Trp Ser Phe Trp
          260          265          270

```

18009

Leu Thr Gly Pro Leu Ser Thr Arg Ala Ala Gln Ala Gln Asp Val Ser  
275 280 285  
Ala Thr Thr Ser Arg Thr  
290

<210> 40952  
<211> 145  
<212> PRT  
<213> A.fumigatus

<400> 40952  
Arg Pro Ser Gly Ala Pro His Ala Asp Pro Ala Val Phe Glu Leu Gly  
1 5 10 15  
Val Pro Val Leu Gly Ile Cys Tyr Gly Leu Gln Glu Ile Ala Tyr Arg  
20 25 30  
Leu Gly Lys Asp Asn Val Val Ala Gly Thr Ala Arg Glu Tyr Gly His  
35 40 45  
Ala Asp Leu Asn Ala Gln Arg Leu Asp Asn Gln Gly His Val Asp Lys  
50 55 60  
Leu Phe Ala Gly Leu Glu His Val Lys Val Trp Met Ser His Gly  
65 70 75 80  
Asp Lys Leu Val Lys Leu Pro Glu Gly Phe His Thr Ile Ala Thr Thr  
85 90 95  
Ala Asn Ser Glu Tyr Ala Gly Ile Ala His Glu Thr Lys Pro Val Tyr  
100 105 110  
Gly Asn Ser Pro Ile Ala Ala Gln Pro Phe Ser Tyr Leu Leu Thr Gln  
115 120 125  
Pro Gln Ala Phe Ser Ser Thr Pro Lys Leu Gln Tyr Asp Pro Phe Ala  
130 135 140  
Gln  
145

<210> 40953  
<211> 73  
<212> PRT  
<213> A.fumigatus

<400> 40953  
Leu Ile Leu Gln Gly Asp Lys Arg Val Tyr Ala Glu Ile Ile Ile Leu  
1 5 10 15  
Arg Ala Val Glu Thr Thr Asp Cys Lys Leu Thr Leu Gly Ile Asp Gly  
20 25 30  
Asp Phe Val Leu Arg Tyr Ile Ile Ser Val Met Thr Ala Arg Ala Phe  
35 40 45  
Pro Phe Asp Asn Glu Phe Leu Ser Lys Cys Ala Thr Arg Ile Ile Asn  
50 55 60  
Glu Val His Gly Gly Lys Phe Glu Ser  
65 70

<210> 40954  
<211> 237  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE

## 18010

&lt;222&gt; (237)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40954

```

Arg Ser His Arg His Ser Val Pro Pro Arg Ser Tyr Ser Met Ile Leu
1          5          10          15
Ser Leu Asn Ser Arg Gln Ser Ala Arg Arg Ser Asn Gln Ala Gln His
          20          25          30
Thr Pro Asp Gly Ala Lys Leu Leu Arg Asn Phe Ala Val Asp Ile Cys
          35          40          45
Gly Ala Asn Pro Asn Trp Thr Met Ser Lys Phe Val Asp Gln Glu Ile
          50          55          60
Leu Arg Ile Arg Lys Leu Val Gly Glu Thr Asp His Val Leu Gly Ala
65          70          75          80
Val Ser Gly Gly Val Asp Ser Thr Val Ala Lys Leu Met Lys Glu
          85          90          95
Ala Ile Gly Asp Arg Phe His Ala Val Leu Val Asn Asn Gly Cys Met
          100          105          110
Arg Leu Asn Glu Cys Glu Thr Val Ala Glu Thr Leu Asn Lys His Leu
          115          120          125
Gly Ile Asn Leu Thr Val Val Asp Ala Ser Lys Arg Phe Leu Asp Gly
          130          135          140
Leu Lys Gly Val Thr Asp Pro Glu Lys Lys Arg Met Phe Ile Gly Ala
145          150          155          160
Thr Phe Ile Asp Val Phe Glu Glu Glu Ala Glu Lys Ile Glu Ala Leu
          165          170          175
Ala Glu Asn Ser Gly Ala Lys Val Lys Trp Phe Leu Gln Gly Thr Leu
          180          185          190
Tyr Pro Asp Val Ile Glu Ser Ile Ser Phe Lys Gly Pro Ser Ala Thr
          195          200          205
Ile Lys Val Cys Leu Pro Arg Leu Phe Trp Gly Val Cys Tyr Ser His
          210          215          220
Ile Ser Leu Asp Ala Ser Gln Cys Arg Cys Thr Ala Xaa
225          230          235

```

&lt;210&gt; 40955

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40955

```

Cys Asn Gly Arg Val Leu Gly Glu Val Thr Pro Glu Arg Val Asp Ile
1          5          10          15
Ala Arg Lys Ala Asp His Ile Phe Ile Ser Met Ile Arg Glu Ala Gly
          20          25          30
Leu Tyr Asp Lys Ile Ser Gln Ala Tyr Ala Ala Leu Asp Pro Ser Lys
          35          40          45
Ala Val Gly Val Met Val Arg Leu Val Ala Ser Leu Asn Trp Phe Gln
          50          55          60
Ser Asn Ser Ser Cys Arg Val Thr Ser Ala Ser Thr Leu Arg Ser Ser
65          70          75          80
Phe Cys Ala Arg Leu Arg Pro Pro Thr Val Ser
          85          90

```

&lt;210&gt; 40956

&lt;211&gt; 74

<213> A.fumigatus

[illegible]

<211> 261

<213> A.fumigatus

[illegible]

## 18012

<210> 40958  
 <211> 145  
 <212> PRT  
 <213> A.fumigatus

<400> 40958  
 Gln Thr Pro Gln Asn Arg Arg Gly Arg Gln Thr Leu Met Val Ala Glu  
 1 5 10 15  
 Gly Pro Leu Asn Glu Ile Leu Ser Ile Thr Ser Gly Tyr Arg Val Pro  
 20 25 30  
 Trp Arg Asn His Leu Thr Leu Ala Pro Glu Phe Ser Ala Lys Ala Ser  
 35 40 45  
 Ile Phe Ser Ala Ser Ser Ser Lys Thr Ser Met Lys Val Ala Pro Met  
 50 55 60  
 Asn Met Arg Phe Phe Ser Gly Ser Val Thr Pro Leu Arg Pro Ser Lys  
 65 70 75 80  
 Lys Arg Leu Leu Ala Ser Thr Thr Val Arg Leu Ile Pro Arg Cys Leu  
 85 90 95  
 Phe Arg Val Ser Ala Thr Val Ser His Ser Phe Lys Arg Met His Pro  
 100 105 110  
 Leu Leu Thr Arg Thr Ala Trp Lys Arg Ser Pro Ile Ala Ser Phe Met  
 115 120 125  
 Ser Leu Ala Ala Thr Val Glu Ser Thr Pro Pro Leu Thr Ala Pro Arg  
 130 135 140  
 Thr  
 145

<210> 40959  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 40959  
 Arg His Leu Ser Lys Leu Ile Glu Ala Ser Gln Ser Phe Asn Arg Lys  
 1 5 10 15  
 Ser Asp Leu Cys Arg His His Arg Ile His Thr Asn Glu Arg Pro Tyr  
 20 25 30  
 His Cys Thr Val Lys Gly Cys Asn Lys Ser Phe Val Gln Arg Ser Ala  
 35 40 45  
 Leu Thr Val His Phe Arg Thr His Thr Gly Glu Arg Pro His Ala Cys  
 50 55 60  
 Asn Phe Ala Gly Cys Glu Lys Ala Phe Ser Asp Val Arg Pro Pro Pro  
 65 70 75 80  
 His Ile Thr His Met Tyr Cys Ser Leu Asn Leu Arg Ser Pro Gln Ala  
 85 90 95

<210> 40960  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 40960  
 Leu Lys Glu His Val Leu Val Ser Arg Asp Thr His Glu Asn Glu Ile  
 1 5 10 15  
 Thr Ser Pro Arg Leu Leu Ala Thr Ser Ile Val Trp Ser Ser Ser Leu  
 20 25 30

Variable	Mean	SD	Min	Max	Median	Q1	Q3	Mode	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	32	28	38	35	0.15	3.2	Normal
Gender	0.55	0.50	0	1	0	0	1	0	-0.05	1.5	Normal
Marital Status	0.65	0.48	0	1	0	0	1	0	-0.05	1.5	Normal
Education	12.5	2.5	8	16	12	11	13	12	0.10	3.0	Normal
Income	1500	500	500	3000	1200	800	1800	1000	0.20	3.5	Normal
Health	0.85	0.35	0	1	0	0	1	0	-0.05	1.5	Normal
Stress	0.75	0.40	0	1	0	0	1	0	-0.05	1.5	Normal
Depression	0.65	0.45	0	1	0	0	1	0	-0.05	1.5	Normal
Loneliness	0.55	0.50	0	1	0	0	1	0	-0.05	1.5	Normal
Life Satisfaction	0.45	0.50	0	1	0	0	1	0	-0.05	1.5	Normal
Resilience	0.35	0.48	0	1	0	0	1	0	-0.05	1.5	Normal
Optimism	0.25	0.45	0	1	0	0	1	0	-0.05	1.5	Normal
Gratitude	0.15	0.35	0	1	0	0	1	0	-0.05	1.5	Normal
Self-Compassion	0.05	0.25	0	1	0	0	1	0	-0.05	1.5	Normal
Emotional Regulation	0.95	0.20	0	1	0	0	1	0	-0.05	1.5	Normal
Prosocial Behavior	0.85	0.35	0	1	0	0	1	0	-0.05	1.5	Normal
Life Satisfaction	0.45	0.50	0	1	0	0	1	0	-0.05	1.5	Normal
Resilience	0.35	0.48	0	1	0	0	1	0	-0.05	1.5	Normal
Optimism	0.25	0.45	0	1	0	0	1	0	-0.05	1.5	Normal
Gratitude	0.15	0.35	0	1	0	0	1	0	-0.05	1.5	Normal
Self-Compassion	0.05	0.25	0	1	0	0	1	0	-0.05	1.5	Normal
Emotional Regulation	0.95	0.20	0	1	0	0	1	0	-0.05	1.5	Normal
Prosocial Behavior	0.85	0.35	0	1	0	0	1	0	-0.05	1.5	Normal

```
<210> 40961
<211> 194
<212> PRT
<213> A.fumigatus
```

```
<210> 40962
<211> 99
<212> PRT
<213> A.fumigatus
```

<400> 40962															
His	Ser	Pro	Thr	Met	Arg	Ile	Gln	Ser	Ser	Leu	Ser	Ser	Trp	Phe	Leu
1				5					10					15	
Ser	Ser	Ala	Leu	Phe	Thr	Gly	Leu	Ala	Ser	Ala	Ser	Gly	Ser	Phe	Asp
			20					25					30		
Cys	Arg	Asn	Ile	Ile	Ala	Glu	Gly	Ile	Lys	Tyr	Asp	Leu	Tyr	Gly	Leu
		35					40					45			
His	Gly	Val	His	Thr	Ile	Tyr	His	Val	Asp	Lys	Ala	Glu	Asp	Tyr	Ile
	50					55					60				
Val	Asn	Thr	Thr	Tyr	Val	Leu	Asp	Ile	Cys	Lys	Ala	Leu	Gly	Lys	Ala
65					70					75					80

## 18014

Ser Ile Arg Gly Asp Leu Lys Cys Gly Thr Ser Lys Asn Ser Ala Cys  
 85 90 95  
 His Gly Thr

<210> 40963  
 <211> 116  
 <212> PRT  
 <213> A.fumigatus

<400> 40963  
 Leu Leu Phe Tyr Ser Val Val Cys Gly Phe Gln Tyr Lys Tyr Thr Pro  
 1 5 10 15  
 Asp Gly Ser Glu Glu Ile Ser His Ala Phe Pro Ile Ala Gly Leu Asp  
 20 25 30  
 Pro Leu Gly His Gly Ser Lys Asp Ala Glu Val Thr Arg Leu Lys Gly  
 35 40 45  
 Asp Gly Gln Glu Gly Leu Leu Val Lys Leu Ala Gly Gly Glu Tyr Ile  
 50 55 60  
 Asp Lys Asp Lys Lys Lys Asp Ala Arg Ala Val Ile Glu Phe Gln  
 65 70 75 80  
 Cys Asp Pro Asp Arg Ser Gly Leu Glu Gly Leu Ser Phe Cys Gly Gly  
 85 90 95  
 Gly Arg Gly Gly Gly Gly Asp Ala Pro Ile Phe Thr Thr Gly Val Glu  
 100 105 110  
 Gly Tyr Ala Leu  
 115

<210> 40964  
 <211> 184  
 <212> PRT  
 <213> A.fumigatus

<400> 40964  
 Thr Gly Phe Ser Cys Cys Asp Leu Gly Thr Met Gln Thr His Tyr Tyr  
 1 5 10 15  
 Arg Ser Pro Ala Ser Pro Asn His Gln Ser Gly Arg Tyr Glu Leu Pro  
 20 25 30  
 Pro Val Gln Ser Val Thr Ser Pro Ser Gly Pro Phe Pro Gln Gly Thr  
 35 40 45  
 Ser Ala Gly Leu Cys Ser Ala Pro Pro Ser Arg Pro Gly Ser Gly Leu  
 50 55 60  
 Arg Met Ala Gln Leu Leu Gln Pro Leu Gly Gln Pro Pro Ser Thr Thr  
 65 70 75 80  
 Ser Thr Tyr Thr Arg Ser Tyr Glu Ser Ser Gly Ser Pro Ala Glu Val  
 85 90 95  
 Pro Pro Ile Arg Ser Asp Val Ser Ser Leu Asn Gly Ser Val Ser Gly  
 100 105 110  
 Gly Ser Thr Leu Pro Pro Ala Ser Ala Val Gly Gln Gln Gln Gln  
 115 120 125  
 Pro Pro Pro Pro Pro Gln Gln His His His Ser His His His Gln  
 130 135 140  
 Gln Gly His Leu His Gln Lys Arg Ala Tyr Arg Gln Arg Arg Lys Asp  
 145 150 155 160  
 Pro Ser Cys Asp Ala Cys Arg Glu Arg Lys Val Lys Val Ile Thr Ile  
 165 170 175



18015

Arg Ala Ser Pro Met Thr Ile Asp  
180

<210> 40965  
<211> 81  
<212> PRT  
<213> A.fumigatus

<400> 40965  
Leu Ser Tyr Pro Gln Cys Cys Leu Ser Pro Pro Phe Pro Pro Ser Gly  
1 5 10 15  
Ile Asn Phe Ile Tyr Thr Thr Lys Leu Ser Leu Tyr Lys Leu Ser Ile  
20 25 30  
Ile Asn Leu Ser Leu Glu Leu Ala Ser Pro Arg Cys Ser Gln Val Asn  
35 40 45  
Pro Thr Asp Ala Thr Leu Ser Val Gly Asp Thr His Thr Leu Phe Gln  
50 55 60  
Ala Arg Arg Gly Thr Asn Ser Pro Asp Glu Leu Ala Phe His Val Ala  
65 70 75 80  
Ile

<210> 40966  
<211> 89  
<212> PRT  
<213> A.fumigatus

<400> 40966  
Ser Arg Met Tyr Leu Ser Ser Ser Val Leu Leu Tyr Ser Cys Thr Pro  
1 5 10 15  
Ser Gly Trp Met Leu Leu Thr His Ser Arg Tyr Lys Ile Gly Asp Ala  
20 25 30  
Phe Phe Gln Leu Pro Leu Ala Asp Ala Gln Ser Leu Leu Ala Ser Ser  
35 40 45  
Thr Glu Gln Ile Asp Leu Glu Val Ser Arg Leu Glu Thr Leu Gly  
50 55 60  
Asp Val Arg Glu Glu Leu Gln Gln Leu Lys Val Thr Leu Tyr Ala Arg  
65 70 75 80  
Phe Gly Arg Ser Ile Asn Leu Glu Thr  
85

<210> 40967  
<211> 64  
<212> PRT  
<213> A.fumigatus

<400> 40967  
Leu Ser Ala Arg Asp Lys His Arg Ser Ser Asp Pro Ser Ala Phe Gly  
1 5 10 15  
Asp Thr Pro Phe Ser Asp Val Asp Asp Pro Val Asp Gly Gly Asp Tyr  
20 25 30  
Asp Asp Val Ala Ala Val Val Val Val Val Ala Ala Ala Ala Ala  
35 40 45  
Pro Pro Gln Met Gln Val Glu Glu Leu Ser Pro Gln Ile Gln Ile His  
50 55 60

18016

<210> 40968  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 40968  
 Ile Ile Trp Gln Tyr Ser Pro Ser Thr Leu Ser Phe Leu Asn Arg Ser  
 1 5 10 15  
 Met Thr Ile Asp Thr Ser Val Tyr His Leu Ile Ser Ser His Pro Asn  
 20 25 30  
 Arg Thr Ala Met Leu Leu Tyr Pro Ala Pro His Gly Pro Pro Pro Thr  
 35 40 45  
 Thr Val Lys Ser Val Ser Lys Ser Thr Lys Asn Gln Ile Leu Lys Pro  
 50 55 60  
 Ile Lys Pro Ile Ala Thr Lys Leu Ser Thr Leu Thr  
 65 70 75

<210> 40969  
 <211> 97  
 <212> PRT  
 <213> A.fumigatus

<400> 40969  
 Ala Ala Thr Asn Asp Ile Arg Tyr Val Gly Asn Lys Ile Ala Thr Leu  
 1 5 10 15  
 Val Met Gln Leu Leu Gly Cys Asp Val Ala Ala Leu Asn Thr Val His  
 20 25 30  
 Phe Ser Asn Gln Pro Asn Ile Arg Arg Gln Val Glu Ser Thr Asn Ile  
 35 40 45  
 Gln Gln Ala Thr Thr Leu Ala Thr Gly Ser Leu Lys Ala His Gly Gln  
 50 55 60  
 Gln Leu Lys Arg Leu Glu Thr Tyr Met Arg Val Ser Ala Arg Ala Ile  
 65 70 75 80  
 Ser Arg Ile Leu Met Ser Cys Cys Arg Val Met Pro Leu Val Leu Arg  
 85 90 95  
 Gln

<210> 40970  
 <211> 553  
 <212> PRT  
 <213> A.fumigatus

<400> 40970  
 Pro Leu Leu Leu Leu Ala Leu Glu Asp Tyr Phe Lys Ser Pro Tyr Pro  
 1 5 10 15  
 Glu Thr Leu Ala Thr Leu Tyr Asn Ala Val Asn Glu Met Asp Leu Ser  
 20 25 30  
 Leu Met Pro Lys Leu Ser Leu Leu Glu Arg Gln Ile Leu Gln Ala Ser  
 35 40 45  
 Asn Ala Lys Asp Met Phe Ile Glu Lys Phe Glu Gln Met Ile Gln Gln  
 50 55 60  
 Arg Leu Ile Glu Glu Gly Glu Pro Val Glu Asp Ser Pro Pro Ser Pro  
 65 70 75 80  
 Lys Lys Pro Ala Pro Arg Tyr Ala Leu Pro Arg Asp Thr His Glu Phe  
 85 90 95

## 18017

Glu Ser Arg Val Ile Tyr Asn Asp Ile Pro Ile Pro Val Lys Val Pro  
 100 105 110  
 Thr Val Ile Trp Pro Glu Ile Val Gly Asp Phe Ser Leu Ile Lys Leu  
 115 120 125  
 Ile Gln Thr Phe Ser Thr Val His Ala Thr Ala Pro Gln Ala Phe Pro  
 130 135 140  
 Leu His Pro His Leu Thr Thr Asn Gly Ser Tyr Thr His Pro Ile Ile  
 145 150 155 160  
 Val Leu Val Asn Ala Met Leu Thr Gln Lys Arg Val Ile Phe Leu Gly  
 165 170 175  
 His Asn Arg Pro Ser Gly Glu Val Ala Glu Ala Val Leu Ala Ala Cys  
 180 185 190  
 Ala Leu Ala Ser Gly Gly Ile Leu Arg Gly Phe Thr Arg His Ala Phe  
 195 200 205  
 Pro Tyr Thr Asp Leu Thr Lys Ile Asp Asp Leu Leu Lys Val Pro Gly  
 210 215 220  
 Phe Ile Ala Gly Val Thr Asn Pro Thr Phe Ala Asn His Pro Glu Trp  
 225 230 235 240  
 Trp Asp Leu Leu Cys Asp Leu Pro Thr Gly Arg Met Lys Ile Ser Ser  
 245 250 255  
 His Ile Glu Pro Ala Pro Val Thr Glu Gly Leu Leu Tyr Phe Gln Gln  
 260 265 270  
 Ser Ser Phe Leu Gln Asn Tyr Thr Pro Ser Ala His Pro Asp Pro Thr  
 275 280 285  
 Gly Asp Asn Ala Phe Met Glu Asp Val Gln Arg Ser Ile Thr Asn Arg  
 290 295 300  
 His Gly Glu Asn Ala Ile Arg Ala Lys Trp Arg Ala Tyr Ile Thr Lys  
 305 310 315 320  
 Phe Thr Arg Val Ala Ala Ala Phe Glu Glu Thr Val Tyr Gly Ala Ser  
 325 330 335  
 Asn Leu Tyr Ile Ile Gly Pro Asn Glu Glu Leu Ser Pro Glu Ser Pro  
 340 345 350  
 Ser Gly Val Gln Ala Asp Pro Leu Asp Pro Thr Thr Leu Arg Gly His  
 355 360 365  
 Gly Tyr Val Trp Pro Asp Glu Ala Thr Lys Gln Arg Glu Leu Ile Ala  
 370 375 380  
 Ser Val Ser Arg Ile Glu Gly Trp Arg Thr Thr Arg Ser Tyr Tyr Ser  
 385 390 395 400  
 Phe Ile Gln Asp Ile Ala Ala Met Tyr Tyr Pro Ala Arg Pro Ile Gln  
 405 410 415  
 Lys Pro Asp Leu His His His His Asp Arg Leu Arg Thr Leu Arg Leu  
 420 425 430  
 Ser His Ala Asp Ala Gly Ala Ile Tyr Leu Ala Phe Ser Lys Ala Val  
 435 440 445  
 Lys Asp Tyr Ala Gly Ile Cys Gln Leu Leu Thr Val Thr Pro Glu Ser  
 450 455 460  
 Gln Ala Gly Leu Leu Tyr Ile Ser Met Gly Leu Phe His Pro Asp Gln  
 465 470 475 480  
 Thr Val Arg Glu Ala Thr Ala Asp Leu Leu Asp Arg Ile Ala Ala His  
 485 490 495  
 Pro Ala Gly Arg His Phe Trp Ala Gln Leu Ser Arg Phe Asn Lys Leu  
 500 505 510  
 Ala Tyr Phe Arg Val Arg Arg Glu Arg Asp Ala Ala Gln Ser Pro Val  
 515 520 525  
 Ser Gly Thr Gly Ser Ser Leu Gly Ala Pro Gln Ser Leu Ile Gly Ile  
 530 535 540

## 18018

Ala Thr Gly Asn Ala Ser Arg Arg Ser  
545 550

<210> 40971

<211> 234

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (179)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 40971

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Ser Gly Thr Pro Phe Val Asn His Ile Thr Leu Arg Val Leu Ser Gly
1          5          10          15
Ile Lys Ile Thr Ser Leu Ser Thr Leu Ala Glu Ala Ile Thr Ala Ile
20          25          30
His Ala Thr Tyr Ser Ile Pro His Val Ile Ile Thr Ser Val Arg Ile
35          40          45
Ser Gln Phe Ser Ser Ser Pro Glu Ala Thr Thr Asp Ser Leu Thr Val
50          55          60
Ile Gly Ser Thr Ile Lys Ser Asp Asp Ser Pro Arg Leu Phe Arg Val
65          70          75          80
Asp Val Pro Ala Leu Asp Cys Phe Phe Ser Gly Thr Gly Asp Met Phe
85          90          95
Ala Ala Leu Thr Val Ala Arg Leu Arg Glu Ala Val Phe Ala Ala Asp
100         105         110
Ser Thr Leu Arg Ser Thr Lys Ser Trp Val Ser Pro Asp Asp Val Lys
115         120         125
Ala Thr Asp Leu Pro Leu Ala Lys Ala Thr Val Lys Val Leu Ala Ser
130         135         140
Met His Ser Val Leu Glu Arg Thr Leu Glu Ala Arg Asp Ala Glu Leu
145         150         155         160
Arg Ala Ala Ala Ser Ala Glu Glu Thr Glu Pro Gly Leu Val Glu Glu
165         170         175
Arg Lys Xaa Lys Gly Arg Pro Cys Ala Asp Gln Thr Pro Leu Gly Lys
180         185         190
Val Val Pro Asn Arg Arg Phe Leu Arg Lys Pro Asp Cys Glu Phe Pro
195         200         205
Pro Pro Ile Gly Lys Gly Arg Ser Gly Ser Arg Gly Phe Asn Ile Glu
210         215         220
Gly Leu Asn Lys Pro Leu Phe Arg Leu Thr
225         230

```

<210> 40972

<211> 62

<212> PRT

<213> A.fumigatus

<400> 40972

```

Gln His Asp Tyr Asn Val Pro Val Tyr Ile Thr Tyr Asn Asp Ser Glu
1          5          10          15
Tyr Ile Tyr Leu Val Ile Gln Phe Leu Asp Ile Ile Phe Ser Leu Phe
20          25          30
Phe Phe Leu Ser Leu Ser Cys Gly Trp Gly Gly Gly Phe His Leu Met

```

## 18019

35                      40                      45  
 Cys Ile Val Leu Gly Asp Thr Ala Phe Asn Asp Met Ala Val  
 50                      55                      60

<210> 40973  
 <211> 132  
 <212> PRT  
 <213> A.fumigatus

<400> 40973  
 His Ser Thr Gly Asn His Thr Gly Tyr Arg Gln Phe Lys Gly Thr Arg  
 1                      5                      10                      15  
 Ser Thr Ala Gln Glu Ile Arg Asp Leu Tyr Glu Gly Leu Cys Gln Ser  
                     20                      25                      30  
 His Leu Thr Asp Phe Asp Val Met Leu Ser Gly Tyr Ala Pro Ser Ala  
                     35                      40                      45  
 Ala Ala Val Glu Ala Val Gly Ala Ile Gly Leu Asp Leu Gln Arg Lys  
                     50                      55                      60  
 Ala Glu Ser Asn Pro Gly Ser Phe Phe Trp Gly Met Arg Asn Pro Ile  
 65                      70                      75                      80  
 Leu Val Glu Leu Pro Ala Asn Gly Glu Arg Ser Thr Val Leu Asp Pro  
                     85                      90                      95  
 Val Met Gly Asp Gln Gly Arg Leu Tyr Val Asn Asp Asp Val Val Pro  
                     100                      105                      110  
 Ala Tyr Lys Lys Ile Ile His His Ala Asp Leu Ile Leu Pro Asn Gln  
                     115                      120                      125  
 Phe Glu Ala Glu  
                     130

<210> 40974  
 <211> 237  
 <212> PRT  
 <213> A.fumigatus

<400> 40974  
 Gly Ala Tyr Phe His Ser His Leu Ser Arg Ser Leu Leu Pro Arg Ser  
 1                      5                      10                      15  
 Asp Ser Leu Pro Thr Pro Phe Asp Thr Lys Ser Pro Tyr Asn Phe Arg  
                     20                      25                      30  
 Ala Glu Ser Cys Pro Gln Phe Phe Asn Asp Phe Leu Ser Asn Ser Thr  
                     35                      40                      45  
 Val Thr Ser Cys Tyr Pro Ile Ser Leu Leu Leu His Asp Ser Thr Ser  
                     50                      55                      60  
 Phe Phe His Thr Leu Thr Ser Ala Thr Ala Thr Ser His Val Leu Asp  
 65                      70                      75                      80  
 Leu Ser Cys Ala Ala Ser Val Asp Thr Cys Ala Ser Ile Phe Asn Arg  
                     85                      90                      95  
 Leu Ala Thr Asp Leu Leu Lys Ala Asp Ala Cys Gly Lys Asp Tyr Glu  
                     100                      105                      110  
 Leu Gly Asn Pro Leu Val Ala Ser Ala Tyr Thr Gly Phe Ile Thr Tyr  
                     115                      120                      125  
 Glu Pro Val Tyr Arg Ala Ala Cys Leu Lys Asn Pro Asp Thr Lys Asp  
                     130                      135                      140  
 Tyr Cys Phe Val Asp Ala Ala Thr Asn Ala Ser Ser Pro Gln Asn Leu  
 145                      150                      155                      160  
 Asp Thr Tyr Ser Ile Pro Ala Gly Tyr Thr Thr Asp Glu Ala Pro Trp

[illegible]

```
<210> 40975
<211> 250
<212> PRT
<213> A.fumigatus
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<400>	40975															
His 1	Ala	Leu	Pro	Tyr 5	Arg	Leu	Glu	Val	Asn 10	Ser	Asp	Pro	Leu	Trp 15	Ala	
Met	Ser	Phe	Ile 20	Gln	Phe	Ser	Ala	Lys 25	Met	Lys	Ser	Phe	Ser	His 30	Phe	
Ser	Pro	Tyr 35	Trp	Pro	Ser	Arg	Pro	Ser	Gln 40	Trp	Gly	Glu 45	Thr	Met	Gly	
Pro	Asp 50	Val	Cys	Ser	Thr	Ser	Gln 55	His	His	Gln 60	Ser	Gly	Asn	Pro	Lys	
Thr 65	Thr	Ser	Arg	Leu	Ser	Thr	Leu 70	Ile	Thr	Leu 75	Leu	Met	Val	Leu 80	Leu	
Leu	Ser	Ser	Val 85	Val	Ser	Ala	Ala	Ala 90	Ile	Pro	Asp	Glu	Ser	Pro 95	Pro	
Leu	Ala	His 100	Gly	Ala	Phe	Leu	Ser 105	Arg	Thr	Glu	Ala	Phe 110	Pro	Gly	Asp	
His	Leu	Asp 115	Ser	Gly	Gln	Ala	Arg 120	Tyr	Gly	Lys	Thr	Trp 125	Val	Ile	Glu	
Ser	Ser	Leu 130	Ala	Asp	Glu	Ala	Ala 135	Thr	Leu	Pro	Ile 140	Leu	Val	Ala	Pro	
Asp 145	Glu	Asp	Val	Glu	Glu	His	Thr 150	Phe	Ile	Arg	Thr 155	Cys	His	Ala 160	Arg	
Phe	Tyr	Pro	Gly 165	Pro	Thr	Arg	Cys	Arg	His 170	Pro	Leu	Thr	Pro	Asn 175	Leu	
Pro	Thr	Thr 180	Ser	Glu	Pro	Arg	Ala 185	Ala	Pro	Ser	Ser	Ser	Thr 190	Thr	Ser	
Ser	Pro	Thr 195	Gln	Arg	Ser	Pro	Pro 200	Ala	Ile	Pro	Ser	Arg 205	Ser	Ser	Ser	
Thr	Thr 210	Pro	Pro	Pro	Ser	Ser 215	Thr	Leu	Leu	Pro	Pro 220	Gln	Pro	Pro	Pro	
Arg 225	Thr	Ser	Ser	Thr	Ser	Pro 230	Ala	Pro	Pro	Pro	Pro 235	Thr	Pro	Ala	Pro 240	
Pro	Ser	Ser	Thr 245	Asp	Leu	Pro	Pro	Thr	Cys 250							

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<210> 40976
<211> 375
<212> PRT
<213> A.fumigatus
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<400> 40976  
Asn Thr Val Asp Pro Ser Ser Pro Val Val Lys Thr Tyr Ser His Leu

## 18021

```

1           5           10           15
Ile Asn Ala Arg Thr Gly Gln Ala Ile Asn Val Arg Ser Pro Ser Thr
      20           25           30
Glu Ile Thr Val Asp Glu Arg Pro Arg Ser Ala Gly Thr Ile Gln Thr
      35           40           45
Leu Arg Ala Leu Asp Arg Ser Arg Pro Arg Ser Ala Ile Ser Ser Thr
      50           55           60
Ser His Asn Ile Trp Val Glu Ser Leu Leu Arg Arg Trp Glu Asn Pro
      65           70           75           80
Ala Phe Arg Arg Pro Glu Arg Pro Ile Thr Ala Ile Ser Asp Gly Glu
      85           90           95
Ser His Arg Asn Met Ser Asp Asn Gly Leu Ile Arg Pro Phe Asp Cys
      100          105          110
Ser Arg Gly Ser Tyr Gly Leu Asp Asp Phe Gly Leu Ala Lys Phe Arg
      115          120          125
Gly Arg Leu Ser Lys Ser His Leu Ala Thr Ala Asn Val Ile Ala Gln
      130          135          140
Val Asp Arg Lys Phe Ile Leu Val Lys Leu Ala Asp Gly Arg Ser Ser
      145          150          155          160
Arg Ser Ala Leu Val Leu Ile Asp Gln His Ala Ala Asp Glu Arg Cys
      165          170          175
Arg Ile Glu Ser Leu Phe Gly Ala Met Phe Ala Asp Gly His Arg Gln
      180          185          190
Val Gln Ser Ile Arg Ile Asp Pro Ile Thr Phe Asp Ile Pro Leu Val
      195          200          205
Glu Ala Ala Leu Phe Gly Lys His Ala Asp Ser Phe Ala Ser Trp Gly
      210          215          220
Val Gly Tyr Thr Val Glu Arg Lys Ser Ser Ala Arg Ala Ala Leu Val
      225          230          235          240
Val Val Thr Ser Leu Pro Thr Leu Ile Ala Glu Arg Cys Arg Leu Glu
      245          250          255
Pro Asp Leu Val Ser Asp Met Ile Arg Gly Glu Ile Trp Lys His Glu
      260          265          270
Glu Asn Gly Gln Gly Ala Leu Ala Leu Ser Asp Gln Arg Ala Gln Arg
      275          280          285
Ser Lys Val His Arg Asp Glu Leu Gly Val Glu Thr Glu Gly Asn Trp
      290          295          300
Val Asp Arg Leu Thr Ser Cys Pro Gln Gly Ile Ile Asp Leu Leu Asn
      305          310          315          320
Ser Arg Ala Cys Arg Thr Ala Ile Met Phe Asn Asp Met Leu Thr Ala
      325          330          335
Glu Glu Cys Lys Ser Leu Val Gly Arg Leu Ala Gly Cys Met Leu Pro
      340          345          350
Phe Gln Cys Ala His Gly Arg Pro Ser Met Val Pro Ile Leu Asp Val
      355          360          365
Arg Glu Ser Glu Glu Phe Leu
      370          375

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&lt;210&gt; 40977

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40977

```

Arg Ile Glu Arg Ser Ser Thr Cys Tyr Gln Leu Ile Thr Pro Pro His
1           5           10           15

```

## 18022

Pro Pro Pro Ser Gln Lys Ile Met Pro Tyr Ser Ser Thr Pro Glu Ala  
 20 25 30  
 Ser Thr Thr Pro Leu Ala Asp Tyr Phe Trp Ile Ala Gly Val Asp Gly  
 35 40 45  
 Thr Glu Val Leu Glu Thr Phe Arg Arg Leu Gly Asp Glu Tyr Arg Ala  
 50 55 60  
 Asn Ser Ala Thr Ser Pro Gly Pro Ala Leu Thr Asp Thr Ile Glu Glu  
 65 70 75 80  
 Asp Ala Asp Ala Glu Glu Ala His Asp Ser Arg Phe Asp Gly Leu Ser  
 85 90 95  
 Arg Pro Asn Ser Thr Leu Pro Gly Trp Asn Ser Phe Gln Arg Phe Ser  
 100 105 110  
 Met Arg Ser Glu Asn Ala Ala Glu Gly Asn Ala Asn Gly Ser Asn Ser  
 115 120 125  
 Asn Arg Ser Ser Leu Thr Ile Lys Gly Ala Gln Ser Pro Arg Gly Ser  
 130 135 140  
 Ser Phe Leu Glu Asp Phe Asp Phe Asp Lys Ala Leu Phe Lys Phe Ala  
 145 150 155 160  
 Ser Glu Arg Asp Ser Phe Leu Ser Asp Leu Ser Leu Ser Ala Gly Ala  
 165 170 175  
 Ile Thr Pro Ala Ser Arg Pro Arg Ser Arg Leu Arg Thr Gln Lys Ile  
 180 185 190  
 Thr Ala Glu Glu Thr Pro Ser Gln Pro Ser Ser Leu Leu Arg Ser Gly  
 195 200 205  
 Ile Gly Ser Val Arg Arg His Met Ala Phe Arg Asp Met Asn Ser Met  
 210 215 220  
 Lys Arg Gln Pro Ser Val Ala Arg Gln Gly Glu Ser Ile Pro Gly Asp  
 225 230 235 240  
 Ile Arg His Thr Ala Pro Ser Thr Leu Thr Ile Tyr  
 245 250

&lt;210&gt; 40978

&lt;211&gt; 707

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40978

Thr Leu Phe Phe Ser Trp Thr Ala Ser Ile Arg Thr Ser Arg Arg Leu  
 1 5 10 15  
 Ser Asn Tyr Asn Ser Val Ile Pro Ala Pro Gln Pro Leu Glu Phe Ser  
 20 25 30  
 Pro Thr Met His Pro Leu Lys Arg Arg Phe Glu Pro Val Leu Leu Asp  
 35 40 45  
 Arg Tyr Pro Thr Lys Gly Met Thr Glu Glu Leu Lys Gln Arg Gly Thr  
 50 55 60  
 Phe Pro Asp Tyr Val Pro Met Phe Ala Phe Pro Asn Asp Ile Asn Ile  
 65 70 75 80  
 Val Ser Ser Asp Gln Arg Pro Arg Ser Thr Trp His Gly Phe Thr Met  
 85 90 95  
 Thr Thr Asp Asn Gly Ser Arg Leu His Ala Ile Cys Val Ile Ile Trp  
 100 105 110  
 Ile Pro Leu Asn Gln Arg Ala Ala Glu Glu Leu Glu Lys Arg Cys Glu  
 115 120 125  
 Glu Trp Arg Lys Glu Asn Met Thr Asp Glu Glu Arg Glu Leu Ala Ala  
 130 135 140  
 Ser Leu Gly Glu Arg Leu Ala Ser Glu Arg Ala Lys Leu Ser Arg Leu



## 18023

145                      150                      155                      160  
 Leu Ala Lys Leu Pro Thr Val Val Ser Gly Ser Glu Ser Arg Glu Gln  
                                  165                      170                      175  
 Leu Glu Asp Glu Ile Ser Ala Val Glu Glu Lys Ile Gly Leu Met Thr  
                                  180                      185                      190  
 Asp Leu Leu Arg Pro Val Arg His Gly Ala Ala Ser Lys Ile Glu Gly  
                                  195                      200                      205  
 Leu Thr Asp Gly Glu Thr Gly Phe Trp Ile Pro Arg Ala Tyr Gly Ile  
                                  210                      215                      220  
 Leu Gly Arg Glu Glu Asn Met Thr Ser Phe Trp Lys Glu Trp Leu Lys  
 225                                   230                                   235                                   240  
 Ala Ile Ile Val Pro Met Thr Asp Gly Gly Val Gln Arg Val Pro Pro  
                                  245                                   250                                   255  
 Ser Ser Pro Arg Met Gly Val Trp Gln Pro Leu Glu Arg Tyr Val Met  
                                  260                                   265                                   270  
 Asn Leu Cys Thr Glu Ala Phe Ser Pro Asn Ser Ser Lys Thr Gln Val  
                                  275                                   280                                   285  
 Glu Leu Ala Val Arg Glu Leu Arg Leu Phe Ala Arg Lys Glu Ala Val  
                                  290                                   295                                   300  
 Asn Glu Leu Pro Gly Ser Arg Asn Thr Asp Leu Tyr Ala Leu Phe Arg  
 305                                   310                                   315                                   320  
 Thr Leu Ser Leu Ser Asn Ile Ile Ile Leu Phe Glu Tyr Ala Leu Thr  
                                  325                                   330                                   335  
 Glu Ser Arg Ile Ile Phe Leu Ser Ser His Thr Ser Met Leu Tyr Leu  
                                  340                                   345                                   350  
 Ala Thr Arg Ala Leu Val Asp Leu Leu Phe Pro Leu Gln Trp Thr Gly  
                                  355                                   360                                   365  
 Val Leu Ile Pro Val Leu Pro Ala Arg Leu Ile Gln Ala Leu Glu Ala  
                                  370                                   375                                   380  
 Pro Cys Pro Tyr Ile Val Gly Ile Glu Arg Arg Tyr Glu Lys Val Glu  
 385                                   390                                   395                                   400  
 Leu Pro Ser Asp Asp Phe Val Leu Val Asp Leu Asp Ala Asp Val Ile  
                                  405                                   410                                   415  
 Glu Ser Thr Val Gln Pro Thr Pro Leu Pro Arg His Gln Arg Arg Lys  
                                  420                                   425                                   430  
 Leu Leu Ser Leu Leu Gln Leu Ala Ala Pro His His Ser Arg Cys Ala  
                                  435                                   440                                   445  
 Val Pro Thr Gly Pro Pro Ala Tyr Ala Ile Glu Thr Phe Pro Phe Asp  
                                  450                                   455                                   460  
 Ala Phe Met Ser Glu Asn Pro Ser Met Phe Asn Ala Arg Ala Gln Ser  
 465                                   470                                   475                                   480  
 Thr Gln Leu Ala Lys Tyr Val Ser Leu Asn Ser Ser Ala Phe Gly Gln  
                                  485                                   490                                   495  
 Gln Ser Val Leu Pro Thr Thr Phe Gln Pro Leu Ile Phe Asn Ala Tyr  
                                  500                                   505                                   510  
 Leu Tyr Ala Arg Asn Glu Gln Ala Ala Ser Arg Gly Phe Ser Ser Lys  
                                  515                                   520                                   525  
 Gly Ser Asp Arg Pro Ser Thr Gly Ser Thr Ser Lys Thr Gly Ser Pro  
                                  530                                   535                                   540  
 Pro Ser Pro Arg Asp His Ser Pro Thr Ser Gly His Phe Pro Pro Ser  
 545                                   550                                   555                                   560  
 Ser Arg Asn Asp Ser Gly Met Ala Leu Gln Ala Ser Leu Arg Glu Lys  
                                  565                                   570                                   575  
 Arg Ser Gly His Phe Asp Ala Ser Ser Arg Arg Ser Ser Ser Phe Gly  
                                  580                                   585                                   590  
 Met Glu Met Arg Pro Gly Val Pro Arg Arg Pro Ser Ala Pro Phe Leu

## 18024

595                      600                      605  
 Gly His Ala Pro Asn Leu Ser Val Thr Thr Leu Asn Thr Glu Tyr Asn  
 610                      615                      620  
 Ser Gly Ser Thr Tyr Ala Pro Ser Val Tyr Ala Gln Ser Thr Val Ala  
 625                      630                      635                      640  
 Ala Ser Thr Ile Val Pro Gln Ser Val Ala Gln Pro Ile His Asn Ala  
 645                      650                      655  
 Glu Gly Thr Cys Trp Val Glu Gly His Cys Leu Gln Val Val Pro Ala  
 660                      665                      670  
 Asp Asp Lys Ala Val Cys Ala Val Cys Asp Glu Arg Ala Glu Asp Gly  
 675                      680                      685  
 Met Tyr Arg Cys Ser Ala Val Phe Thr Gly Gly Glu Lys Ala Cys Ser  
 690                      695                      700  
 Gly Ser Gln  
 705

&lt;210&gt; 40979

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40979

Phe Ser Glu Arg Asn Ile Tyr Val Ser Ala Glu Asp Ser Met Ala Ile  
 1                      5                      10                      15  
 Trp Arg Ile Asp Gly Asn Gln His Ala Ser Ser Leu His Ser Phe Arg  
 20                      25                      30  
 Pro Ile Glu Thr Pro Asp Phe Asp Val Leu Pro Glu Glu Ser Glu Gly  
 35                      40                      45  
 Asn Ile Arg Glu Arg Thr Lys Thr Ile Thr Lys His Leu Val Lys Glu  
 50                      55                      60  
 Asn Glu Asn Ala Lys Asp Ala Ser Ile Asn Tyr Gln Thr Tyr Asp Leu  
 65                      70                      75                      80  
 Tyr Met Lys Arg Ala Leu Leu Leu Asn Tyr Ala Pro Pro Gly Tyr Ser  
 85                      90                      95  
 Ile Gly Pro Phe Phe Glu Ser Ser Thr Thr Val Ile Arg His Gly Lys  
 100                      105                      110  
 Ile Val Arg Arg Arg Ser Ala Lys Asn Arg Leu Arg Phe Lys Leu Ala  
 115                      120                      125  
 Gly Lys Thr Ser Thr Met Ala Lys Lys Leu Ser Glu His Glu Leu  
 130                      135                      140

&lt;210&gt; 40980

&lt;211&gt; 450

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40980

Arg Trp Gln Arg Asn Asn Tyr Pro Ala Ala Arg Leu Gln Gly Leu Glu  
 1                      5                      10                      15  
 Arg Asp Leu Asn Leu Ser Asp Ala Asp Tyr Gln Thr Gly Leu Ser Ile  
 20                      25                      30  
 Leu Phe Val Gly Tyr Ile Leu Met Gln Val Pro Ser Asn Leu Ile Leu  
 35                      40                      45  
 Asn Tyr Met Gly Arg Pro Ser Leu Tyr Leu Gly Phe Phe Thr Ser Ala  
 50                      55                      60  
 Trp Gly Leu Val Ser Leu Leu Thr Ser Gln Val Lys Ser Phe Gly Gly

## 18025

65		70		75		80
Ile Val Ala Cys Arg Phe Ile Leu Gly Leu Val Glu Ala Pro Phe Phe						
	85			90		95
Ala Gly Val Leu Phe Tyr Leu Ser Lys Trp Tyr Thr Lys Lys Glu Leu						
	100			105		110
Ala Leu Arg Met Ser Ile Phe Tyr Ala Gly Ser Leu Leu Ser Gly Ala						
	115			120		125
Phe Gly Ser Leu Ile Ala Ala Gly Ile Leu Lys Gly Leu Asp Gly Lys						
	130			135		140
Asn Gly Leu Ala Ala Trp Gln Trp Leu Tyr Ile Ile Glu Gly Ala Ile						
	145			150		155
Thr Ile Ala Val Gly Ile Ala Val Met Leu Phe Leu Pro Asp Phe Pro						
	165			170		175
Ser Thr Trp Lys Arg Leu Ser Glu Glu Arg His Val Ala Asn Arg						
	180			185		190
Arg Leu Ala Ile Glu Ala Ala Asp Ala Asp Val Asp Glu Ala Gly Lys						
	195			200		205
Met Ser Gln Ile Lys Gly Leu Lys Leu Ala Phe Ser Asp Ile Lys Thr						
	210			215		220
Tyr Val Leu Ala Ile Ala Tyr Met Ser Ile Thr Gly Ala Ser Gly Phe						
	225			230		235
Gln Asn Phe Phe Pro Thr Leu Thr Ser Thr Leu Lys Tyr Asp His Phe						
	245			250		255
Ile Ser Leu Leu Leu Val Ala Pro Pro Tyr Val Phe Val Val Phe Tyr						
	260			265		270
Ser Met Ala His Ser His Leu Ser Asp Arg Phe Gly Asn Arg Phe Trp						
	275			280		285
Phe Phe Phe Tyr Pro Ile Pro Val Thr Ile Ile Gly Phe Ile Ile Phe						
	290			295		300
Met Thr Thr Asp Ser Phe Gly Pro Lys Tyr Phe Ser Phe Phe Leu Met						
	305			310		315
Asn Ile Ile Phe Ala Gln Asn Gly Thr Ile Tyr Ala Trp Ile Gly Asn						
	325			330		335
Ala Ile Pro Arg Pro Pro Ala Lys Arg Ala Ala Ala Tyr Ala Phe Ile						
	340			345		350
Asn Ser Ile Gly Asn Ser Ala Ser Ile Trp Thr Pro Tyr Thr Tyr Arg						
	355			360		365
Lys Gln Asp Phe Pro His Tyr Arg Pro Ala Leu Gly Val Cys Ile Gly						
	370			375		380
Leu Gln Thr Leu Gly Gly Ile Met Ala Ile Ile Met Tyr Phe His Leu						
	385			390		395
Arg Ser Leu Asn Lys Arg Leu Glu Arg Leu Asp Asp Thr Glu Val Thr						
	405			410		415
Leu Thr Asp Lys Glu Ile Arg Arg Leu Glu Arg Thr Ala Glu Ile Glu						
	420			425		430
Gly Ile Asp Leu Ala Ala Ala Arg Arg Leu Gln Lys Gly Phe Arg Tyr						
	435			440		445
Ile Val						
450						

&lt;210&gt; 40981

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40981

## 18026

```

Ser Thr Gln Leu Ser Ile Leu Tyr Tyr Ile Arg Thr Lys Gly Ser Leu
1           5           10           15
Ile Asp Ala Phe Asp Ala Ile Cys Arg Arg Ala Gly Gln Ser Cys His
           20           25           30
Ala Pro Ser Gln Glu Phe Met Val Cys Thr Gly Ile Asp Arg Ile Glu
           35           40           45
Thr Gly Val Pro Ala Tyr Leu Val Phe Glu Lys Cys Lys Arg Ala Asn
           50           55           60
Gly Gly Ile Lys Asn Ser Ala Lys Ala Leu Thr Ile Ala Thr Gly Arg
65           70           75           80
Thr Pro Ser Ala Leu Pro Ala Gln Thr Ala Ile Gly Glu Gly Tyr Gln
           85           90           95
Pro Val Leu Ile Ala Ala Arg Arg Met Phe Lys His Val Pro Glu Leu
           100          105          110
Glu Tyr Tyr Val Leu Asp Ile Glu Arg Glu Leu Leu Ala Lys Asp Leu
           115          120          125
Ser Ser Phe His Val Ile Thr Ser Thr Asn Cys Ile His Ala Thr Gln
           130          135          140
Asn Leu Met Asn Ser Leu Ser Lys Ile Arg Lys Met Leu Arg Asn Asp
145          150          155          160
Gly Val Ile Ala Leu Val Glu Ile Thr Arg Asn Met Phe Trp Gln Asp
           165          170          175
Ile Ala Val Tyr Leu Phe Glu Gly Trp Trp Val Phe Met Met Gly Ala
           180          185          190
Asn Met Arg Asp Pro Gly Leu Thr Asp Val Ala Trp Thr Ser Gly Glu
           195          200          205
Glu Pro Glu Thr Asn Thr Ile Arg Ile Ile Gly Gly Phe Ala Gly Ser
           210          215          220
Gly
225

```

&lt;210&gt; 40982

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40982

```

Val Val Pro Ser Leu Glu Asp Ser Ala Leu Leu Asp Phe Pro Arg Tyr
1           5           10           15
Asn Leu Thr Ser Asn Gly His Asn Leu Ser Ala Phe Gly Asp Phe Arg
           20           25           30
Ala Ser Pro Arg Ala Tyr Asp Ser Leu Val Val Phe Ile His Tyr Arg
           35           40           45
Met Pro Tyr Asp Glu His Phe Phe Cys Ser Ile Gln Ile Phe Ile Trp
           50           55           60
Asn Pro Ala Ile Arg Ala Arg Val Gln Arg Val Ser Trp Pro
65           70           75

```

&lt;210&gt; 40983

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40983

```

Gly Phe Leu Arg Arg Ala Gly Cys Arg Val Val Leu Lys Tyr His Ser
1           5           10           15

```

## 18027

```

Ile Asn Glu Ala Gly Arg Pro Pro Ser Ser Ser Ile Glu Ser Ile Asn
      20                      25                      30
Asn His Pro Asp Phe Leu Ile Leu Pro Phe Ser Arg Ser Pro Ser Asn
      35                      40                      45
Leu Ser Arg Asn Phe Ile Met Asn Leu Lys Thr Ile Thr Ile Leu Leu
      50                      55                      60
Ser Leu Cys Glu Thr Leu Phe Ala Val Pro Ile Gln Gly Ser Gln Lys
      65                      70                      75                      80
Asp Lys Arg Gln Gly Leu Gly Gly Phe Asn Phe Gly Asp Leu Ala Ser
      85                      90                      95
Met Gly Thr Ser Gly Thr Ser Ala Gly Ser Asn Thr Asn Pro Phe Gly
      100                     105                     110
Ser Leu Phe Ser Gly Ile Ile Pro Ser Thr Ser Ser Ser Gly Ser Ser
      115                     120                     125
Ala Gly Thr Gly Asn Met Ile Leu Pro Ala Gly Ala Leu Thr Ser Gly
      130                     135                     140
Ser Gln Thr Gly Asn Asp Glu Thr Asn Gln Gly Gln Ser Gly Ser Gly
      145                     150                     155                     160
Asp Phe Phe Gln Gly Gly Glu Asp Gly Glu Glu Ala Ala Val Ala
      165                     170                     175
Val Gln Asp Gly Asn Glu Gly Asp Gly Pro Glu Asp Glu Thr Val Ala
      180                     185                     190

```

&lt;210&gt; 40984

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (37)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 40984

```

Arg Thr Ala Arg Val Leu Asp Ile Phe Arg Ser Tyr Tyr Gly Gly Leu
1      5      10      15
Ile Cys Val Cys Trp Ser Pro Asp Gly Lys Tyr Ile Val Thr Gly Gly
      20      25      30
Gln Asp Asp Leu Xaa Thr Ile Trp Ser Phe Pro Glu Arg Lys Ile Val
      35      40      45
Thr Arg Cys Gln Gly His Asn Ser Trp Val Ser Ala Val Gly Phe Asp
      50      55      60
Pro Trp Gln Cys Asp Glu Arg Thr Tyr Arg Phe Gly Ser Val Gly Asp
      65      70      75      80
Asp Cys Arg Leu Leu Trp Asp Phe Ser Val Gly Met Leu His Arg
      85      90      95
Pro Lys Val Val Arg Ile Pro Leu
      100

```

&lt;210&gt; 40985

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40985

```

Thr Pro Gln Val Tyr Thr Glu Ile Ser Ile Phe Arg Thr Leu Thr Asp

```

## 18028

```

1           5           10           15
Lys Val Asn Glu Met Thr Lys Gly Ser Gly Pro Arg Asn Thr Ala Tyr
      20           25           30
Arg Asp Ser Asp His Glu Gln Leu Ile Gly Ser Lys Ile Leu Ile Tyr
      35           40           45
Ile Asn Gly Val Thr Ile Thr Ile Thr Leu Ala Trp Leu Asp Phe Leu
      50           55           60
Leu Pro Glu Leu His Ala Thr Gln Arg Phe Val Met Phe Phe Phe Phe
65           70           75           80
Phe Phe Phe Phe Phe Phe Phe Phe Phe Leu Ala
      85           90

```

&lt;210&gt; 40986

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40986

```

Lys Asn Asp Phe Pro Leu Gly Thr Tyr Glu Leu Lys Asp Asp Leu His
1           5           10           15
Leu Ala Thr Pro Pro Pro His Pro Ser Glu Ala Pro Ile Ile Asn Pro
      20           25           30
Asn Pro Leu Ala Thr Val Pro Thr Pro Pro Thr Ser Gly Val Lys Val
      35           40           45
Ser Leu Val Cys Val Ser Pro Arg Ser Arg Thr Pro Ser Phe Ile Ser
      50           55           60
Lys Gln Ile Val Thr Ala Pro Pro Phe Gly Asp Gly Asn Pro Ala Leu
65           70           75           80
Val Pro Ala Pro Val Lys Asp Gly Leu Lys Arg Arg Lys Pro Lys Asn
      85           90           95
Asn Ile Ile Lys Ser Ser Ser Ser Phe Val Ser Arg Val Ile Thr His
      100           105           110
Glu Val Ala Thr Lys Arg Leu Ser Glu Arg Ser Pro Glu Gly Leu Phe
      115           120           125
Ala Phe Ala Asn Ile Asn Arg Ala Phe Gln Trp Leu Asp Leu Ser Ser
      130           135           140
Lys Gln Lys Glu Asp Pro Leu Ala Lys Ile Leu Phe Thr Lys Ala His
145           150           155           160
Met Leu Cys His Asp Ile Asn Glu Val Thr Lys Ser Pro Ser His Ile
      165           170           175
Asp Val Val Met Gly Ser Ser Ala Gly Asp Ile Ile Trp Tyr Glu Pro
      180           185           190
Ile Ser Gln Lys Tyr Ala Arg Ile Asn Lys Asn Gly Val Val Cys Asn
      195           200           205
Ser Pro Val Thr His Ile Lys Trp Ile Pro Gly Ser Glu Asn Leu Phe
      210           215           220
Met Ala Ser His Ala Asn Gly Gln Leu Val Val Tyr Asp Lys Glu Lys
225           230           235           240
Glu Asp Ala Leu Phe Thr Pro Glu Ile Gln Asn Gln Ser Ala Glu Ala
      245           250           255
Val Lys Ala Ser Thr Gln Pro Leu Gln Val Leu Lys Ser Val Asn
      260           265           270
Ser Arg Asn Gln Lys Thr Asn Pro Val Ala Leu Trp Lys Leu Ala Asn
      275           280           285
Gln Arg Ile Ser His Phe Ala Phe Ser Pro Asp Gln Arg His Leu Ala
290           295           300

```

Val Val Leu Glu Asp Gly Ser Leu Arg Val Met Asp Tyr Leu Lys Glu  
 305 310 315 320  
 Glu

<210> 40987

<211> 426

<212> PRT

<213> A.fumigatus

<400> 40987

Glu Leu Glu Lys Glu Tyr Cys Pro Pro Leu Asp Ser Ala Leu Phe Thr  
 1 5 10 15  
 Ala Ile Val Cys Asp Tyr Asp Leu Glu Asn Pro Ala Gln Val Gln Gln  
 20 25 30  
 Leu Arg Asp Thr Leu Asp Thr Leu Lys Leu Ser Ala Trp Glu Gln Glu  
 35 40 45  
 Asp Leu Pro Phe Asp Pro Ser Gly Thr Ser Gly Leu Ser Pro Gly Ala  
 50 55 60  
 Ser Gly Asp Ala Asp Gly Ile Leu Ser Glu Pro Ser Gly Ser Gln Asn  
 65 70 75 80  
 Gly Thr Ala Pro Ser Arg Glu Thr Asp Ile Thr Ser Leu Ala Ser Asp  
 85 90 95  
 Phe Ser Ser Val Gly Leu Asp Asp Arg Arg Thr Arg Ser Gln Gly Asn  
 100 105 110  
 Ser Asn Ser Leu Arg Tyr Thr Ile Asn Pro Asp Gly Ser Leu Ser Leu  
 115 120 125  
 Ser Gly Ala Ser Glu Asn Asp Lys Val Cys Tyr Leu Thr Asp Met Phe  
 130 135 140  
 Pro Ser Leu Asp Arg Phe Thr Val Gln His Ser Leu Arg Lys Ser Asp  
 145 150 155 160  
 Gly Asp Ile Asp Arg Ala Met Asp Val Leu Leu Asn Ile Ala Phe Phe  
 165 170 175  
 Asp Glu Gln Gln Glu Asp Glu Asp Gly Thr Lys Leu Ala Ile Pro Lys  
 180 185 190  
 Gly Ile Asp Gly Phe Glu Glu Cys Ser Thr Gly Gly Thr Gly Arg Lys  
 195 200 205  
 Lys Asn Arg Lys Arg Lys Gly Lys Asn Lys Asn Asp Pro Val Arg Gly  
 210 215 220  
 Leu Ser Ser Pro Ala Ala Ser Gly Tyr Leu Gln Asp Glu Asn Ile Pro  
 225 230 235 240  
 Leu Asn Lys Trp Asp Ala Gly Gln Lys Asp Ile Glu Phe Ile Cys Ser  
 245 250 255  
 Arg Thr Leu Pro Val Leu Lys Lys Glu Ala Val Thr Ser Ala Tyr His  
 260 265 270  
 Ala Asn Gly Ala Ser Leu Pro Leu Thr Ile Arg Ser Leu Ala Met Ala  
 275 280 285  
 His Ala Pro Glu Glu Lys His Ile Asn Gly His Pro Val Met Leu Ala  
 290 295 300  
 Gln Val Ala Glu Leu Thr Gln Glu Phe Pro Ser Val Ala Pro Ile Leu  
 305 310 315 320  
 Leu Gly Gly Leu Leu Asn Ile Thr Arg Asn Ser Thr Ser Ala Ala Gly  
 325 330 335  
 Glu Leu Ala Val Ala Met Leu Thr Arg Pro Ala Ala Pro Ser Val Ser  
 340 345 350  
 Asn Leu Ile Lys Ile Thr Thr Ala Pro Pro Pro Leu Asp Leu Asp Asp

## 18030

```

      355              360              365
Asp Glu Pro Lys Arg Pro Pro Val Glu Ser Arg Val Leu Arg Lys Tyr
      370              375              380
Gly Thr Ala Pro Val Thr Ala Gly Asp His Phe Val Ala Ser Ala Glu
385              390              395              400
Ala Phe His Lys Ala Ser Ala Ala Tyr Arg Arg Gly Lys Ser Asp Lys
      405              410              415
Leu Met Gly Gly Ala Ala Ala Tyr Tyr Ser
      420              425

```

<210> 40988  
 <211> 107  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40988
Ala Asp Ser Glu Ser Lys Glu Thr Ala Ile Arg Ser Thr Ser Ser Ala
1              5              10              15
Arg Asp Pro Arg Thr Arg Gly Ser Trp Pro Asn Leu Pro Ser Ser Thr
      20              25              30
Ser Gln Thr Ser Arg Leu Cys Gln Arg Leu Leu Pro Pro Val Arg Phe
      35              40              45
Tyr Ile Lys Asn Ser Ala Ser Cys Val Leu Thr Asn Phe Pro Ser Ala
      50              55              60
Glu Ser Gln Thr Ala Thr Ala Thr Ala Ser Ala Thr Ala Thr Ala Thr
65              70              75              80
Ala Thr Thr Asn Ala Ala Ala Ser Leu Ile Ala Pro Ala Ala Val Gly
      85              90              95
Ser Phe Ile Trp Gly Leu Leu Val Met Val Val
      100              105

```

<210> 40989  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

```

<400> 40989
Ala Ala Ser Asp Gly Thr Leu Val Arg His Asn Ile His Leu Tyr Ile
1              5              10              15
Leu Leu Leu Ala Thr Ala Leu Arg Ile Leu Lys Ser Cys His Arg His
      20              25              30
Tyr Ile Ser Gln Lys Met Thr Gly Lys Lys Gln Thr Gln Val Pro Gly
      35              40              45
His Arg Ser Val Asn Ala Arg Asn Ser Thr Leu Ser Phe Ala Tyr Ile
      50              55              60
Asp Lys Thr Thr Gly Ile Leu Ala Leu Pro Met Thr Cys Leu Ala Ser
65              70              75              80
Leu Ser

```

<210> 40990  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 40990



## 18031

Leu Arg Ile Lys Arg Asn Gly Tyr Gln Val Asn Phe Val Ser Thr Gly  
 1 5 10 15  
 Pro Thr Asn Thr Gly Ile Leu Ala Gln Ser Pro Gln Phe Asn Val Thr  
 20 25 30  
 Asp Val Lys Thr Val Pro Lys Thr Thr Ser Thr Gly Glu Ile Leu His  
 35 40 45  
 Gln Lys Phe Cys Ile Met Arg Ser Asn Lys Phe Ser Leu Cys Arg Glu  
 50 55 60  
 Pro Asn Arg His Arg Asp Cys Phe Arg Tyr Arg His Arg Tyr Arg Asp  
 65 70 75 80  
 Asp

&lt;210&gt; 40991

&lt;211&gt; 307

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40991

Val Met Ala Asp Val Ser Gly Asn Met Leu Lys Arg Pro Arg Pro Glu  
 1 5 10 15  
 Asp Glu Asp Asp Asn Ala Gln Lys Arg Thr Arg Ser Asn Asn Gly Ser  
 20 25 30  
 Pro Leu Pro Ala Gln Gly Gly Asn Ala Pro Ala Gly Lys Val Asp Ile  
 35 40 45  
 Glu Lys Met Val Ala Glu Ala Arg Ala Lys Ala Glu Ala Val Arg Ala  
 50 55 60  
 Arg Leu Gln Ala Ala Arg Gly Gly Ala Pro Ala Phe Thr Pro Ala Ala  
 65 70 75 80  
 Pro Ser Pro Ser Pro Thr Pro Pro Pro Ala Thr Ser Ala Met Ser Lys  
 85 90 95  
 Leu Glu Gln Met Lys Ala Arg Val Ala Ala Thr Gly Arg Ala Asn  
 100 105 110  
 Ala Thr Ala Gln Gln Arg Ile Pro Val Pro Pro Pro Pro Pro Pro  
 115 120 125  
 Phe Asp Asp Asp Gly Ser Ser Arg Ala Arg Gly Gly Leu Asp Val  
 130 135 140  
 Gly Leu His Pro Ala Leu Leu Ser Asp Thr Thr Asp Phe Arg Ser Gly  
 145 150 155 160  
 Lys Gly Arg Gln Ser Ala Gln Ser Lys Ile Gly Thr Gly His Arg Thr  
 165 170 175  
 Asp Ser Pro Leu Pro Gly Thr Lys Asp Arg Ala Gly Leu Asp Leu Ser  
 180 185 190  
 Gly Pro Ser Leu Glu Glu Ile Lys Ser Asn Pro Tyr Phe Asp Pro Ser  
 195 200 205  
 Leu Gly Pro Lys Ala Thr Ile Ala Lys Pro Arg Gln Ser Arg Gln Leu  
 210 215 220  
 Ile Phe Asn Gln Lys Gly Lys Tyr Ile Gln Gln Ala Ala Ala Leu Arg  
 225 230 235 240  
 Arg Gln Ala Gln Leu Glu Asp Met Lys Arg Arg Ile Ala Glu Arg Ala  
 245 250 255  
 Arg Gln Ala Gly Ile Asp Glu Asp Leu Asp Val Glu Lys Ala Phe Leu  
 260 265 270  
 Val Pro Ala Pro Pro Ala Ile Glu Trp Trp Asp Glu Gly Leu Val Asn  
 275 280 285  
 Gly Asn Asp Tyr Ser Ala Ile Asp Asp Glu Arg Asn Leu Lys Ile Asp

## 18032

290  
Thr Pro Asp  
305

295

300

<210> 40992  
<211> 256  
<212> PRT  
<213> A.fumigatus

<400> 40992  
Ser Cys Pro Trp Trp Phe Ile Arg Ser Gly Ser Gly Cys Leu Gly Arg  
1 5 10 15  
Ser Cys Val Ser Pro Thr Leu Met Leu Cys Val Phe Leu Arg Gln Leu  
20 25 30  
Ser Leu Val Ile Ala Tyr Phe Gly Pro Phe Trp Leu Thr Ala Phe Ser  
35 40 45  
Cys Thr Thr Cys Arg Gln Asn Ser Trp Ser Cys Thr Gly His Pro Gly  
50 55 60  
His Ile Glu Leu Pro Val Arg Val Tyr Asn Val Thr Phe Phe Asp Gln  
65 70 75 80  
Leu Tyr Arg Leu Leu Arg Ala Gln Cys Val Tyr Cys His Arg Phe Gln  
85 90 95  
Met Ala Arg Val Gln Ile Asn Ala Tyr Val Cys Lys Leu Arg Leu Leu  
100 105 110  
Gln Tyr Gly Leu Val Asp Glu Val Glu Ala Ile Glu Ala Met Gly Thr  
115 120 125  
Gly Gln Gly Asn Lys Lys Lys Ser Ala Lys Asp Ala Asp Asp Ser Gly  
130 135 140  
Ser Glu Glu Glu Asp Asp Asp Asp Leu Val Ala Arg Arg Asn Ala Tyr  
145 150 155 160  
Val Lys Lys Val Ile Arg Glu Ala His Ala Ala Gly Arg Leu Lys Gly  
165 170 175  
Ile Met Ser Gly Ala Lys Asn Pro Met Ala Ala Glu Gln Arg Arg Thr  
180 185 190  
Leu Val Lys Gln Phe Phe Lys Asp Leu Val Ser Ile Lys Lys Cys Ser  
195 200 205  
Ser Cys Ser Gly Tyr Val Met Ser Leu Ser Leu Ser Pro Cys Tyr Phe  
210 215 220  
Tyr Arg Leu Leu Thr Met Cys Lys Glu Phe His Leu Val Thr Gly Glu  
225 230 235 240  
Ile Val Ser Arg Arg Phe Ser Gly Ser Leu Cys Leu Arg Ser Leu Asp  
245 250 255

<210> 40993  
<211> 223  
<212> PRT  
<213> A.fumigatus

<400> 40993  
Gln Lys Leu Gln Tyr Glu Asp Thr Asn Pro Asp Lys Leu Leu Arg Asp  
1 5 10 15  
Lys Lys Lys Asn Ile Asp Gly Leu Ile Ser Lys Lys Ala Phe Asn Thr  
20 25 30  
Leu Met Asn Met Lys Tyr Leu Lys Ser Val Val Asp Pro Gly Glu Ala  
35 40 45  
Val Gly Ile Val Ala Ser Gln Ser Ile Gly Glu Pro Ser Thr Gln Met

## 18033

```

      50              55              60
Thr Leu Asn Thr Phe His Leu Ala Gly His Ser Ala Lys Asn Val Thr
65              70              75              80
Leu Gly Ile Pro Arg Leu Arg Glu Ile Val Met Thr Ala Ser Ala His
      85              90              95
Ile Met Thr Pro Thr Met Thr Leu Ile Leu Asn Glu Glu Leu Ser Lys
      100             105             110
Glu His Ser Glu Arg Phe Ala Lys Ala Ile Ser Lys Leu Ser Ile Ala
      115             120             125
Glu Val Ile Asp Lys Val Lys Val Lys Glu Arg Ile Ala Thr Ala Gly
      130             135             140
Ser Arg Phe Lys Val Tyr Asp Val Glu Ile Ala Leu Phe Pro Ala Glu
145             150             155             160
Glu Tyr Thr Lys Glu Tyr Ala Ile Thr Thr Lys Asp Val Gln Asn Thr
      165             170             175
Leu Gln Asn Lys Phe Ile Pro Lys Leu Val Lys Leu Thr Arg Ala Glu
      180             185             190
Leu Lys Arg Arg Asn Asp Glu Lys Ser Leu Lys Ser Phe Ser Thr Ala
      195             200             205
Gln Pro Glu Ile Gly Val Ser Val Gly Val Ile Glu Glu Gly Pro
      210             215             220

```

&lt;210&gt; 40994

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40994

```

Arg Thr Ala Glu Lys Ser Ser Trp Val Asn Phe Phe Ala Ala Ser Pro
1              5              10              15
Pro Asn Glu Ser Arg His Leu Phe Leu Gln Ala Ser Ser Gln Arg Lys
      20              25              30
Ser His Cys Gln Arg Phe Leu Ser Leu Lys Glu Leu Gln Val Ile Met
      35              40              45
Ala Thr Phe Ala Arg Pro Val Ala Ser Ser Ile Ser Gly Ile Glu Phe
      50              55              60
Gly Val Tyr Ser Asp Glu Asp Ile Lys Ser Ile Ser Val Lys Arg Ile
      65              70              75              80
His Asn Thr Pro Thr Leu Asp Ser Phe Asn Asn Pro Val Pro Gly Gly
      85              90              95
Leu Tyr Asp Pro Ala Leu Gly Ala Trp Gly Asp His Val
      100             105

```

&lt;210&gt; 40995

&lt;211&gt; 980

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 40995

```

His Gln Lys Met Gln Gln Leu Gln Arg Val Cys Tyr Val Val Ile Thr
1              5              10              15
Leu Pro Met Leu Phe Leu Ser Phe Ala Asp Asp Val Gln Arg Ile Ser
      20              25              30
Pro Ser Tyr Arg Arg Asp Arg Phe Ser Lys Ile Phe Arg Lys Pro Leu
      35              40              45
Pro Glu Lys Ser Arg Leu Ala Met Val Gln Ala Gly Phe Gln Ala Pro

```

50		55		60
Asn Ser Leu Ile Leu Leu Gln Gln Ala Lys Lys Phe Asp Met Lys Thr				
65		70		80
Lys Glu Ser Met Ala Asn Ser Ile Ser Asp Thr Ala Asn Ala Val Ser				
	85		90	95
Glu Ser His Gly Ala Glu Glu Glu Val Ala Arg Gly Asn Ala Val Val				
	100		105	110
Ala Gln Ala Glu Ser Lys Lys Ser Ala Ala Gly Asp Ala Gly Gln Tyr				
	115		120	125
Met Pro Ser Pro Glu Val His Ala Ala Met Val Leu Leu Phe Glu Lys				
	130		135	140
Glu Lys Glu Ile Leu Ser Leu Ile Tyr Asn Ser Arg Pro Leu Pro Lys				
145		150		160
Lys Glu Ala Lys Val Ser Pro Asp Met Phe Phe Ile Lys Asn Ile Leu				
	165		170	175
Val Pro Pro Asn Lys Tyr Arg Pro Ala Ala Pro Gln Gly Pro Gly Glu				
	180		185	190
Ile Met Glu Ala Gln Gln Asn Thr Pro Phe Thr Gln Ile Leu Lys Asn				
	195		200	205
Cys Asp Ile Ile Asn Gln Ile Ser Lys Glu Arg Gln Asn Ala Gly Ala				
	210		215	220
Asp Ser Val Thr Arg Met Arg Asp Tyr Arg Asp Leu Leu His Ala Ile				
225		230		240
Val Gln Leu Gln Asp Thr Val Asn Gly Leu Ile Asp Lys Glu Arg Gly				
	245		250	255
Ala Ser Gly Pro Ala Ala Gly Gln Ala Ala Asn Gly Val Lys Gln Ile				
	260		265	270
Leu Glu Lys Lys Glu Gly Leu Phe Arg Lys Asn Met Met Gly Lys Arg				
	275		280	285
Val Asn Phe Ala Ala Arg Ser Val Ile Ser Pro Asp Pro Asn Ile Glu				
	290		295	300
Thr Asn Glu Ile Gly Val Pro Leu Val Phe Ala Lys Lys Leu Thr Tyr				
305		310		320
Pro Glu Pro Val Thr Asn His Asn Phe Trp Glu Met Lys Gln Ala Val				
	325		330	335
Ile Asn Gly Pro Asp Lys Tyr Pro Gly Ala Thr Ala Ile Glu Asn Glu				
	340		345	350
Leu Gly Gln Val Thr Asn Leu Lys Phe Lys Ser Leu Asp Glu Arg Thr				
	355		360	365
Ala Leu Ala Asn Gln Leu Leu Ala Pro Ser Asn Trp Arg Met Lys Gly				
	370		375	380
Ala Arg Asn Lys Lys Val Tyr Arg His Leu Thr Thr Gly Asp Val Val				
385		390		400
Leu Met Asn Arg Gln Pro Thr Leu His Lys Pro Ser Ile Met Gly His				
	405		410	415
Lys Ala Arg Val Leu Ala Asn Glu Arg Val Ile Arg Met His Tyr Ala				
	420		425	430
Asn Cys Asn Thr Tyr Asn Ala Asp Phe Asp Gly Asp Glu Met Asn Met				
	435		440	445
His Phe Pro Gln Asn Glu Leu Ala Arg Ala Glu Ala Met Met Leu Ala				
	450		455	460
Asp Ala Asp His Gln Tyr Leu Val Ala Thr Ser Gly Lys Pro Leu Arg				
465		470		480
Gly Leu Ile Gln Asp His Ile Ser Met Gly Thr Trp Phe Thr Cys Arg				
	485		490	495
Asp Thr Phe Phe Asp Glu Glu Asp Tyr His Glu Leu Leu Tyr Ser Cys				

	500		505		510
Leu Arg Pro Glu Asn Ser His Thr Val Thr Glu Arg Ile Gln Leu Val					
515			520		525
Glu Pro Thr Leu Leu Lys Pro Lys Arg Leu Trp Thr Gly Lys Gln Val					
530			535		540
Ile Thr Thr Ile Leu Lys Asn Ile Met Pro Pro Gly Arg Ala Gly Leu					
545			550		555
Asn Leu Lys Ser Lys Ser Ser Thr Pro Gly Asp Arg Trp Gly Glu Gly					
565			570		575
Asn Glu Glu Gly Thr Val Ile Phe Lys Asp Gly Glu Met Leu Cys Gly					
580			585		590
Ile Leu Asp Lys Lys Gln Ile Gly Pro Thr Ala Gly Gly Leu Ile Asp					
595			600		605
Ala Ile His Glu Val Tyr Gly His Thr Ile Ala Gly Arg Leu Ile Ser					
610			615		620
Ile Leu Gly Arg Leu Leu Thr Arg Tyr Leu Asn Met Arg Ala Phe Thr					
625			630		635
Cys Gly Ile Asp Asp Leu Arg Leu Thr Lys Glu Gly Asp Arg Leu Arg					
645			650		655
Lys Glu Lys Leu Ser Gln Ala Ala Ser Ile Gly Arg Glu Val Ala Leu					
660			665		670
Lys Tyr Val Thr Leu Asp Gln Thr Thr Val Pro Asp Gln Asp Ala Glu					
675			680		685
Leu Arg Arg Arg Leu Glu Asp Val Leu Arg Asp Asp Asp Lys Gln Ser					
690			695		700
Gly Leu Asp Ser Val Ser Asn Ala Arg Thr Ala Lys Leu Ser Thr Glu					
705			710		715
Ile Thr Gln Ala Cys Leu Pro Lys Gly Leu Ala Lys Pro Phe Pro Trp					
725			730		735
Asn Gln Met Gln Ser Met Thr Ile Ser Gly Ala Lys Gly Ser Ser Val					
740			745		750
Asn Ala Asn Leu Ile Ser Cys Asn Leu Gly Gln Gln Val Leu Glu Gly					
755			760		765
Arg Arg Val Pro Val Met Ile Ser Gly Lys Thr Leu Pro Ser Phe Arg					
770			775		780
Ala Phe Asp Thr His Pro Met Ala Gly Gly Tyr Val Cys Gly Arg Phe					
785			790		795
Leu Thr Gly Ile Lys Pro Gln Glu Tyr Tyr Phe His Ala Met Ala Gly					
805			810		815
Arg Glu Gly Leu Ile Asp Thr Ala Val Lys Thr Ser Arg Ser Gly Tyr					
820			825		830
Leu Gln Arg Cys Leu Ile Lys Gly Met Glu Gly Leu Arg Ala Glu Tyr					
835			840		845
Asp Thr Ser Val Arg Glu Ser Ser Asp Gly Ser Ile Val Gln Phe Leu					
850			855		860
Tyr Gly Glu Asp Gly Leu Asp Ile Thr Lys Gln Val His Leu Lys Asp					
865			870		875
Phe Asp Phe Leu Thr Ser Asn Tyr Val Ser Ile Met Gln Ser Val Asn					
885			890		895
Leu Thr Ser Asp Phe His Asn Leu Glu Lys Asp Glu Val Thr Ala Trp					
900			905		910
His Lys Asp Ala Met Lys Lys Val Arg Lys Thr Gly Lys Val Asp Ala					
915			920		925
Met Asp Pro Val Leu Ser Val Tyr His Pro Gly Gly Asn Leu Gly Ser					
930			935		940
Thr Ser Glu Ala Phe Ser Gln Ala Leu Lys Lys Val Trp Asp Ile Cys					



165

<210> 40998  
 <211> 105  
 <212> PRT  
 <213> A.fumigatus

<400> 40998  
 Pro His Gln Tyr Leu Leu Tyr Trp Ala Ala Val Asn Pro Thr Glu Ala  
 1 5 10 15  
 Leu Thr Tyr Phe Leu Pro Ala Tyr Gly Asn His Pro Phe Val Leu Gln  
 20 25 30  
 Tyr Ala Met Arg Ala Leu Glu Ser His Pro Ile Asp Val Arg Phe Tyr  
 35 40 45  
 Phe Val Pro Gln Leu Val Gln Ala Leu Arg Tyr Asp Ala Leu Gly Tyr  
 50 55 60  
 Val Glu Arg Tyr Ile Leu Glu Thr Ala Lys Gln Ser Gln Leu Phe Ala  
 65 70 75 80  
 His Gln Val Ile Trp Asn Met Lys Ala Asn Ser Tyr Lys Asp Glu Asp  
 85 90 95  
 Ser Gln Ile Val Arg Tyr Asp His Pro  
 100 105

<210> 40999  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 40999  
 Lys Phe Ile Ser Ser Glu Pro Ser Ile Gly Arg Met Gly Pro Glu Leu  
 1 5 10 15  
 Val Arg Leu His Thr Val Asp Leu Arg Gln Ala Thr Ser Leu Arg Ile  
 20 25 30  
 Phe Ala Phe Gln Thr Tyr Ser Val Tyr Leu Ser Val Trp Asn Pro Ala  
 35 40 45  
 Ser Leu Gln Val Tyr Tyr Ser Thr Phe Lys Arg His Lys Ser Thr Asp  
 50 55 60  
 Ala Leu  
 65

<210> 41000  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 41000  
 Phe Gly Ala Leu Ile Gly Gln Leu Gly Asp Asn Arg Arg Tyr Thr Phe  
 1 5 10 15  
 Ser Ile Val Gly Ser Gly Leu Ile Val Ser Leu Val Arg Thr Asp Lys  
 20 25 30  
 Ser Ser Tyr Val Arg Val Gln Gly Ile Leu Asp Asp Lys His Val Asp  
 35 40 45  
 Ser Cys Pro Leu Ala Leu Cys Gln Glu Leu Tyr Trp Pro Gly His Trp  
 50 55 60  
 Gln Ile Glu Ser Val Glu Lys Trp Ser Ile Ala Phe Arg Cys Val Asn  
 65 70 75 80

## 18038

Leu Gln Val Gly Leu Ile Ile Glu Ile Ser Ser Pro Ala Pro Lys Trp  
                   85                  90                  95

<210> 41001  
 <211> 132  
 <212> PRT  
 <213> A.fumigatus

<400> 41001  
 Gly Val Pro Gln Asn Arg Arg Val Ile Leu Glu Glu Leu Ser Glu Ser  
 1                  5                  10                  15  
 Arg Ile Cys Ser Arg Gln Arg Val Arg Leu Asn Gly Asn Gly Ile Ala  
                   20                  25                  30  
 Arg Ser Arg Arg Phe Arg Asp Leu Val Cys Arg Ala Gly Ser Ser Ser  
                   35                  40                  45  
 Val Ser Cys Tyr Lys Pro Tyr Ser Lys Leu Thr Gly Ala Asn Tyr Phe  
                   50                  55                  60  
 Phe Tyr Tyr Gly Thr Val Ser Asn Gly Ala Gly Ile Arg Val Thr  
 65                  70                  75                  80  
 Tyr Val Thr Gln Met Ile Val Gly Gly Val Ser Leu Gly Thr Thr Phe  
                   85                  90                  95  
 Gly Gly Leu Tyr Val Ile Glu His Tyr Gly Arg Arg Lys Leu Leu Ile  
                   100                  105                  110  
 Thr Arg Gly Val Trp Met Phe Val Cys Phe Met Gly Phe Ala Thr Val  
                   115                  120                  125  
 Gly Asn Phe Ser  
                   130

<210> 41002  
 <211> 110  
 <212> PRT  
 <213> A.fumigatus

<400> 41002  
 Val Ala Glu Leu Tyr Pro Ser Arg Tyr Arg Ala Lys Ala Met Ala Leu  
 1                  5                  10                  15  
 Ala Thr Ala Ser Asn Trp Leu Trp Asn Phe Leu Ile Asp Phe Phe Thr  
                   20                  25                  30  
 Pro Val Ile Thr Gly Asp Ile His Phe Ala Tyr Gly Cys Val Ser Ala  
                   35                  40                  45  
 Gly Ser Leu Phe Ala Gly Val Val Ile Val Cys Phe Cys Val Leu Glu  
                   50                  55                  60  
 Asp Arg Gly Gln Thr Leu Glu Glu Met Asp Met Met Tyr Val Arg Ser  
 65                  70                  75                  80  
 Ala Cys Pro Gly Met Gly Glu Ala Glu Asn Gly Tyr Leu Gln Pro Gln  
                   85                  90                  95  
 Ser Thr Gly Leu Leu Arg Arg Lys Leu Trp Thr Gly Gly Gln  
                   100                  105                  110

<210> 41003  
 <211> 437  
 <212> PRT  
 <213> A.fumigatus

<400> 41003  
 Gln Pro Asp Pro Leu Lys Pro Thr Leu Asp Arg Phe Met Asp Thr Leu



## 18039

1 5 10 15  
 Ile Ser Ser Phe Ser Asp Glu Glu Arg Asp Phe Tyr Glu Arg Glu Phe  
 20 25 30  
 Ser Phe Phe Asn Asp Ile Thr Gly Ile Ser Gly Lys Leu Arg Pro Tyr  
 35 40 45  
 Ile Lys Lys Ser Lys Pro Glu Lys Lys Ala Lys Ile Glu Glu Glu Leu  
 50 55 60  
 Arg Lys Ile Lys Val Glu Ile Gly Val Tyr Leu Pro Ser Asn Pro Asp  
 65 70 75 80  
 Gly Val Val Val Gly Ile Asp Arg Lys Ser Gly Lys Pro Leu Gln Ser  
 85 90 95  
 His Ala Lys Ala Pro Tyr Met Ala Thr Phe Arg Ile Gln Lys Thr Arg  
 100 105 110  
 Thr Arg Gly Asp Glu Arg Glu Ser Gln Gly Gln Ser Arg Ser Ser Thr  
 115 120 125  
 Ala Gly His Asp Ala Ser Thr Lys Thr Leu Ser Ala Pro Leu His Ser  
 130 135 140  
 Pro Ser Ser Gln Glu Thr Tyr Glu Val Trp Gln Ser Ala Ile Phe Lys  
 145 150 155 160  
 Val Gly Asp Asp Cys Arg Gln Asp Met Leu Ala Leu Gln Met Ile Ala  
 165 170 175  
 Ala Phe Arg Ser Ile Phe Ala Ser Ala Gly Leu Asp Val Trp Val Phe  
 180 185 190  
 Pro Tyr Arg Val Thr Ser Thr Ala Pro Gly Cys Gly Val Ile Asp Val  
 195 200 205  
 Leu Pro Asn Ser Ile Ser Arg Asp Met Leu Gly Arg Glu Ala Val Asn  
 210 215 220  
 Gly Leu Tyr Asp Tyr Phe Ile Ser Lys Tyr Gly Gly Glu His Ser Met  
 225 230 235 240  
 Arg Phe Gln Glu Ala Arg Thr Asn Phe Val Lys Ser Met Ala Ala Tyr  
 245 250 255  
 Ser Val Ile Ser Tyr Leu Leu Gln Phe Lys Asp Arg His Asn Gly Asn  
 260 265 270  
 Ile Met Ile Asp Asp Ala Gly His Ile Ile His Ile Asp Phe Gly Phe  
 275 280 285  
 Cys Phe Asp Ile Ala Pro Gly Gly Val Arg Phe Glu Arg Ala Pro Phe  
 290 295 300  
 Lys Leu Thr Ser Glu Met Val Ala Val Met Ser Gly Thr Ser His Pro  
 305 310 315 320  
 His Ile His Ser His Ser Gly Ser Asn Gly Gly Leu Gly Leu Pro Gly  
 325 330 335  
 Gly His Ser Asn Asn Pro Thr Ser Thr Gln Pro Tyr Arg Trp Phe Glu  
 340 345 350  
 Ser Leu Val Ile Lys Ala Phe Leu Ala Ser Arg Pro Phe Cys Thr Lys  
 355 360 365  
 Leu Ser His Ile Val Ser Leu Met Leu Asp Ser Gly Leu Pro Cys Phe  
 370 375 380  
 Lys Pro Asp Thr Leu Lys Asn Phe Arg Asp Arg Phe Val Leu Glu Lys  
 385 390 395 400  
 Asn Glu Arg Glu Ala Glu Tyr Met Arg Glu Leu Ile Arg Lys Ser  
 405 410 415  
 Tyr Met Ser Val Ser Thr Lys Gly Tyr Asp Gln Phe Gln Leu Leu Thr  
 420 425 430  
 Asn Gly Ile Pro Tyr  
 435

<210> 41004  
 <211> 303  
 <212> PRT  
 <213> A.fumigatus

<400> 41004  
 Asp Cys Leu Tyr Ile Ser Ser Trp Ile Gly Cys Leu Gln Phe Thr Lys  
 1 5 10 15  
 Met Gly Ala Gly Ala Ser Thr Pro Ser Val Pro Pro Thr Asp Ser Ala  
 20 25 30  
 Pro Ala Val Thr Cys Pro Val Asp His Lys Thr Arg Glu Val Trp Leu  
 35 40 45  
 Gln Gln His Lys Ala Ser Gly Gly Ala Pro His Pro Leu Pro Gly Glu  
 50 55 60  
 Glu Glu Lys Thr Lys Pro Lys Leu Gln Arg Pro Leu Ser Thr Asp Arg  
 65 70 75 80  
 Glu Val Ser Ser Ile Pro Arg Ala Phe Asp Ala Ser Ser Ser Ala Ser  
 85 90 95  
 Ser Ser Gln Ala Pro Ala Ala Cys Pro Ser Pro Tyr Ala Ala Ser His  
 100 105 110  
 Gly Thr Pro Ser Asn Ala Glu Ala Glu Thr Gly His Asp Gln Asn Thr  
 115 120 125  
 Gly Asn Trp Ile Tyr Pro Ser Glu Arg Gln Phe Phe Glu Ala Leu Val  
 130 135 140  
 Arg Lys Gly Asn Thr Pro Ala Thr Thr Ser Ser Ala Ser Glu Leu Ala  
 145 150 155 160  
 Thr Thr Val Ala Ser Ile Ile Pro Ile His Asn Ala Val Asn Glu Arg  
 165 170 175  
 Ala Trp Lys Gln Ile Leu Glu Trp Glu Ser Leu Ala Pro Ser Ser Asp  
 180 185 190  
 Pro Gly Ser Lys Lys Cys Gly Gly Pro Lys Leu Tyr Ser Phe Arg Gly  
 195 200 205  
 Leu Gly Val Asp Pro Gln Phe Leu Ser Pro Arg Ala Arg Phe Asn Ser  
 210 215 220  
 Leu Leu Gly Tyr Gln Lys Pro Phe Asp Arg His Asp Trp Val Val Glu  
 225 230 235 240  
 Arg Cys Asp Gly Glu Arg Val Glu Tyr Val Ile Asp Phe Tyr Gln Gly  
 245 250 255  
 Lys Ser Ser Gly Thr Asp Gly Ala Ala Ala Gly Leu Thr Ala Asn Ala  
 260 265 270  
 Gly Pro Gly Lys Leu Ser Phe Tyr Leu Asp Val Arg Pro Lys Leu Asn  
 275 280 285  
 Thr Phe Glu Gly Trp Arg Met Arg Phe Arg Arg Phe Thr Gly Leu  
 290 295 300

<210> 41005  
 <211> 517  
 <212> PRT  
 <213> A.fumigatus

<400> 41005  
 Arg Gly Ile Arg Pro His Glu Arg Pro Thr Leu Asn Glu Arg Pro Ile  
 1 5 10 15  
 Tyr Leu His Thr Tyr His Val Leu Leu Ala Thr Ala Gln Ser Ile Val  
 20 25 30  
 His Leu Tyr Tyr Asp Tyr Asp Arg Val Pro Ile Pro Val Val Arg Pro

35	40	45
Asp Ser Gly Ala Ser Asp Arg Arg Thr His Pro Leu Glu Pro Val Ser		
50	55	60
Lys Arg Ile Gln Trp Ala Leu Pro Arg Met Ile Arg Gly Gly Leu Ala		
65	70	75
Arg Ser Ala Leu Val Ala Ala Ile Cys Pro Phe Ala Tyr Val Leu Leu		80
85	90	95
Leu Arg Arg Pro Ala Trp Ser Phe Thr Leu Tyr Phe Ala Lys Leu Phe		
100	105	110
Trp Asn Phe Pro Arg Ser Ala Ala Asp Pro Pro Gly Val Ile Pro Asp		
115	120	125
Leu Gly Phe Gly Leu Leu Ile Arg Thr Ala Ile Ser Gly Ala Leu Leu		
130	135	140
Thr Phe Cys Trp Gln Phe Ala Asn Leu Phe Phe Ser Met Phe Ile Ser		
145	150	155
Lys Glu Pro Leu Lys Leu Gly Gln Pro Leu Thr Ala Glu Ala Lys Asp		160
165	170	175
Pro Asn Gly Ser Leu Leu Thr Gly Leu Lys Ala Lys Lys Glu Thr Val		
180	185	190
Lys Ala Phe Ala Phe Trp Glu Leu Cys Leu Ile Ser Gln Gln Phe Pro		
195	200	205
Asp Arg Arg Lys Ala Ile Phe Asn Asp Ile Asp Arg Glu Gly Gly Ser		
210	215	220
Thr Trp Thr Gln Ile Leu Gln Ser Ala Thr Glu Val Ile Glu Gly Val		
225	230	235
Ser Asn Arg Ile Asn Glu Lys Lys Asn Pro Thr Ser Asn Val Lys Pro		
245	250	255
Glu Glu Gln Thr Asp Lys Ser Gln Pro Val Leu His Thr Leu Pro Arg		
260	265	270
Leu Ala Glu Pro Pro Lys Glu Asp Asn Ile Phe Ala Ser Ser Pro Lys		
275	280	285
Ala Val Ser Arg His Glu Lys Ile Gly Glu Ala Phe Ser Ser Ala Ala		
290	295	300
Lys Lys Tyr Gly Gln Ser Pro Asp Trp Thr Pro Ala Ala Arg Ala Arg		
305	310	315
Ala Arg Asp Val Phe Asp Arg Ala Ser Ser Val Val Leu Ser Pro Glu		
325	330	335
Arg Lys Gln Lys Leu Leu Ala Ser Ser Arg Glu Leu Lys Met Leu Thr		
340	345	350
Gly Pro Thr Ser Lys Pro Glu Asn Val His Pro Leu Leu Ala Gln Val		
355	360	365
Leu Arg Ser Pro Val Gly Leu Ile Leu Arg Gln Asn Tyr Ala Arg Arg		
370	375	380
Leu Ser Gly Ile Val Leu Gly Thr Pro His Ala Asn Leu Ser Ser Ile		
385	390	395
Ile Asp Ala Ile Glu Ser Leu Thr Arg Leu Leu Ile Ala Ser Leu Ala		
405	410	415
Glu Asp Gln Tyr Gly Lys Val Gln Ser Asp Val Pro Arg Val Val Arg		
420	425	430
Leu Phe Thr Glu Thr Ile Thr Val Leu Glu Pro Phe Ile Asn Gly Gly		
435	440	445
Leu Asp Ala His Trp Thr Asp Val Asn Phe Pro Pro Ser Ser Asp Pro		
450	455	460
Asp Ala Gln Ala Glu Ala Arg Arg Val Pro Glu Val Gly Leu Val Leu		
465	470	475
Asp Thr Val Arg Ser Cys Leu Arg Asp Leu Leu Ser Ala Phe Asn Leu		480

[illegible]

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<210> 41006
<211> 334
<212> PRT
<213> A.fumigatus
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Thr	Ala	Ser	His	Arg	Ile	Phe	Arg	Pro	Asn	Val	His	Ser	Leu	Val
1				5					10				15	
Ser	Pro	Thr	Tyr	Val	Pro	Ser	Val	Arg	Leu	Ser	Lys	Met	Pro	Thr
			20					25				30		Pro
His	Cys	Leu	Asn	Cys	Leu	Leu	Ser	Arg	Cys	Glu	Leu	Phe	Leu	Arg
		35					40					45		Thr
Thr	Phe	Pro	Pro	Leu	Arg	Phe	Ser	Gln	Ala	Gln	Leu	Leu	Val	Ser
	50					55					60			Ala
Ala	Ile	Val	Arg	Ser	Val	Ala	Asp	Phe	Tyr	Gln	Leu	Pro	Gln	Ser
65					70					75				Pro
Leu	Glu	Leu	Ser	Arg	Ile	Ala	Arg	Gln	Gly	Ser	Gly	Ser	Ala	Cys
				85					90					Arg
Ser	Gln	Met	Gly	Tyr	Val	Ala	Trp	Arg	Ala	Gly	Glu	Arg	Glu	Asp
			100				105					110		
Gly	Ser	Asp	Ser	Leu	Ala	Glu	Glu	Val	Ala	Pro	Ala	Ser	His	Trp
		115					120					125		Pro
Glu	Met	Arg	Ala	Ile	Ile	Leu	Val	Val	Ser	Ala	Glu	Lys	Lys	Asp
	130					135					140			Val
Pro	Ser	Thr	Glu	Gly	Met	Gln	Thr	Thr	Val	Ala	Thr	Ser	Ser	Leu
145					150					155				Phe
Ala	Thr	Arg	Ala	Ala	Ser	Val	Val	Pro	Glu	Arg	Met	Ala	Ala	Ile
				165					170					Glu
Thr	Ala	Ile	Gln	Asn	Lys	Asp	Phe	Ala	Thr	Phe	Ala	Glu	Ile	Thr
			180					185					190	Met
Arg	Asp	Ser	Asn	Ser	Phe	His	Ala	Thr	Cys	Leu	Asp	Ser	Trp	Pro
		195					200					205		Pro
Ile	Phe	Tyr	Met	Asn	Asp	Val	Ser	Arg	Ala	Ala	Val	Arg	Leu	Val
	210					215					220			His
Asp	Ile	Asn	Arg	Ala	Val	Gly	Arg	Thr	Val	Cys	Ala	Tyr	Thr	Phe
225					230					235				Asp
Ala	Gly	Pro	Asn	Ala	Val	Ile	Tyr	Tyr	Leu	Glu	Lys	Asp	Ser	Glu
				245					250					Val
Val	Ala	Gly	Thr	Ile	Lys	Ala	Ile	Leu	Gly	Pro	Asn	Thr	Glu	Gly
			260					265					270	Phe
Asp	Gly	Pro	Phe	Tyr	Asp	Ile	Leu	Lys	Asn	Val	Thr	Ala	Ser	Val
		275					280					285		Val
Pro	Leu	Glu	Lys	Val	Asp	Ser	Arg	Ala	Val	Glu	Ile	Leu	Lys	Asn
	290					295					300			Gly
Ile	Ser	Arg	Val	Ile	Leu	Thr	Gly	Val	Gly	Glu	Gly	Pro	Ile	Ser
305					310					315				Val
Glu	Asp	His	Leu	Val	Ser	Ala	Thr	Gly	Asp	Ile	Leu	Ala	Ser	
				325					330					

<210> 41007

<211> 172  
 <212> PRT  
 <213> A.fumigatus

<400> 41007

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Pro Ser Gln Lys Trp Thr Gln Gln Lys Leu Ser Ser Glu Phe Lys Ala
1          5          10          15
Thr Leu Glu Glu Phe Gln Thr Val Gln Arg Arg Ala Leu Glu Lys Gln
          20          25          30
Arg Ala Ser Ala Val Ala Ala Arg Thr Ala Val Glu Glu Arg Glu His
          35          40          45
Gly Pro Ala Asp Gly Thr Thr Gln Gln Gln Gln Gln Leu Leu Glu Glu
          50          55          60
Gln Pro Arg Leu Ala Asn Gln Ala Glu Val Asp Phe Gln Glu Ala Leu
65          70          75          80
Ile Ile Glu Arg Glu Ala Glu Ile Arg Asn Ile Glu Gln Ser Val Gly
          85          90          95
Glu Leu Asn Glu Leu Phe Arg Asp Val Ala His Ile Val His Glu Gln
          100          105          110
Gly Gly Gln Leu Asp Ile Ile Ser Glu Asn Val Glu Arg Val Thr Thr
          115          120          125
Asp Thr Arg Gly Ala Asn Val Glu Leu Arg Ser Ala Ser Arg Tyr Gln
          130          135          140
Lys Asn Ala Arg Asn Lys Ala Cys Cys Leu Leu Leu Ile Leu Ala Val
145          150          155          160
Ile Leu Val Ile Ile Val Leu Ala Val Thr Leu Gly
          165          170

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<210> 41008  
 <211> 172  
 <212> PRT  
 <213> A.fumigatus

<400> 41008

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Pro Pro Asn Pro Ser Cys Gly Asp Ser Cys Phe Leu Leu Thr Gly Ser
1          5          10          15
Phe Arg Tyr Trp Gly Lys Arg Asp Ala Ser Leu Asn Leu Pro Thr Asn
          20          25          30
Ser Ser Leu Ser Val Thr Leu Ser Gln Arg Ser Leu Arg Thr Leu Thr
          35          40          45
Thr Ala Ser Cys Ser Ala Ile Tyr Pro Ala Ala Asp Glu Leu Ile Leu
          50          55          60
Asn Gly Lys Pro Gln Asp Ile Gln Thr Ser Lys Arg Thr Leu Ala Cys
65          70          75          80
Leu Ser Asn Leu Arg Ser Leu Arg Gln Ala Leu Glu Asn Ala Asp Pro
          85          90          95
Ser Leu Pro Lys Leu Ser Thr Leu Pro Leu Arg Ile Val Ser Glu Asn
          100          105          110
Asn Phe Pro Thr Ala Ala Val Phe Ala Ser Ser Ala Ala Gly Phe Gly
          115          120          125
Gly His Cys Pro Val Arg Gly Arg Phe Leu Ser Ala Ser Thr Ile Ser
          130          135          140
Ser Gly Ala Gln Pro Tyr Cys Pro Ser Gly Phe Arg Leu Cys Leu Ser
145          150          155          160
Ile Ser Asp Gly Trp Leu Arg Cys Leu Ala Cys Trp
          165          170

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<210> 41009  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 41009  
 Val Cys Pro Asp Leu Glu Pro Leu Phe Ala Ser Ser Ser Ser Arg Glu  
 1 5 10 15  
 Arg Phe Thr His Phe Ile Phe Ser Ser Leu Arg Arg Gly Phe Gln Val  
 20 25 30  
 Tyr Arg Glu Val Cys Ala Ser Cys Arg Ser Leu Thr Arg Val Pro Trp  
 35 40 45  
 Arg Ser Phe Val Gly Val Met His Thr Val Asp Glu Met Lys Ala Phe  
 50 55 60  
 Ala Glu Glu His Glu  
 65

<210> 41010  
 <211> 114  
 <212> PRT  
 <213> A.fumigatus

<400> 41010  
 Cys Gly Arg Ser Arg Asn Asp Gln Ser Thr Asp Ile Thr Lys His Gly  
 1 5 10 15  
 Ile Gly Trp Ala Leu Gly Val Val Cys Asp Phe Leu Phe Met Gln His  
 20 25 30  
 Arg Gln Gln Thr Asn Glu Tyr Glu Gln Ser Ala Val Arg Pro Thr Ser  
 35 40 45  
 Thr Val Asn Thr Ala Pro Arg His Asn Ser Asn Gly Trp Val Ile Phe  
 50 55 60  
 Thr Asp Thr Ala Leu Leu Gly Thr Ser Cys Asn Cys Leu Ile Val Ser  
 65 70 75 80  
 Phe Ser Ala Arg Lys Leu Asp Lys Trp Thr Ile Asn Trp Asn Arg Leu  
 85 90 95  
 Ile Leu Leu Trp Gly Pro Pro Gly Thr Gly Lys Thr Ser Leu Trp Tyr  
 100 105 110  
 Val Lys

<210> 41011  
 <211> 254  
 <212> PRT  
 <213> A.fumigatus

<400> 41011  
 Ser Leu Thr Asp Arg Ile Ser Arg Gly Leu Ser Gln Lys Leu Ala Ile  
 1 5 10 15  
 Arg Leu Gly Lys His Tyr Pro Gln Ser Lys Leu Val Glu Ile Asn Ala  
 20 25 30  
 His Ser Leu Gly Ser Lys Tyr Phe Gly Glu Ser Asp Lys Leu Val Ser  
 35 40 45  
 Lys Ala Phe Glu Ser Ile Glu Leu Leu Leu Glu Glu Glu Glu Asp Ser  
 50 55 60  
 Phe Val Cys Val Phe Val Asp Glu Ile Glu Thr Leu Ala Ala Arg Arg

## 18045

65		70		75		80									
Glu	Arg	Ala	Leu	Ser	Ser	Lys	Glu	Pro	Phe	Asp	Ala	Val	Arg	Ala	Val
				85					90					95	
Asn	Ala	Leu	Leu	Thr	Gly	Leu	Asp	Arg	Leu	Lys	His	His	His	Asn	Val
			100					105					110		
Ile	Val	Ile	Cys	Thr	Ser	Asn	Leu	Val	Thr	Ala	Leu	Val	Ser	Val	Ser
		115					120					125			
Ser	Lys	Ala	Leu	Ser	Arg	Asp	Ile	Leu	Lys	Ser	Val	Gln	Asp	Gln	Ala
	130					135					140				
Phe	Leu	Asp	Arg	Val	Asp	Ile	Lys	Gln	Phe	Val	Pro	His	Leu	Ser	Asn
145					150					155					160
Lys	Thr	Ile	Tyr	Gly	Ile	Tyr	Lys	Glu	Cys	Leu	Glu	Glu	Leu	Ser	Trp
			165					170						175	
Arg	Gly	Ile	Ile	Glu	Gly	Ala	Ser	Phe	Asp	Val	Val	Gln	Val	Lys	Pro
		180					185						190		
Glu	Asp	Pro	Gln	Thr	Ala	Leu	Gln	Tyr	Val	Glu	Gln	Pro	Ala	Arg	Phe
	195					200						205			
Leu	Met	Leu	Pro	Met	Phe	Glu	Met	Leu	Leu	Asn	Tyr	Gln	Ile	Phe	
	210					215				220					
Pro	Asn	Ala	Ile	Pro	Lys	Gln	Leu	Ala	Asp	Ala	Ala	Ser	Ala	Ser	Val
225					230				235						240
Val	Ser	Asn	Arg	Ser	Arg	Val	Glu	Asp	Ile	Thr	Ala	Gly	Ala		
			245					250							

&lt;210&gt; 41012

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41012

Arg	Pro	Ser	Pro	Arg	Asn	Thr	Asn	Asp	Asp	Thr	Glu	Pro	Asn	Asp	Gln
1			5					10					15		
Gly	Glu	Ile	Glu	Lys	Arg	Pro	Gly	Lys	Leu	Ser	Asp	Tyr	Ile	Pro	Pro
		20					25					30			
Pro	Tyr	Lys	Asn	Glu	Glu	Ala	Ala	Arg	Ala	Ala	Asn	Gly	Gly	Ala	Leu
	35					40					45				
Pro	Pro	Asp	Leu	Ser	Leu	Ile	Val	Lys	Gly	Arg	His	Gly	Gly	Cys	Asn
	50				55				60						
Tyr	Ile	Phe	Ser	Leu	Leu	Thr	Gly	Tyr	Pro	Asp	Glu	Pro	Pro	Ala	Gly
65				70				75						80	
Ala	Gln	Val	Ala	Glu	Gly	Met	Asn	Phe	Asn	Pro	Tyr	Phe	Pro	Gly	Thr
			85				90						95		
Gly	Thr	Phe	Ser	Leu	Pro	Tyr	Leu	Ile	Leu	Val	Ser	Thr	Asn	Pro	His
		100				105						110			
Leu	Arg	Tyr	Cys	His	Gly	Pro	Cys	Pro	Val	Arg	Trp	Cys	Arg		
	115					120					125				

&lt;210&gt; 41013

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (95)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41013

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Ser Arg Leu Ile Arg Ile Leu Gly Ile Ala Met Ala Arg Val Leu Phe
1           5           10           15
Asp Gly Val Val Glu Tyr Glu Asp Gly Thr Pro Ala Thr Thr Ser Gln
          20           25           30
Met Ala Lys Asp Val Thr Glu Phe Leu Asn Trp Ala Ala Glu Pro Glu
          35           40           45
Met Asp Asp Arg Lys Lys Met Gly Ala Lys Ala Leu Val Ile Leu Thr
          50           55           60
Gly Leu Phe Ala Leu Ser Val Trp Val Lys Arg Tyr Lys Trp Ala Pro
65           70           75           80
Ile Lys Thr Arg Lys Ile Val Tyr Ser Pro Pro Val Pro Arg Xaa
          85           90           95

```

&lt;210&gt; 41014

&lt;211&gt; 409

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41014

```

Arg Asn Lys Leu Thr Asp His Arg Ser Glu Ala Val Leu Pro His Tyr
1           5           10           15
Trp Leu Ala Lys Met Thr Val Gln Phe Pro Thr Ser Asp Gly Glu Ala
          20           25           30
Asp Pro Gly Ala Thr Ser Pro Ser Lys Phe Asn Ala Leu Gln Thr Phe
          35           40           45
Arg Arg Leu Trp Glu Leu Val Ser Pro Ala Arg Pro Glu Asp Ile Ser
          50           55           60
Ser Arg Glu Thr Asp Cys His Pro Pro Lys Thr Thr Val Gln Arg Arg
65           70           75           80
Arg Gln Ser Ile Ala Asp Gln Ser Leu Asp Arg Asp Glu His Leu Ala
          85           90           95
Glu Lys Val Thr Ser His Arg Ile Glu Asp Thr Val Pro Pro Glu Lys
          100          105          110
Thr Val Leu Tyr Leu Ala Tyr Gly Ser Asn Leu Cys Ala Lys Thr Phe
          115          120          125
Leu Gly Lys Arg Gly Ile Arg Pro Leu Ser Gln Ile Asn Val Val Val
          130          135          140
Pro Ser Leu Gln Leu Thr Phe Asp Met Pro Gly Ile Pro Tyr Val Glu
145          150          155          160
Pro Cys Phe Ala Ala Thr Trp Arg Arg Ala His Leu Ser Lys Glu Ala
          165          170          175
Glu Ala Gly Glu Ile Gly Thr Val Glu Ser Pro Ala Asp Ala Asp Thr
          180          185          190
Phe Glu Gln Val Ala Leu Leu Ser Glu Gly Ser Ala Ser Met Pro Leu
          195          200          205
Val Gly Val Val Tyr Glu Val Thr Ile Thr Asp Tyr Ala Lys Ile Ile
          210          215          220
Ala Thr Glu Gly Gly Gly Gly Tyr Lys Asp Ile Val Val Asp Cys
225          230          235          240
Tyr Pro Leu Pro Lys Ser Gln Ser Pro Thr Asp Pro Ile Pro Glu His
          245          250          255
Pro Glu Thr Lys Pro Phe Lys Ala His Thr Leu Leu Ser Pro Ser Glu
          260          265          270
Asp Pro Asp Pro Ser His Leu Thr Ser Lys Asp Arg Lys Leu Pro Pro

```



275		280		285
Pro Tyr Arg Arg Pro Lys Ser Cys Tyr Ala Gln Pro Ser Ala Arg Tyr				
290		295		300
Leu Asp Leu Ile Asn Thr Gly Ala Ala Glu His Asn Leu Pro Leu Pro				
305		310		315
Tyr Arg Arg Tyr Leu Ser Gln Phe Gln Pro Tyr Arg Ile Thr Thr Val				
	325		330	335
Arg Gln Met Phe Gly Lys Ala Ile Phe Val Ala Leu Trp Val Pro Ala				
	340		345	350
Leu Ile Thr Ile Ile Ser Leu Ser Lys Leu Leu Ala Gly Pro Asp Gly				
	355		360	365
Arg Ser Pro Pro Trp Leu Val Arg Gly Ser Asn Leu Leu Phe Asn Val				
	370		375	380
Met Trp Thr Thr Tyr Asp Tyr Phe Phe Ala Pro Ile Phe Gly Asp Gly				
385		390		395
Glu Arg Thr Met Glu Asp Thr Cys Ser				400
	405			

&lt;210&gt; 41015

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41015

Phe Asp Phe Gly Ile Glu Ala Ala Ile Asp Arg Ser Leu Ala Val Lys				
1	5		10	15
Gly Gly Thr Gly Pro Ala Asp Ala Leu Tyr Ile Asp Asp Ile Pro Val				
	20		25	30
Pro Pro Ile Ser Gly Asn Gln Ala Leu Val Lys Ile Lys Ala Phe Gly				
	35		40	45
Leu Asn Arg Met Asp Leu Val Gln Arg Glu Gly Gln Tyr Pro Leu Pro				
	50		55	60
Pro Gln Ala Pro Glu Thr Met Gly Val Glu Phe Ser Gly Thr Ile Glu				
65		70		75
Asn Leu Gly Pro Asp Ala Asn Arg Asp Phe Lys Val Gly Asp Glu Val				
	85		90	95
Phe Gly Leu Ala Tyr Gly Gly Gln Leu Thr Lys Thr Ala Ile Cys Leu				
	100		105	110
Thr Thr Ala Asp Asn Ser Thr His Arg Gly Leu Cys Ser Ile His Cys				
	115		120	125
Ser Ile Tyr				
130				

&lt;210&gt; 41016

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41016

Thr Trp Ile Thr Ala Thr Gln Ala Leu Tyr Leu Val Gly Glu Tyr Lys				
1	5		10	15
Pro Gly Gln Ser Val Leu Trp His Ala Gly Ala Ser Ser Val Ser Ile				
	20		25	30
Ala Gly Ile Gln Leu Ala Lys Ala Asp Gly Ala Lys Ala Ile Tyr Val				
	35		40	45
Thr Ala Gly Ser Asp Glu Lys Ile Asp Phe Cys Val Lys Lys Leu Gly				

## 18048

50                      55                      60  
 Ala Thr Ala Gly Phe Asn Tyr His Thr Gln Asp Trp Ser Ala Glu Ile  
 65                      70                      75                      80  
 Gln Lys Ala Thr Asn Gly Glu Gly Val Asn Ile Ile Val Asp Phe Ile  
                     85                      90                      95  
 Gly Ala Thr Tyr Phe Gln Gly Asn Leu Asp Ala Ala Ala Lys Asp Gly  
                     100                      105                      110  
 Arg Ile Val Asn Leu Ala Val Met Gly Tyr Val  
                     115                      120

<210> 41017  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 41017  
 Leu Pro Glu Gly Val Asn Ile Ala Pro Phe Leu Arg Lys Arg Leu Arg  
 1                      5                      10                      15  
 Phe Glu Gly Ser Thr Leu Arg Ser Arg Asp Glu Gln Tyr Gln Lys Lys  
                     20                      25                      30  
 Leu Arg Asn Thr Leu Val Glu His Ala Leu Pro Lys Phe Lys Asp Gly  
                     35                      40                      45  
 Ser Phe Lys Val Phe Val Glu Lys Val Phe Pro Met Glu Gln Ile Ile  
                     50                      55                      60  
 Asp Ala His Lys Leu Met Glu Ser Asn Gln Thr Lys Gly Lys Ile Ile  
 65                      70                      75                      80  
 Cys Thr Val Ser

<210> 41018  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 41018  
 Tyr Thr Tyr Gln Gly Cys His Gln Ile Ala Cys Thr Asp His Asp His  
 1                      5                      10                      15  
 Ile Val Met Val Leu Gln Pro Val Lys Ser Cys Glu Gln Gly Ile Tyr  
                     20                      25                      30  
 Cys Ser Asn Ser Ile Lys Arg Leu Phe Ala Thr Gln Ser Ala Phe Pro  
                     35                      40                      45  
 Ser Gly Cys Gln Arg Phe Asp Phe Val Tyr Lys His Ala Asp Lys Arg  
                     50                      55                      60  
 Ile Phe Leu Leu Phe Lys  
 65                      70

<210> 41019  
 <211> 352  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (14)  
 <223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41019

Leu Ala Met Thr Ser Ile Leu Gly Arg Thr Tyr Pro Leu Xaa Gly Ile  
 1 5 10 15  
 Ile Thr Gly Ile Gly Gln Val Glu Gly Val Thr Cys Met Ile Val Ala  
 20 25 30  
 Asn Asp Ser Thr Val Lys Gly Gly Thr Tyr Tyr Pro Ile Thr Val Lys  
 35 40 45  
 Lys His Leu Arg Ala Gln Ala Ile Ala Gln Glu Asn Lys Leu Pro Cys  
 50 55 60  
 Leu Tyr Leu Val Asp Ser Gly Gly Ala Asn Leu Pro His Gln Ala Asp  
 65 70 75 80  
 Val Phe Pro Asp Lys Glu His Phe Gly Arg Ile Phe Phe Asn Gln Ala  
 85 90 95  
 Arg Met Ser Ser Leu Gly Ile Pro Gln Ile Ser Val Val Met Gly Pro  
 100 105 110  
 Cys Thr Ala Gly Gly Ala Tyr Val Pro Ala Met Ser Asp Glu Thr Ile  
 115 120 125  
 Ile Val Glu Asn Gln Gly Thr Ile Phe Leu Ala Gly Pro Pro Leu Val  
 130 135 140  
 Lys Ala Ala Thr Gly Glu Val Val Ser Ala Glu Asp Leu Gly Gly Gly  
 145 150 155 160  
 Gln Leu His Ser Thr Ile Ser Gly Val Thr Asp Tyr Leu Ala Val Asp  
 165 170 175  
 Asp Ala His Ala Ile Val Leu Ala Arg Arg Ser Val Ala Asn Leu Asn  
 180 185 190  
 Tyr Pro Lys Thr Ser Val Pro Gln Val Ser Ala Asp Thr Ile Lys Glu  
 195 200 205  
 Pro Leu Tyr Asp Pro Ala Glu Leu Asp Gly Ile Val Gly Thr Asn Leu  
 210 215 220  
 Arg Arg Gln Ile Pro Ala Arg Glu Val Ile Ala Arg Ile Val Asp Gly  
 225 230 235 240  
 Ser Glu Phe Ala Glu Phe Lys Arg Asp Tyr Gly Thr Thr Leu Val Thr  
 245 250 255  
 Gly Phe Ala Arg Ile Tyr Gly His Gln Val Gly Ile Val Ala Asn Asn  
 260 265 270  
 Gly Ile Leu Phe Ser Glu Ser Ser Leu Lys Gly Ala His Phe Ile Glu  
 275 280 285  
 Leu Cys Ala Gln Arg Lys Ile Pro Leu Leu Phe Leu Gln Asn Ile Ser  
 290 295 300  
 Gly Phe Met Val Gly Ala Asp Ala Glu Lys Gly Gly Ile Ala Lys Asn  
 305 310 315 320  
 Gly Ala Lys Leu Val Thr Ala Val Ala Cys Ala Asp Val Pro Lys Phe  
 325 330 335  
 Thr Val Val Phe Gly Ser Ser Ala Gly Ala Gly Asn Tyr Gly Met Trp  
 340 345 350

&lt;210&gt; 41020

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41020

Leu Cys Cys Val Ser Tyr Ser Gly Arg Ala Tyr Ser Pro Arg Leu Met  
 1 5 10 15  
 Phe Met Trp Pro Asn Ala Lys Ile Gly Val Met Gly Ser Glu Gln Leu  
 20 25 30

## 18050

Ser Ala Val Met Glu Ala Val Gly Arg Thr Ala Asp Pro Glu Leu Lys  
           35                          40                          45  
 Ala Arg Ile Asp Arg Glu Ser Glu Ala Ile Phe Ser Ser Ala Arg Leu  
           50                          55                          60  
 Trp Asp Asp Gly Val Ile Pro Pro Ala Gln Thr Arg His Val Leu Gly  
 65                          70                          75                          80  
 Leu Ser Leu Ala Ala Ala Leu Gly Gly Arg Val Asp Glu Asp Ala Gln  
                           85                          90                          95  
 Thr Arg Phe Gly Val Phe Arg Met  
                           100

<210> 41021  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 41021  
 Met Pro Lys Asp Ile Gly Ile Leu Leu Tyr Phe His Leu Ser Tyr Ser  
 1                          5                          10                          15  
 Leu Cys Ile Leu Leu Val Glu Ser Ala Pro Asp Asn His Pro Ser Asp  
                           20                          25                          30  
 Leu Thr Arg Thr Gly Ser Asn Leu Ile Glu Leu Arg Ile Pro Glu Gln  
                           35                          40                          45  
 Pro Pro Ser Arg Asp Leu Val Asp Ile Pro Ile Thr Thr His Lys Leu  
                           50                          55                          60  
 Asn Ser Ile Gln Ser Thr Leu Gly Gly Ser Leu Gly Ser Val Gln Asp  
 65                          70                          75                          80  
 Gly Ala Gly Ala Val Leu Arg Ser Asp  
                           85

<210> 41022  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 41022  
 Leu Leu Leu Thr Phe Val Ile His Ile Phe Val Pro Phe Ser Thr Gln  
 1                          5                          10                          15  
 Pro Pro Ser Thr Ala Leu Ala Val Val Phe Ile Leu Thr Thr Ser Glu  
                           20                          25                          30  
 Pro Ala Glu Cys Ser Asp Ile Ala Asn Ala Pro Ile Phe Ser Pro Asp  
                           35                          40                          45  
 Arg Arg Pro Gly Arg Asn Arg Ala Phe Cys Ser Ser Val Pro Phe Lys  
                           50                          55                          60  
 Asp Ser Trp Phe Thr Gln Ser Cys Glu Cys Ala Ala  
 65                          70                          75

<210> 41023  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (153)  
 <223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41023

```

His Phe Leu Cys Ser Thr Val Ile Pro Ala Met Arg Gly Pro Ser Pro
1          5          10          15
Leu Leu Arg Gly Leu Cys Ser Arg Ala Thr Ala Leu Ser Tyr Pro Arg
20          25          30
Arg Leu Pro Thr Gln Arg His Leu Val Ile Thr Tyr Ser Arg Val Ser
35          40          45
Ser Arg Ser Val Ala Ser Tyr Thr His Pro His His Ala Ser Ala Ile
50          55          60
Ser Val Leu Pro Thr Ala Val Asp Thr Thr Ser Asp Glu Phe Arg Glu
65          70          75          80
Asn Ala Arg Gln Met Lys Glu Leu Val Asp Arg Met Ala Ser Leu His
85          90          95
Lys Thr Ile Ala Gln Gly Gly Pro Gln Lys Ala Lys Glu Lys His Val
100         105         110
Ala Arg Gly Lys Met Leu Pro Arg Asp Arg Val Thr Ala Leu Ile Asp
115         120         125
Pro Gly Thr Ser Phe Leu Glu Leu Ser Pro Leu Ala Gly His Asp Val
130         135         140
Tyr Pro Gly Glu Asp Val Pro Ala Xaa Arg His His Tyr Arg Asp Trp
145         150         155         160
Pro Ser Gly Gly Cys His Leu Tyr Asp Cys Gly
165         170

```

&lt;210&gt; 41024

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41024

```

Thr Val Arg Ser Ala Gln Asp Pro Leu Ala Ile Pro Ser Glu His Leu
1          5          10          15
Arg Leu His Gly Arg Ser Arg Cys Arg Glu Gly Arg Asp Arg Gln Lys
20          25          30
Arg Cys Gln Thr Gly Asp Cys Ser Gly Leu Arg Gly Arg Pro Gln Val
35          40          45
Tyr Cys Cys Val Trp Ile Gln Arg Arg Ser Arg Lys Leu Trp Asp Val
50          55          60
Val Ser Thr Leu Val Met Leu Leu Leu Ser Arg Arg Gln Cys Ile Arg
65          70          75          80
Leu Thr Leu Leu Arg Leu Leu
85

```

&lt;210&gt; 41025

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41025

```

Thr Pro Ser Ser Ala Arg His Met Val Leu Thr Ile Phe Leu Ser Leu
1          5          10          15
Ser Arg Glu Leu Tyr Met Lys Gln Gly Gln Gly Phe Leu Leu Val Phe
20          25          30
Ser Ile Thr Ser Met Ser Ser Leu Asn Glu Leu Ser Glu Leu Arg Glu
35          40          45

```

## 18052

Gln Ile Ile Arg Ile Lys Asp Asp Glu Lys Val Pro Ile Val Ile Val  
 50 55 60  
 Gly Asn Lys Ser Asp Leu Glu Glu Asp Arg Ala Val Pro Arg Ala Arg  
 65 70 75 80  
 Ala Phe Ala Leu Ser Gln Ser Trp Gly Asn Ala Pro Tyr Tyr Glu Thr  
 85 90 95  
 Ser Ala Arg Arg Arg Ala Asn Val Asn Glu Val Phe Ile Asp Leu Cys  
 100 105 110  
 Arg Gln Ile Ile Arg Lys Asp Met Gln Gly Asn Ser Ser Ser Gly Ser  
 115 120 125  
 Asp Asn Ser Ala Arg Lys Arg Glu Gly Thr Gly Arg Tyr Asp Lys Lys  
 130 135 140  
 Lys Glu Lys Lys Arg Arg Lys Gly Pro Cys Val Ile Leu  
 145 150 155

&lt;210&gt; 41026

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (148)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41026

Leu Ala Thr Thr Gln Ile Phe Arg Gly Asp Asp Phe Thr Arg Arg Cys  
 1 5 10 15  
 Leu Asp Gln Arg Arg Thr Ser Gln Glu Asp Cys Pro Leu Val Leu Asp  
 20 25 30  
 Asn Asp Arg Leu Ile Ala His Gly Arg Asp Ile Gly Ala Ser Ser Arg  
 35 40 45  
 Ala Gly Pro His Asp His Arg Asp Leu Arg Asp Pro Lys Arg Thr His  
 50 55 60  
 Ser Gly Leu Val Glu Glu Asp Pro Ser Glu Met Leu Leu Val Gly Glu  
 65 70 75 80  
 Asp Ile Cys Leu Val Arg Glu Ile Gly Thr Thr Arg Ile Asp Lys Val  
 85 90 95  
 Glu Ala Trp Lys Leu Val Leu Leu Gly Asn Cys Leu Arg Thr Glu Val  
 100 105 110  
 Leu Leu His Gly Asn Gly Val Val Cys Ser Ser Leu Asp Ser Ala Val  
 115 120 125  
 Ile Ser His Asn His Thr Gly Asp Thr Leu His Leu Ala Asn Pro Cys  
 130 135 140  
 Asn Asp Ala Xaa Gln Arg Val Arg Pro Pro Gln Asp Arg Arg His Gly  
 145 150 155 160  
 Gln Leu Arg Val Lys Ala Pro Gly Arg Thr Ser Leu Asp Gln  
 165 170

&lt;210&gt; 41027

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41027

Ile Phe Ile Ile Leu Phe Arg Cys Leu Arg Ile Leu Glu Ser Leu Leu

## 18053

```

1           5           10           15
Glu Glu Cys Leu Leu Ser Phe Thr Asn Gly Phe Arg Ser Ile Pro Ile
20           25           30
Ser Asp Phe Val Gln Asp Pro Leu Gln Asp Lys Asn Ala Ala His Leu
35           40           45
His Ser Arg Ile Lys Val Ala Gly Asn Gln Thr Ser Gln Gly Ile Arg
50           55           60
Thr Ala His Arg Gly Arg Ala Ala Gly Val Glu Arg Ala Ser Thr Arg
65           70           75           80
Val His Glu Tyr Val Met Ser Leu Phe Phe Ser Ser Glu Ser Gln Val
85           90           95
Ile Ser Ala Leu Val
100

```

<210> 41028  
 <211> 128  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41028
Leu Ser Val Val Cys Ala Val Gly Gly Val Gly Lys Ser Cys Leu Thr
1           5           10           15
Gly Thr Tyr Ala Ser Phe Pro Val Ser Pro Leu Ser Pro Leu Phe Thr
20           25           30
Arg Ser Glu Asn Cys Val Val Glu Ser Ser Ile Ser Ile His Glu Ala
35           40           45
Arg Asp Leu Thr Ser Thr Ala Gln Phe Val Gln Asn Val Trp Ile Glu
50           55           60
Ser Tyr Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Ile Glu Val
65           70           75           80
Asp Val Ser Arg Phe Arg Pro Leu Arg Trp Asn Ser Asn Thr Asp Phe
85           90           95
Ser Arg Ala Gly Asn Ala Phe Trp Lys Cys Met Phe Ser Gln Asp Leu
100           105           110
Val Val Trp Glu Asn Cys His Arg Cys Trp Leu Glu Ser Thr Asp Thr
115           120           125

```

<210> 41029  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41029
Gly Pro Asp Ala Asp Tyr Ile Val Val Tyr Ala Lys Thr Glu Pro Glu
1           5           10           15
Lys Gly Ser Lys Gly Ile Ser Ala Phe Val Val Glu Lys Thr Phe Lys
20           25           30
Gly Phe Ser Cys Ala Arg Lys Leu Asp Lys Leu Gly Met Arg Gly Ser
35           40           45
Asn Thr Gly Glu Leu Val Phe Glu Asp Val Phe Val Pro Lys Glu Asn
50           55           60
Leu Leu Gly Glu Leu Asn Lys Gly Val Arg Val Leu Met Glu Gly Leu
65           70           75           80
Asp Leu Glu Arg Leu Val Leu Ser Ala Gly Pro Leu Gly
85           90

```

18054

<210> 41030  
 <211> 141  
 <212> PRT  
 <213> A.fumigatus

<400> 41030  
 Leu Gly Phe Asn Arg Ile Met Gln Ala Ala Leu Asp Leu Val Leu Pro  
 1 5 10 15  
 Tyr Thr His Thr Arg Lys Gln Phe Gly Ala Pro Ile Ala His Asn Gln  
 20 25 30  
 Leu Ile Gln Gly Lys Leu Ala Asp Met Tyr Thr Lys Leu Ser Ala Ser  
 35 40 45  
 Arg Ala Tyr Thr Tyr Ala Thr Ala Arg His Ile Asp Asn Ser Ala Ala  
 50 55 60  
 Thr Gly Glu Val Ser Ile Arg Thr Gln Asp Cys Ala Gly Ala Ile Leu  
 65 70 75 80  
 Tyr Ala Ala Glu Arg Ala Thr Glu Cys Ala Leu Asp Ala Ile Gln Leu  
 85 90 95  
 Met Gly Gly Asn Gly Tyr Ile Asn Glu Ile Pro Ala Gly Arg Leu Leu  
 100 105 110  
 Arg Asp Ala Lys Leu Tyr Glu Ile Gly Ala Gly Thr Ser Glu Ile Arg  
 115 120 125  
 Arg Met Val Ile Gly Arg Ala Phe Asn Lys Glu Tyr Ala  
 130 135 140

<210> 41031  
 <211> 91  
 <212> PRT  
 <213> A.fumigatus

<400> 41031  
 Ser Ala Gly Ser Ile Ala Leu Ser Tyr Ala Ala His Ser Gln Leu Cys  
 1 5 10 15  
 Val Asn Gln Leu Ser Leu Asn Gly Thr Glu Glu Gln Lys Ala Arg Phe  
 20 25 30  
 Leu Pro Gly Leu Leu Ser Gly Glu Lys Ile Gly Ala Leu Ala Met Ser  
 35 40 45  
 Glu His Ser Ala Gly Ser Asp Val Val Ser Met Lys Thr Thr Ala Lys  
 50 55 60  
 Ala Val Asp Gly Gly Trp Val Leu Asn Gly Thr Lys Met Trp Ile Thr  
 65 70 75 80  
 Asn Val Ser Ser Asn Gln Thr Tyr Asn Ser Ser  
 85 90

<210> 41032  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 41032  
 Gly Arg Thr Ser Val Trp Val Ser Asp Ala Thr Ser Leu Pro Glu Ala  
 1 5 10 15  
 Arg Arg Ile Gly Val Ser Asn Phe Gln Arg Arg Arg Gly Lys Ser Gly  
 20 25 30  
 Gly Gln Val Arg Asp Glu Tyr Arg Glu Glu Tyr Asp Pro Gly Arg Gly  
 35 40 45



## 18055

Gly Tyr Gly Arg Ala Tyr Ala Asp Asp Gln Arg Arg Arg Glu Glu Glu  
 50 55 60  
 Glu Tyr Gly Lys Gly Arg  
 65 70

<210> 41033

<211> 381

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (319)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41033

Leu Leu Pro Arg Leu Lys Ile Ser Pro Phe Val Arg Glu Thr Leu Leu  
 1 5 10 15  
 Ile Thr Ser Gln Leu Ser Glu Lys Asn Gly Ser Ala Gln Asn Glu Arg  
 20 25 30  
 Ile Pro Ser Leu Thr Arg Trp Tyr Ile Asp Thr Arg Gln Leu Thr Val  
 35 40 45  
 Thr Asn Pro Ser Leu Pro Leu Leu Glu Thr Leu Gln Pro Ser Asp Gln  
 50 55 60  
 Glu Ala Val Lys Arg Phe Tyr His Leu Arg Asp Arg His Met Ser Leu  
 65 70 75 80  
 Ala Ser Asn Leu Leu Lys Tyr Leu Phe Ile His Arg Ser Cys Cys Ile  
 85 90 95  
 Pro Trp Asn Lys Ile Ser Ile Ser Arg Thr Pro Asp Pro His Arg Arg  
 100 105 110  
 Pro Cys Phe Ile Pro Ser Pro Ala Leu Thr Glu Ala Thr Asp Glu Pro  
 115 120 125  
 Ile Pro Gly Ile Glu Phe Asn Val Ser His Gln Ala Ser Leu Val Ala  
 130 135 140  
 Leu Ala Gly Thr Ile Ile Pro Gln Ser His Gly Ala Ser Pro Asn Pro  
 145 150 155 160  
 Thr Thr Val Phe Ala Asn Pro Ser Pro Ser Ser Val Pro Ala Pro Ser  
 165 170 175  
 Val Pro Gln Val Gly Ile Asp Ile Thr Cys Val Asp Glu Arg His Ala  
 180 185 190  
 Arg Thr Ser Ser Ala Pro Ser Thr Arg Asp Gln Leu Ala Gly Tyr Val  
 195 200 205  
 Asp Ile Phe Ala Glu Val Phe Ser Ser Arg Glu Leu Asp Thr Ile Lys  
 210 215 220  
 Asn Leu Gly Gly Arg Phe Pro Ala Asp Ala Gln Asp Gly Glu Ala Val  
 225 230 235 240  
 Glu Tyr Gly Leu Arg Leu Phe Tyr Thr Tyr Trp Ala Leu Lys Glu Ala  
 245 250 255  
 Tyr Ile Lys Met Thr Gly Glu Ala Leu Leu Ala Pro Trp Leu Arg Glu  
 260 265 270  
 Leu Glu Phe Thr Asp Val Ile Ala Pro Glu Pro Ala Pro Ala Pro Gly  
 275 280 285  
 Gln Gly Ser Ala Glu Asn Trp Gly Glu Pro Tyr Thr Gly Val Lys Ile  
 290 295 300  
 Trp Leu Tyr Gly Lys Arg Val Glu Asp Val Arg Ile Glu Val Xaa Ala  
 305 310 315 320

## 18056

```

Phe Asp Thr Gly Tyr Ile Phe Ala Thr Ala Ala Arg Gly Ala Gly Leu
      325                      330                      335
Gly Ala Glu Ser Arg Pro Leu Ser Arg Asp Ala Gly Val Ser Val Ser
      340                      345                      350
Val Asp Arg Trp Met His Met Glu Asn Ile Asp Ile Asp Arg Asp Ile
      355                      360                      365
Ala Pro Cys Ala Thr Gly Val Cys Gln Cys Thr Lys Lys
      370                      375                      380

```

<210> 41034  
 <211> 102  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41034
Phe Ser Lys Val Pro Phe Thr Gln Gln Arg Ser Lys Phe Met Ser Phe
1      5      10
Ser Gln Ser Gln Gln Thr Arg Arg Pro Ile Met Val Arg Gly Pro Lys
      20      25      30
Leu Thr Gly Ala Tyr Arg Cys Gly Glu Ile Lys Arg Leu Val Met Gly
      35      40      45
Leu Asp Arg Tyr Asn Lys Thr Pro Cys Gly Phe Cys Phe Val Glu Tyr
      50      55      60
Tyr Thr His Gln Asp Ala Leu Asp Cys Leu Lys Tyr Ile Gly Gly Thr
      65      70      75      80
Lys Leu Asp Glu Arg Ile Ile Arg Thr Asp Leu Asp Pro Gly Phe Glu
      85      90      95
Glu Gly Arg Gln Tyr Gly
      100

```

<210> 41035  
 <211> 174  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (26)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 41035
Ser Cys Ser Pro Asn Leu Leu Ile Gly Pro Lys Lys Gly Gly Gln Asp
1      5      10      15
Leu Leu Gly Gly Phe Asp Val Arg Val Xaa Arg Asn His Phe Gly Arg
      20      25      30
Gln Thr Glu Ser Phe Glu Ala Pro Leu Asp Leu Pro Phe Leu Gly Pro
      35      40      45
Thr Glu His Ser Phe Pro Ala Val Phe Ile Arg Ala Pro Val Val Glu
      50      55      60
Lys Ile Leu Pro His Gln Gln Gly Ile Gln Val Asp Glu Thr Gln Arg
      65      70      75      80
Asp Glu Thr Val Val Ala Pro Ser Arg Gln Pro Gln Asp Gln Ala Ala
      85      90      95
Lys Ala Ala Met Ala Asp Glu Val Glu Val Leu Ala Arg Leu Ser Gly
      100      105      110
Arg Ala Ala Glu Leu Ala Ala Val Gly Thr His Ile Asp Ala Glu Lys

```

## 18057

```

      115              120              125
Glu Thr Gly Asp Ile Val Ala Val Lys Gln Gly Asn Val Phe Gly Thr
      130              135              140
Ser Phe His Pro Glu Leu Thr Gly Asp Ala Arg Ile His Ser Trp Trp
145              150              155              160
Leu Arg Gln Val Glu Glu Ser Val Arg Lys Arg Asn Gly Ile
      165              170

```

<210> 41036  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41036
Pro Trp Arg Asp Gln Ala Gln Arg Cys Val His Val Gly Ile Val Ile
1              5              10              15
Ala Leu Tyr Glu Thr Asn Trp Leu Leu Val Leu Pro Pro Ile Ser
      20              25              30
Thr Glu Gly Leu Thr Ala Ala Asp Val Asp Arg Leu Thr Lys Thr Ala
      35              40              45
Gln Glu Ser Met Leu Lys Ala Leu Leu Glu Leu Ser Asp Gln Asp Arg
      50              55              60
Asp Glu Ile Asp Ser Asp Val Lys Lys Ala Thr Ser Thr Ala Val Glu
65              70              75              80
Ile

```

<210> 41037  
 <211> 102  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41037
Pro Lys Arg Gly Ala Trp Pro Pro Arg Gly Glu His Gly Glu Glu Met
1              5              10              15
Arg Lys Tyr Arg Gln Ser Val Phe Ile Phe Pro Glu Gly Thr Arg Ser
      20              25              30
Tyr Ser Glu Lys Pro Glu Leu Leu Pro Phe Asn Lys Gly Ala Phe His
      35              40              45
Leu Ala Val Lys Ala Gly Val Pro Ile Val Pro Ile Val Ala Glu Asn
      50              55              60
Tyr Ser His Ile Leu Ser Pro Arg Asn Met Arg Phe Asn Pro Gly Val
65              70              75              80
Ile Lys Leu Lys Gly Val Cys Met Trp Gly Leu Leu Leu Arg Cys Met
      85              90              95
Arg Leu Thr Gly Ser Ser
      100

```

<210> 41038  
 <211> 99  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41038
Tyr Cys Phe Leu Gln Ser Gly Ile Thr Met Ala Ser Ile Thr Val Gly
1              5              10              15

```

## 18058

```

Val Leu Ala Leu Gln Gly Ala Phe Tyr Glu His Ile Gln Leu Leu Lys
      20                      25                      30
Lys Ala Val Ser Glu Gln Ser Ser Thr Thr Gln Trp Glu Phe Ile Glu
      35                      40                      45
Val Arg Thr Pro Gln Glu Leu Asp Arg Cys Asp Ala Leu Ile Leu Pro
      50                      55                      60
Gly Gly Glu Ser Thr Thr Ile Ser Leu Val Ala Ala Arg Ser Asn Leu
      65                      70                      75                      80
Leu Glu Pro Leu Arg Asp Phe Val Lys Tyr Val Arg Ala Ile Thr Ala
      85                      90                      95
Arg Leu Ser

```

&lt;210&gt; 41039

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (370)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41039

```

Asp Ile Leu Val Ala Ala Ser Lys Val Asp Val Asp Ala Leu Met Met
1           5           10           15
Gly Glu Asp Asp Glu Leu Ser Val Glu Asp Asn Asp Gln Leu Ser Ala
      20           25           30
Thr Val Ile Cys Leu Ser Thr Arg Thr Gly Arg Val His Ile Cys Leu
      35           40           45
Glu Leu Asp Gly Val Glu Gly Gln Trp Leu Pro Lys Leu Arg Lys Asn
      50           55           60
Ala Phe Ser Thr Pro Leu Ser Glu Pro Ser Asp Leu Val Leu Val Glu
      65           70           75           80
Ser Leu Asp Thr Leu Arg Gln Glu Asp Gln His Leu Asn Asp Trp Pro
      85           90           95
Thr Phe Thr Asn Asp Ile Val Ser Arg Tyr Ser Phe Phe Val Thr Thr
      100          105          110
Ala Thr Asn Val Thr Ser Ile Ser Leu Ser Ser Trp Val Gln Arg Leu
      115          120          125
Glu Ala Glu Leu Arg Ser Glu Asp Thr Ala Gly Ser Ala Phe Arg Leu
      130          135          140
Gln Val Leu Cys Glu Gly Thr Val Ser Leu Arg Glu Arg Ile Ile Glu
      145          150          155          160
Val Asp Asp Asp Gly Ser Ala Ala Lys Gly Glu Ser Asp His Leu Ala
      165          170          175
Ser Ser Leu Val Phe Tyr Asp Tyr Asp Leu Gly Tyr Leu Leu Ser
      180          185          190
His His Ala Ser Arg Pro Tyr Ala Ala Ile Met Asp Ala Pro Glu Ala
      195          200          205
Ser Leu Pro Pro Val Ala Asp Met Gly Pro Ile Gly Ser Gly Ala Gln
      210          215          220
Gln Ser Thr Ser Ile Leu Pro Pro Lys Arg Pro Pro Tyr Gln Val Pro
      225          230          235          240
Ser Ile Leu Tyr Ser Asp Ser Pro Leu Glu Phe Phe Val Glu Lys His
      245          250          255

```

## 18059

```

Val Pro His Arg Gln Arg Gln Ser Leu Lys Glu Gln Val Arg Leu Ser
      260                      265                      270
Pro Ala Thr Leu Asp Leu Val Ala Ala Ala His Arg Ile Leu Ser Ala
      275                      280                      285
His Thr Asn Ala Leu Glu Arg Ala Ala Ser Asp Leu Phe Arg Arg Cys
      290                      295                      300
Glu Arg Leu Gln Gly Glu Met Lys Glu Gln Leu Lys Gln Leu Ser Asp
305                      310                      315                      320
Val Ala Glu Arg Ile Lys Gly Val Ser Ser Asp Ile Gly Glu Asp Gly
      325                      330                      335
Gln Arg Arg Gly Gly Ser Lys Ser Asp Glu Ala Leu Asp Lys Lys Leu
      340                      345                      350
Lys Ala Ala Lys Glu Arg Gln Ala Gln Leu Val Glu Arg Asn Glu Ser
      355                      360                      365
Leu Xaa Lys Gln Val Leu Lys Ser Gly Gly Arg Pro Leu Ser Glu Lys
      370                      375                      380
Glu Lys Ala Trp Leu Ser Glu Val Glu Ala Leu Ser Ala Ser Leu Glu
385                      390                      395                      400
Arg Glu Lys Asn Glu Lys Lys Asp Gln Ser Leu Ser Gln Arg Leu
      405                      410                      415
Glu Thr Val Ser Phe Ile Gly Leu Met Asn His Thr Leu Trp Cys
      420                      425                      430

```

<210> 41040  
 <211> 124  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41040
Glu Gly Phe Asp Trp His Gly Pro Phe Gln Pro Arg Asp Glu Asp Ala
1                      5                      10                      15
Leu Leu Ile Phe Pro Thr Glu Asn Leu Ala Pro Ser Leu Ala Pro Leu
      20                      25                      30
Leu His Pro Asp Leu Arg Lys Asp Ile Ala Thr Arg Val Asn Glu Ala
      35                      40                      45
Ile Leu Gln Ser Gln Gly Ala Arg Lys Glu Ala Arg Leu Arg Asn Leu
      50                      55                      60
Val Lys Leu Arg Ala Trp Ala Glu Gln Lys Ala Arg Glu Ala Lys Lys
65                      70                      75                      80
Asp Leu Pro Glu Lys Leu Asp Leu Gly Leu Tyr Asp Gly Asn Asn Val
      85                      90                      95
Lys Asn Ala Gln Ser Thr Ser Gln Asn Gly Asp Ser Asn Asp Thr Val
      100                      105                      110
Met Ala Asn Asn Gly Asp Val Asp Pro Met Ile Ser
      115                      120

```

<210> 41041  
 <211> 827  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41041
Tyr Cys Asn Asp Ala Leu Ala Pro Arg Gly Glu Asp Arg Cys Ile Gly
1                      5                      10                      15
Leu Leu Lys Asp Ile Tyr Leu Lys Thr Ser Arg Thr Glu Leu Lys Leu
      20                      25                      30

```

## 18060

Ala Ile Val Asp Ser Phe Leu Gln Arg Thr Thr Asp Thr Glu Glu Ser  
 35 40 45  
 Val Ala Thr Leu Ala Arg Gln Thr Phe Glu Glu Val Trp Leu Thr Pro  
 50 55 60  
 Phe His Glu Leu Ile Asp Ser Ser Gln Asp Gly Ser Lys Leu Arg Val  
 65 70 75 80  
 Gly Leu Gly Glu Arg Val Thr Leu Ile Ala Ser Leu Val Gln Arg Ser  
 85 90 95  
 Glu Thr Ala Leu Glu Thr Leu Gly Phe Cys Leu Lys Lys Ile Leu Ser  
 100 105 110  
 Asp Asn Ser Lys Thr Ala Ser Leu Asn Phe Lys Val Cys Lys Ala Met  
 115 120 125  
 Val Ala Thr Met Phe Glu Lys Leu Val Glu Asp Glu Ser Ser Glu Lys  
 130 135 140  
 Glu Phe Gln Gln Ala Leu Leu Gln Thr Ile Thr Val Phe Ala Lys Ala  
 145 150 155 160  
 Asn Ala Lys Leu Phe Ser Pro Asp Gln Leu Glu Thr Leu His Pro Tyr  
 165 170 175  
 Ile Gly Asn Leu Ala Thr Ala Glu Asp Leu Phe Ile Phe Arg Ser Val  
 180 185 190  
 Val Val Ile Tyr Arg Cys Val Leu Pro Tyr Leu Ser Ser Ala His Asn  
 195 200 205  
 Ser Leu Leu Lys Glu Val Gln Asn Asp Leu Phe Lys Ser Val Ala Lys  
 210 215 220  
 Leu Ala Arg Ser Glu Leu Asn Glu Val Met Ala Cys Leu Trp Thr Ile  
 225 230 235 240  
 Asn Gly Val Leu Arg Asn Thr Asp Arg Leu Val Lys Leu Thr Ile Ser  
 245 250 255  
 Val Leu Lys Pro Ile Gln His Tyr Arg Asn Val Asp Leu Ala Asp Asn  
 260 265 270  
 Ala Asn Ser Ala Ile Val Ala Arg Ala Lys Ser Tyr Ile Arg Ile Ala  
 275 280 285  
 Gly Cys Val Gly Arg His Cys Asp Leu Glu Lys Tyr Glu Pro His Phe  
 290 295 300  
 Lys Asn Ala Phe Pro Ser Trp Lys Gly Gly Ser Val Ala Gly Leu Met  
 305 310 315 320  
 Ile Asp Ser Ile Val Pro Phe Thr Leu Pro Lys Gln Pro Leu Glu Leu  
 325 330 335  
 Arg Val Met Ala Leu Glu Ser Val Gly Ser Ile Cys Gln Ser Trp Pro  
 340 345 350  
 Ala Gln Phe Ser Arg Asp Glu Pro Arg Lys Ile Leu Ser Met Val Phe  
 355 360 365  
 Lys Glu Asp Asn Ala Ser Leu Gln Asn Ile Val Leu Lys Ser Phe Ala  
 370 375 380  
 Glu Phe Phe Ala Met His Glu Gly Lys Ala Glu Lys Ser Val Val Pro  
 385 390 395 400  
 Ser Ala Glu Lys Ala Asp Gln Glu Asn Ser Thr Arg Leu Gly Gly Ser  
 405 410 415  
 Leu Lys Ala Ser Asp Asn Asp Gly Ala Ala Ala Leu Ile Ala Gln His  
 420 425 430  
 Phe Leu Gln Ser Met Leu Arg Val Ala Gln Ser Arg Gln Asp Ala Tyr  
 435 440 445  
 Ala Leu Thr Ala Ile Glu Leu Ile Ala Ser Ile Asn Arg Gln Gly Leu  
 450 455 460  
 Val His Pro Lys Glu Cys Ala Gly Val Leu Val Ser Leu Glu Thr Ser  
 465 470 475 480

## 18061

Thr Val Pro Ala Ile Ala Lys Val Ala Phe Asp Thr His Lys Met Leu  
 485 490 495  
 His Gln Gln Tyr Glu Ser Met Phe Glu Arg Glu Tyr Met Arg Ala Val  
 500 505 510  
 Gln Glu Ala Phe Tyr Tyr Gln Arg Asp Val Val Gly Asp Pro Ser Gly  
 515 520 525  
 Ala Leu Ala Arg Pro Tyr Ile Ala Lys Leu Ala Pro Leu Phe Asp Ile  
 530 535 540  
 Ile Lys Thr Ser Asn Ser Arg Tyr Gln Lys Lys Phe Leu Ser Asn Leu  
 545 550 555 560  
 Cys Ser Lys Val Asp Phe Glu Leu Lys Lys Leu Asp Ser Thr Gly Asp  
 565 570 575  
 Pro Pro Glu His Leu Leu Leu Thr Arg Phe Val Ala Gln Asn Leu Ala  
 580 585 590  
 Phe Phe Asp Tyr Gly Gln Leu Ala Glu Leu Val Ser Ala Val Glu Cys  
 595 600 605  
 Met Glu Arg Ile Val Ser Ala Thr Gly Thr Val Val Ala His Ser Ile  
 610 615 620  
 Glu Ile Glu Ile Phe Pro Pro Arg Met Glu Ala Pro Leu Gly Glu Leu  
 625 630 635 640  
 Ser Ser Glu Pro Val Pro Gln Gly Pro Gly Asn Ala Glu Pro Pro Pro  
 645 650 655  
 Gln Val Asn Pro Ser Val Leu Arg Gln Leu Ala Thr Ala Ala Ala Ser  
 660 665 670  
 Leu Ser Met Leu Trp Glu Ala Arg Thr Tyr Leu Arg Arg Leu Tyr Gly  
 675 680 685  
 Ile His Ala His Val Arg Glu Lys Asp Gly Lys Ala Ala Ala Lys Glu  
 690 695 700  
 Leu Asn Lys Ser Ala Thr Lys Val Gln Gly Val Thr Gly Asp Lys Phe  
 705 710 715 720  
 Trp Asp Ala Ile Ser Arg Asn Met Glu Ala Leu Asn Ser Glu Asp Gln  
 725 730 735  
 Met Ile Ser Lys Cys Arg Glu Phe Ala Thr Leu Leu Ala Ile Asp Asp  
 740 745 750  
 Glu Phe Lys Val Gly Gln Asp Glu Asp Ala Glu Gly Asn Ser Phe Asp  
 755 760 765  
 Ala Val Ala Asp Leu Asp Asp Thr Gly Pro Gly Pro Gly Ser Leu Gly  
 770 775 780  
 Gly Gln Arg Pro Gly Lys Arg Arg Asn Ser Val Ser Ser Gln Asn Pro  
 785 790 795 800  
 Ala Lys Arg Pro Arg Gly Arg Lys Ser Gly Ser Gly Lys Lys Arg Ala  
 805 810 815  
 Ser Thr Glu Pro Glu Asp Asp Met Ile Trp Asp  
 820 825

&lt;210&gt; 41042

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41042

Asn His Pro Ala Ser Ile Asp Arg Ile Arg His Cys Arg Ile Glu Ala  
 1 5 10 15  
 Pro Ser Arg Thr Pro Pro Leu Tyr Ala Met Ser Thr Ala Leu Leu Arg  
 20 25 30  
 Ser Arg Pro Asn Thr Ala Ala Leu Arg Arg Ile Cys Leu Val Ser His

## 18062

```

      35              40              45
Arg Gly Gln Phe Pro Lys Pro Asn Ser Ser Ile Ser Ile Val Thr Ser
  50              55              60
Arg Ala Leu His Thr Thr Arg Arg Arg Pro Val Thr Gln Gln Arg Ile
  65              70              75              80
Ser Asn Ile Leu His Ser Ala Ser Leu Ser Val Arg Tyr Glu Ser Thr
      85              90              95
Gly Lys Asp Pro Met Ala Lys Ala Ala Arg Lys Ser Pro Ala Leu Asn
      100              105              110
Ile Leu Val Lys Ser Phe Thr Tyr Cys Gly Phe Phe Ile Val Met Thr
      115              120              125
Gly Val Ala Val Val Ala Phe Phe Ile Tyr Asp Ala Thr Thr Tyr Arg
      130              135              140
Glu Asp Pro Ser Ser Glu Asp Ile Pro Val Ser Glu Leu Ala Leu Asn
  145              150              155              160
Pro Arg Arg Gly Gly Pro Lys Asn Leu Pro Ile Ala Glu Val Leu Val
      165              170              175
Gly Asp Asn Asp Ser Glu Ala Met Val Gln Gln Asn Asp Lys Pro Arg
      180              185              190
Leu Val Ile Leu Gly Thr Gly Trp Gly Ser Ile Ala Leu Leu Lys Asn
      195              200              205
Leu Asn Pro Gly Asp Tyr His Val Thr Val Val Ser Pro Thr Asn Tyr
      210              215              220
Phe Leu Phe Thr Pro Met Leu Pro Ser Ala Thr Val Gly Thr Leu Gly
  225              230              235              240
Leu Arg Ser Leu Val Glu Pro Val Arg Arg Ile Ile Gln Arg Val His
      245              250              255
Gly His Phe Leu Lys Ala Glu Ala Glu Asp Val Asp Phe Ser Glu Lys
      260              265              270
Leu Val Glu Val Ser Gln Val Asp Ala Asn Gly Lys Lys Gln Asn Phe
      275              280              285
Tyr Leu Pro Tyr Asp Lys Leu Val Ile Ala Val Gly Glu Cys Gly Pro
      290              295              300

```

&lt;210&gt; 41043

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41043

```

Thr Ser Cys Ser Asn Ser Met Thr Arg Thr Ala Pro Ala Pro Ser Thr
  1              5              10              15
Ser Ala Asn Cys Thr Asn Ser Ser Thr Arg Ser Thr Pro Ser Ser Pro
      20              25              30
Pro Ser Arg Pro Pro Pro Ser Ala Pro Thr Asn Lys Ala Asn Ile Trp
      35              40              45
Ala Ala Asn Ser Pro Arg Ser Gln Leu Arg Ser Pro Ala Cys Glu Pro
      50              55              60
Thr Arg Ser Asn Thr Glu Thr Ser Thr Thr Ser Phe Thr Asn Pro Ser
  65              70              75              80
Asp Thr Ser Ile Ser Ala Ala Trp His Thr Ser Ala Thr Arg Pro Ser
      85              90              95
Ser Thr Ser Ala Asp Ser Ile Ser Ala Val Ala Phe Trp Pro Cys Thr
      100              105              110
Cys Gly Glu Ala Ser Ile Ser Arg Arg Ala Ser Ala Ser Ala His Gly
      115              120              125

```



## 18063

Ala Cys Trp Pro Trp Thr Gly Pro Arg Glu His Phe Leu Asp Glu Val  
 130 135 140  
 Cys Phe Phe Ala His Val Leu Ser His Glu Ser Ile Ala Lys Leu Leu  
 145 150 155 160  
 Ser Leu Asn Arg Ser Tyr Glu Leu Leu Ile Gly Pro Ser Gly Tyr Lys  
 165 170 175  
 Gln Pro Ala Leu Ala Cys His Arg Lys Gly His Thr Thr Val Ser Ile  
 180 185 190  
 His Pro Cys Gly Leu Leu Leu Asp Arg  
 195 200

<210> 41044  
 <211> 149  
 <212> PRT  
 <213> A.fumigatus

<400> 41044  
 Val Trp Thr Thr Lys Gly Cys Val Thr Asn Pro His Gly Val Lys Gly  
 1 5 10 15  
 Leu Glu His Cys Asn Phe Leu Lys Thr Ile Asp Asp Ala Arg Lys Ile  
 20 25 30  
 Lys Asn Lys Ile Leu Glu Asn Met Glu Leu Ala Cys Leu Pro Thr Thr  
 35 40 45  
 Ser Asp Glu Glu Arg Arg Arg Leu Leu Ser Phe Val Val Cys Gly Gly  
 50 55 60  
 Gly Pro Thr Gly Val Glu Phe Ala Ala Glu Leu Phe Asp Leu Leu Asn  
 65 70 75 80  
 Glu Asp Leu Leu His Ser Phe Pro Lys Ile Leu Arg Asn Glu Ile Ser  
 85 90 95  
 Val His Ile Ile Gln Ser Arg Ser His Ile Leu Asn Thr Tyr Asp Glu  
 100 105 110  
 Ala Leu Ser Lys Tyr Ala Glu Val Arg Cys Phe Thr Cys Phe Ala Asp  
 115 120 125  
 Ile Lys Thr Ile Asp Glu Ala Asn Thr Tyr Arg Pro Val Leu Thr Val  
 130 135 140  
 Ile Thr Leu Lys Ser  
 145

<210> 41045  
 <211> 313  
 <212> PRT  
 <213> A.fumigatus

<400> 41045  
 Ser Pro Asp Lys Cys Ala Ser Glu Gly Gly Pro Arg Arg Gln Ser Phe  
 1 5 10 15  
 Val His Ser Ser Arg Glu Trp Pro Ala Gly Gly Glu Gly Asn Pro Asn  
 20 25 30  
 Gly Phe Leu Pro Leu Val Asp Arg Ser Trp Tyr Val Ile Thr Ile Leu  
 35 40 45  
 Val Cys Asp Val Leu Gly Thr Asp Tyr Cys Thr Asp Arg Ala Glu Leu  
 50 55 60  
 Cys Lys Lys Leu Cys Asp Lys Leu Glu Ala Gln Asn Asn Lys His Ala  
 65 70 75 80  
 Leu Glu Thr Asp Thr His Leu Arg Leu Ile Gly Ala Pro Leu Gly Asp  
 85 90 95

## 18064

Val Tyr Ala Ile Gly Asp Cys Ser Thr Val Gln Asn Lys Val Ala Asp  
 100 105 110  
 Asn Ile Ile Ser Phe Leu Arg Thr Ile Ala Trp Glu Lys Gly Gln Asp  
 115 120 125  
 Pro Gln Lys Val His Leu Thr Phe Arg Glu Trp Lys Asp Val Ala Asn  
 130 135 140  
 Arg Val Arg Lys Arg Phe Pro Gln Ala Ala Asn His Leu Arg Arg Leu  
 145 150 155 160  
 Asp Lys Leu Phe Glu Gln Tyr Asp Lys Asp Arg Ser Gly Thr Leu Asp  
 165 170 175  
 Phe Gly Glu Leu His Glu Leu Leu His Gln Ile Asp Thr Lys Leu Thr  
 180 185 190  
 Ser Leu Pro Ala Thr Ala Gln Arg Ala Asn Gln Gln Gly Gln Tyr Leu  
 195 200 205  
 Gly Arg Lys Leu Thr Lys Ile Ala Ala Ala Leu Pro Gly Met Arg Ala  
 210 215 220  
 Asn Glu Ile Glu His Gly Asp Val Asp Asn Ile Val Tyr Lys Pro Phe  
 225 230 235 240  
 Arg Tyr Lys His Leu Gly Ser Leu Ala Tyr Ile Ser Asn Ala Ala Val  
 245 250 255  
 Phe Asp Phe Gly Gly Leu Asn Phe Ser Gly Gly Val Leu Ala Met Tyr  
 260 265 270  
 Leu Trp Arg Ser Val Tyr Phe Ala Glu Ser Val Ser Phe Arg Thr Arg  
 275 280 285  
 Cys Met Leu Ala Met Asp Trp Ala Lys Arg Ala Leu Phe Gly Arg Gly  
 290 295 300  
 Leu Phe Leu Arg Thr Cys Ser Phe Ser  
 305 310

&lt;210&gt; 41046

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41046

Cys Asn Asp Gly Arg Glu Asp Gln Leu Leu His Phe Ile Thr Ser Asp  
 1 5 10 15  
 Pro Gln Ile Phe Ala Ile Arg Asn Ser Pro Glu Ala Val Leu Ala Ala  
 20 25 30  
 Val Asp Glu Phe Ala Arg Thr Lys Asp Phe Leu Met Asn Val Gly Pro  
 35 40 45  
 Tyr Lys Gly Gly Ile Ile Thr Asp Ile Ile Ala Thr Glu Gln Pro Ser  
 50 55 60  
 Ser Ile Leu Glu Ile Gly Gly Tyr Ile Gly Tyr Ser Ala Ile Met Phe  
 65 70 75 80  
 Gly Ser Ala Met Arg Asp Thr Gly Val Leu Ala Pro Arg Tyr Val Ser  
 85 90 95  
 Leu Glu Met Asn Pro Lys Phe Ala Ser Val Ser Arg Thr Leu Val Glu  
 100 105 110  
 Val Ala Gly Leu Ser Asp Val Val Glu Ile Gln Glu Gly Pro Cys Arg  
 115 120 125  
 Lys Ser Leu His Arg Leu Ala Ala Gly Thr Ser Asn Lys Gly Pro Ser  
 130 135 140  
 Ser Lys Lys Trp Asp Ile Leu Phe Leu Asp His Ser Lys Ile Ser Tyr  
 145 150 155 160  
 Leu Asn Asp Leu Lys Leu Ala Glu Glu Leu Gly Ile Val Ala Pro Gly

## 18065

```

                165                170                175
Ser Ile Val Ile Ala Asp Asp Met Lys Arg Pro Gly Asn Pro Met Tyr
                180                185                190
Ser Asp Tyr Val Met Ala Asp Thr Ala Thr Lys Thr Glu Ala Tyr Met
                195                200                205
Pro Phe Val Gly Cys Leu Ser Asp Gly Gly Ile Ser Leu Gly Asn Pro
                210                215                220
Tyr Leu Ile Tyr Gln Thr Val Leu Leu Glu Gly Leu Glu Pro Thr Gly
225                230                235                240
His Met Val Ser Phe Tyr Tyr Pro Arg Leu Leu Arg Phe Ala Lys Ala
                245                250                255
Ser

```

```

<210> 41047
<211> 68
<212> PRT
<213> A.fumigatus

```

```

<400> 41047
Val Arg Asp Val Tyr Tyr Glu Asp Ala His Asn Ile Gln Lys Leu Cys
1                5                10                15
Asn Gly Met Ser Leu Ile Ile Lys Leu Tyr Tyr Tyr Asp Lys Asn Lys
                20                25                30
Arg Leu Thr Ala Val Leu Asn Asn Ile Phe Leu Asn Ile Tyr Ile Cys
                35                40                45
Asn Asp Pro Lys Ser Ser Gly Thr Phe Ile Leu Cys Leu Leu Gln Ile
50                55                60
Ser Ser Pro Phe
65

```

```

<210> 41048
<211> 61
<212> PRT
<213> A.fumigatus

```

```

<400> 41048
Asn Leu Ala Ala Ala Glu Ile Gly Gly Tyr Phe Glu Pro Leu Lys His
1                5                10                15
Asp Phe Ile Thr Lys Ser Ser Tyr Ser Cys Ala Ala Asp Ile Val Ile
                20                25                30
Ala Tyr Gly Leu Glu Tyr Gly Ser His Cys Ser Val Gly Val Pro Ile
35                40                45
Glu Gly Val Val Leu Tyr Leu Leu Pro Ala Leu Glu Gly
50                55                60

```

```

<210> 41049
<211> 66
<212> PRT
<213> A.fumigatus

```

```

<400> 41049
Pro Leu Asp Val Gly Cys Phe Ser Pro Leu Lys Cys Val Tyr Gly Cys
1                5                10                15
Leu Ile Lys Asp Lys Met Gln Leu Gly Phe Asn His Ile Asp Lys Phe
20                25                30

```

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	1.2	0.4	1	2	0.05	3.0	0.99
Education	12.5	2.1	9	16	0.25	3.5	0.97
Income	1500	500	500	3000	0.35	3.8	0.96
Marital Status	1.5	0.5	1	2	0.10	3.1	0.98
Occupation	2.5	1.2	1	5	0.20	3.4	0.97
Health Status	1.8	0.6	1	3	0.08	3.0	0.99
Stress Level	3.2	1.5	1	5	0.30	3.9	0.95
Life Satisfaction	4.5	1.0	3	6	0.12	3.2	0.98
Resilience	2.8	1.1	1	5	0.22	3.6	0.97
Emotional Stability	3.5	1.2	1	5	0.28	3.7	0.96
Social Support	3.8	1.3	1	5	0.24	3.6	0.97
Life Events	2.2	1.0	1	4	0.18	3.3	0.98
Personal Growth	3.0	1.1	1	5	0.20	3.4	0.97
Meaning in Life	4.2	1.0	3	5	0.10	3.1	0.98
Life Purpose	3.5	1.2	1	5	0.25	3.5	0.96
Life Satisfaction (Total)	4.5	1.0	3	6	0.12	3.2	0.98

```
<210> 41050
<211> 77
<212> PRT
<213> A.fumigatus
```

```
<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.
```

<400> 41050															
Ser	Xaa	Asn	Ser	Val	Leu	Lys	Thr	Pro	Tyr	Asn	Leu	Lys	Gln	Leu	Lys
1				5					10					15	
Lys	Gln	Glu	Thr	Met	Leu	Lys	Lys	Leu	Leu	Arg	Glu	His	Thr	Tyr	Ser
			20					25					30		
Pro	Pro	Thr	Pro	Ile	Lys	Ala	Val	Leu	Gly	Gln	Ile	Ile	Lys	Gly	Cys
		35					40					45			
Lys	Met	Ala	Met	Asn	Asn	Ala	Ala	Leu	Val	Ala	Lys	Glu	Asn	His	Asp
	50					55					60				
Val	Cys	Ala	Ala	His	Glu	Lys	His	Leu	Gln	Lys	Gln	Lys			
65					70					75					

```
<210> 41051
<211> 85
<212> PRT
<213> A.fumigatus
```

<400>	41051															
Val Gly Met Val Val Thr Ser Ile Ser Val Tyr Val Gly Thr Thr Leu							5	10	15							
Thr Tyr Ser Tyr Cys Ser Asp Arg Tyr Lys Ser Gln Ala Ala Lys Val	20						25	30								
Ser Ile Phe Asn Asn Tyr Phe Arg Gln Thr Cys Ile His Tyr Leu Leu	35						40	45								
Leu Arg Leu Ala Ile Gln Thr Arg Val Cys Leu Leu Pro Leu Thr Leu	50						55	60								
Trp Ser Arg Tyr Pro Tyr Tyr Tyr Leu Ser Arg Val Arg Lys Phe	70						75	80								
Val Ile Gly Lys Glu										85						

```
<210> 41052
<211> 71
<212> PRT
<213> A.fumigatus
```

<400> 41052  
Glu Val Leu Gly Ala Arg Glu Leu Val Asp Gly Gly Glu Tyr Arg Leu  
1 5 10 15

## 18067

Trp Arg Val Ala Asp Gly Lys Tyr Leu Gly Ile Thr Gly Tyr Glu Val  
                   20                                  25                                  30  
 Glu Lys Leu Val Phe Pro Ala Val Ile Ala Leu Val Gly Ser Phe Asn  
                   35                                  40                                  45  
 Ser Gln Tyr Ile Gln Ala Ser Arg Gly Val Pro Tyr Gln Asp Ile Phe  
                   50                                  55                                  60  
 Leu Arg Leu Val Lys Pro Leu  
 65                                  70

&lt;210&gt; 41053

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (64)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41053

Tyr Gly Cys Ala Arg Ser Pro Pro Pro Pro Pro Ala Pro Pro Pro Pro  
 1                                  5                                  10                                  15  
 Leu Pro Pro Pro Pro Pro Thr Pro Pro Pro Pro Pro Pro Pro Leu Pro Thr  
                   20                                  25                                  30  
 Pro Pro Ser Pro Pro Pro Pro His Pro Ser Ala His Pro Pro Pro Ser  
                   35                                  40                                  45  
 Ser Pro Pro Pro Ser Thr Tyr Leu Arg Arg Ala Thr Thr Ser Ile Xaa  
                   50                                  55                                  60  
 Ile Leu Leu His Pro Glu Thr Asp Thr Ile Asn Leu Gly Leu Gln Met  
 65                                  70                                  75                                  80  
 Leu Arg Gly Pro Thr Gln Pro Ile Ser Ser Arg Phe Pro Tyr Asn Asn  
                   85                                  90                                  95  
 Ser Leu Pro Pro Gly Met Ser Gln Gln Cys Leu Leu Asn Ala Glu Val  
                   100                                  105                                  110

&lt;210&gt; 41054

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41054

Gly Phe Lys Ile Ala Ser Asn Phe Gly Arg Gly Gln Ile Leu Trp Tyr  
 1                                  5                                  10                                  15  
 Gly Asp Pro Leu Gly Cys Val Ile Arg Ser Leu Thr Asp Tyr Val Ser  
                   20                                  25                                  30  
 Thr Thr Gly Gln Ser Phe Ser Val Val Thr Ala Leu Ser Ile Ser Asn  
                   35                                  40                                  45  
 Asp Leu Ser Lys Phe Ile Ile Thr Gln Asn Arg Thr Leu Leu Trp Ile  
                   50                                  55                                  60  
 Leu Leu Thr Leu Arg Tyr Ile Arg  
 65                                  70

&lt;210&gt; 41055

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41055

Lys Arg Leu Met Ala Ala Ala Trp Met Ser Arg Met Gly Val Lys Thr  
 1                   5                   10                   15  
 Ile Met Ile Asp Gln Lys Ser His Gln Thr Arg Cys Gly Arg Ala Asp  
                   20                   25                   30  
 Gly Leu Glu Ser Arg Thr Leu Glu Ile Leu Asp Ser Phe Gly Leu Ala  
                   35                   40                   45  
 Asp Lys Val Trp Ala Gln Ala Asn His Thr Val Glu Ile Ala Leu Trp  
                   50                   55                   60  
 Val Arg Pro Pro Ser Cys Leu Gln Lys Gln Phe His  
 65                   70                   75

&lt;210&gt; 41056

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41056

Leu Asn Leu Cys Arg Val Gln Gly Ser Thr Ala Asp Gly Lys Leu Glu  
 1                   5                   10                   15  
 Arg Gln Ser Val Ser Ala Asn Ser Lys Pro Gly Trp Ser Arg Phe His  
                   20                   25                   30  
 Glu Ser Thr Leu Ser Gln Gly Glu Ile Glu Glu Tyr Leu Met Glu Phe  
                   35                   40                   45  
 Val Arg Thr Gly Lys His Val Glu Val Lys Arg Glu Thr Ile Pro Thr  
                   50                   55                   60  
 Ser Phe Glu Ile Asp Tyr Ala Met Ile Asn Asp His Asp Ala Phe Pro  
 65                   70                   75                   80  
 Ile Arg Val Asn Leu Glu Asp Val Pro Cys Asn Pro Lys Thr Pro Phe  
                   85                   90                   95  
 Asp Gly Val Ala Thr Pro Asn Ser Glu Leu Ser Glu Ala Pro Ser Asp  
                   100                   105                   110  
 Asp Ser Gly Tyr Ala Gly Met Gly Thr Thr Val Glu Ala Lys Tyr Ile  
                   115                   120                   125  
 Leu Gly Cys Asp Gly Ala His Ser Trp Val Arg Lys Gln Leu Gly Leu  
                   130                   135                   140  
 Arg Leu Glu Gly Glu Ser Tyr Asn Asp Cys Gly Gly Val Leu Asp Ile  
 145                   150                   155                   160  
 Ile Pro Leu Thr Asp Phe Arg Glu Leu Ser Arg Ile Ile Thr Thr Val  
                   165                   170                   175  
 Asp Ile Ala Asn Pro Thr  
                   180

&lt;210&gt; 41057

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (88)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41057

Phe Thr Val Tyr Ser Ser Phe Ala Gly Ser Pro Leu Pro Arg His Phe

## 18069

```

1           5           10           15
Pro Gln Ala Cys Lys Thr Leu Val Ile Trp Met Cys Pro Leu Pro Pro
      20           25           30
Ala Pro Pro Arg Thr Pro Pro Pro Ser Pro Ala Pro Pro Pro His Thr
      35           40           45
Pro Pro Pro Pro Pro Pro Pro His Pro Pro Leu Pro Thr Pro Pro Pro
      50           55           60
Pro Leu Arg Thr Pro Pro Pro Leu Leu Pro Pro Pro Gln His Leu Pro
65           70           75           80
Ser Ser Cys Asp Asp Gln Tyr Xaa Asn Thr Ser Ala Pro Gly Asn Arg
      85           90           95
His His Gln Leu Arg Ala Ser Asn Val Thr Arg Ser His Pro Thr His
      100          105          110
Phe Ile Gln Val Ser Leu Gln Gln Phe Val Ala Thr Trp Tyr Val Ser
      115          120          125
Thr Val Pro Pro Glu Arg Arg Ser Leu Thr Val Ser Ile Glu Arg Gln
      130          135          140
Lys Gln Asn Leu Ser Asp His Asp Ala Asp Gln Thr Ser Arg Ile Met
145          150          155          160
Gly Ser His Ile Pro Asp Arg Asn Val Cys Thr Asn Met Tyr Ser Leu
      165          170          175
Asn Cys Ile Ser Val Ala Arg Gln Arg His Val Ser
      180          185

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&lt;210&gt; 41058

&lt;211&gt; 445

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41058

```

Ser Pro Pro Leu Thr Leu Leu Ile Gln Pro Asp His Pro Ala Asp Ile
1           5           10           15
Arg Lys Arg Phe Ile Ile Lys Ser Lys His Gly Thr Leu Met Met Ile
      20           25           30
Pro Arg Glu Arg Lys Leu Val Arg Val Tyr Val Glu Leu Pro Pro Glu
      35           40           45
Val Ala Asn Arg Tyr Arg Ala Asp Arg Asn Ala Asp Ile Leu Thr Glu
      50           55           60
Gln Val Ala Thr Ile Met Gln Pro Tyr Thr Leu Lys Thr Asn Arg Ile
65           70           75           80
Asp Trp Ser Thr Ile Tyr Thr Val Ser Ser Pro Phe Leu Cys Ser Phe
      85           90           95
Asp Ala Val Pro Gly Thr Pro Lys Leu Ile Thr Asn Gln Val Gly Gln
      100          105          110
Arg Ile Cys Arg Lys Ile Gly Leu His Asn Arg Ile Phe Leu Ala Gly
      115          120          125
Asp Ala Ile His Thr His Ser Pro Lys Ala Gly Gln Gly Met Asn Val
      130          135          140
Ser Met Gln Asp Thr Phe Asn Leu Gly Trp Lys Ile Ala Ser Val Ile
145          150          155          160
Lys Gly Val Leu His Pro Trp Val Leu Glu Thr Tyr Gln Glu Glu Arg
      165          170          175
Leu Pro Val Ala Glu Arg Leu Ile Ala Leu Asp Gln Arg Ile Cys Arg
      180          185          190
Gly Met Cys Ser Gln Arg Ser Gly His Pro Glu Val Gln Gln Gly His
      195          200          205

```

## 18070

Phe Asp Glu Asp His Lys Arg Ala Leu Glu Asp Glu Asn Ser Ser Met  
 210 215 220  
 Ser Gly Leu Ala Val Ile Tyr Gln Pro Asn Ser Leu Val Thr Ser Thr  
 225 230 235 240  
 Ala Trp Asp Ala Pro Leu Pro Lys Asp Val Ala Ser Cys Ile Ser Arg  
 245 250 255  
 Pro Ser Val Ala Gln Asn Leu Gln Val Gly Ala Arg Ile Pro Ser Val  
 260 265 270  
 Leu Ile Leu Asn Gln Ser Asp Ser Gln Ala Cys His Leu Gln Gln Ile  
 275 280 285  
 Leu Pro Ser Thr Gly Gln Trp Asn Leu Leu Val Phe Gly Gly Asp Ile  
 290 295 300  
 Ala Asp Ala Asp Gln Lys Ser Arg Val Gln Asp Leu Ala Asp Ala Leu  
 305 310 315 320  
 Asn Ser Ser Gly Ser Val Phe Glu Lys Leu Asn Asp Pro Val Ser Val  
 325 330 335  
 Ala Arg Arg Gly Phe Pro Ala Leu Gly Val Tyr Leu Ile His Cys Ala  
 340 345 350  
 Asp Arg Leu Ser Ile Glu Leu Asn Asp Leu Pro Met Val Phe Arg Pro  
 355 360 365  
 Trp Thr Lys Asp Gly Val Asp Tyr Gly Arg Val Trp Ala Asp Gly Glu  
 370 375 380  
 Ala Tyr His His Ala Gly Gly Gly Lys Leu Tyr Ser Ser Phe Gly Ile  
 385 390 395 400  
 Gly Asp Lys Gly Cys Met Ala Leu Leu Arg Pro Asp Gln His Leu Ala  
 405 410 415  
 Phe Leu Ser Asp Ile Asn Asp Val Glu Ser Leu Glu Gln Phe Leu Arg  
 420 425 430  
 Ser Ile Met Pro Glu Ala Thr Gln Lys Pro Met Pro Ile  
 435 440 445

&lt;210&gt; 41059

&lt;211&gt; 563

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41059

Gly Gly Glu Asp Ile Ile Thr Met Arg Ile Val Arg Ile Ser Lys Trp  
 1 5 10 15  
 Ala Thr Thr Pro Met Glu Glu Leu Ser Leu Glu Glu Leu Ala Asp Val  
 20 25 30  
 Lys Ala Ala Asn Ile Thr Asp Trp Val Leu Gln Pro Gln Val Leu Arg  
 35 40 45  
 Ser Ile Tyr Arg Glu Phe Lys Ala Phe Leu Thr Glu Phe Thr Asp Gln  
 50 55 60  
 Ala Gly Gln Ser Val Tyr Gly His Lys Ile Lys Thr Leu Gly Glu Val  
 65 70 75 80  
 Asn Ser Ala Ser Leu Glu Val Ser Tyr Val His Leu Ser Ser Thr Lys  
 85 90 95  
 Ala Ala Leu Ser Tyr Phe Leu Ala Asn Glu Pro Thr Glu Val Leu Lys  
 100 105 110  
 Val Phe Asp Gln Val Ala Leu Asp Val Thr Leu Phe His Tyr Pro Gln  
 115 120 125  
 Tyr Gln Asp Ile His Lys Glu Ile His Val Arg Ile Ser Asp Leu Pro  
 130 135 140  
 Ile Val Tyr Thr Leu Arg Gln Leu Arg Gln Gln His Leu Asn Cys Leu



## 18071

145 150 155 160  
 Val Arg Val Ser Gly Val Val Thr Arg Arg Thr Gly Val Phe Pro Gln  
 165 170 175  
 Leu Lys Tyr Val Met Phe Ile Cys Gln Lys Cys Asn Ile Thr Leu Gly  
 180 185 190  
 Pro Phe Gln Gln Glu Ala Ser Ala Glu Val Lys Ile Ser Tyr Cys Gln  
 195 200 205  
 Asn Cys Gln Ser Lys Gly Pro Phe Thr Ile Asn Ser Glu Lys Thr Val  
 210 215 220  
 Tyr Arg Asn Tyr Gln Lys Leu Thr Leu Gln Glu Ser Pro Gly Ser Val  
 225 230 235 240  
 Pro Ala Gly Arg Leu Pro Arg Gln Arg Glu Val Val Leu Leu Ala Asp  
 245 250 255  
 Leu Ile Asp Ser Ala Lys Pro Gly Asp Glu Ile Glu Val Thr Gly Ile  
 260 265 270  
 Tyr Arg Asn Ser Tyr Asp Ala Gln Leu Asn Asn Lys Asn Gly Phe Pro  
 275 280 285  
 Val Phe Ala Thr Ile Ile Glu Ala Asn His Ile Val Lys Ser His Asp  
 290 295 300  
 Gln Leu Ala Gly Phe His Leu Thr Glu Glu Asp Glu Arg Gln Ile Arg  
 305 310 315 320  
 Ala Leu Ser Arg Asp Pro Asp Ile Val Asp Lys Ile Val Arg Ser Ile  
 325 330 335  
 Ala Pro Ser Ile Tyr Gly His Gln Asp Val Lys Thr Ala Val Ala Leu  
 340 345 350  
 Ser Leu Phe Gly Gly Val Ser Lys Glu Ala Gln Gly Lys Met Ala Ile  
 355 360 365  
 Arg Gly Asp Ile Asn Val Leu Leu Leu Gly Asp Pro Gly Thr Ala Lys  
 370 375 380  
 Ser Gln Val Leu Lys Tyr Val Glu Lys Thr Ala His Arg Ala Val Phe  
 385 390 395 400  
 Ala Thr Gly Gln Gly Ala Ser Ala Val Gly Leu Thr Ala Ser Val Arg  
 405 410 415  
 Arg Asp Pro Leu Thr Ser Glu Trp Thr Leu Glu Gly Gly Ala Leu Val  
 420 425 430  
 Leu Ala Asp Arg Gly Thr Cys Leu Ile Asp Glu Phe Asp Lys Met Asn  
 435 440 445  
 Asp Gln Asp Arg Thr Ser Ile His Glu Ala Met Glu Gln Gln Thr Ile  
 450 455 460  
 Ser Ile Ser Lys Ala Gly Ile Val Thr Thr Leu Gln Ala Arg Cys Ala  
 465 470 475 480  
 Val Val Ala Ala Ala Asn Pro Ile Gly Gly Arg Tyr Asn Ser Thr Ile  
 485 490 495  
 Pro Phe Ser Gln Asn Val Glu Leu Thr Glu Pro Ile Leu Ser Arg Phe  
 500 505 510  
 Asp Ile Leu Cys Val Val Arg Asp Thr Val Asp Pro Asn Glu Asp Glu  
 515 520 525  
 Arg Leu Ala Asn Phe Val Ile Glu Ser His His Arg Ser Asn Pro Thr  
 530 535 540  
 Arg Pro Leu Arg Asp Gln Asp Gly Asn Leu Val Asp Ser Glu Gly Asn  
 545 550 555 560  
 Arg Ile Asp

&lt;210&gt; 41060

&lt;211&gt; 99

18072

<212> PRT  
<213> A.fumigatus

<400> 41060

Glu	Gly	Tyr	Arg	Leu	Tyr	Lys	His	Gly	Asn	Arg	Leu	Pro	Pro	Thr	Pro
1				5					10					15	
Glu	Glu	Ile	Ala	Lys	Arg	Glu	Ala	Ala	Gln	Arg	Lys	Ala	Glu	Glu	Glu
			20					25				30			
Lys	Glu	Gly	Glu	Ile	Pro	Gln	Glu	Leu	Leu	Arg	Lys	Tyr	Ile	Leu	Tyr
		35				40					45				
Ala	Arg	Glu	Lys	Cys	His	Pro	Lys	Leu	Tyr	Gln	Ile	Asp	Gln	Asp	Lys
		50			55					60					
Val	Ala	Arg	Leu	Phe	Ala	Asp	Met	Arg	Arg	Glu	Ser	Leu	Ala	Thr	Gly
65					70				75						80
Ala	Tyr	Pro	Ile	Thr	Val	Gly	Gly	Phe	Leu	Thr	Trp	Ser	Ser	Phe	Lys
				85					90					95	
Leu	Ser	His													

<210> 41061  
<211> 73  
<212> PRT  
<213> A.fumigatus

<400> 41061

Ile	Ile	Ile	Leu	Tyr	Leu	Leu	His	His	Arg	Ile	Phe	Met	Leu	Asp	Leu
1			5						10				15		
Leu	Leu	Tyr	Tyr	Ser	Ala	Pro	Thr	Met	Pro	His	Ala	His	Ala	Met	Ser
			20					25				30			
Thr	Ser	Leu	Leu	Ala	Pro	Thr	Tyr	Ser	Trp	Val	Asp	Ser	Thr	Leu	Pro
		35				40					45				
Tyr	Pro	Arg	Val	Phe	Ser	Pro	Val	Thr	Ser	His	Leu	Val	Asp	His	Thr
	50				55					60					
Ala	Glu	Val	Ser	His	Pro	Gln	Cys	Pro							
65					70										

<210> 41062  
<211> 125  
<212> PRT  
<213> A.fumigatus

<400> 41062

Arg	Arg	Ser	Cys	Gln	Pro	Arg	Gly	Glu	Asp	His	Phe	Pro	Ala	Arg	Trp
1			5						10					15	
Asp	Pro	Arg	Tyr	Thr	Leu	His	Ser	Gly	Thr	Val	Ala	Phe	Pro	Asp	Arg
		20						25				30			
Arg	Glu	Asn	Tyr	Gln	Val	His	Ala	Ser	Gly	Pro	Arg	Thr	Pro	Ala	Thr
		35				40					45				
Gly	Ser	Lys	Thr	Asn	Tyr	Tyr	Ala	Asn	Tyr	Lys	Asp	Ala	Val	Thr	Gly
	50			55						60					
Phe	Leu	Val	Asn	Gly	Thr	Leu	Pro	Val	Asp	Ala	Asn	Gln	Gly	Val	His
65				70					75						80
Ser	Leu	Thr	Asp	Val	Pro	Val	Phe	Ala	Gln	Gly	Pro	Cys	Gln	Glu	Leu
			85					90					95		
Phe	Gly	Gly	Val	Tyr	Asn	Ser	Ile	Asp	Ile	Phe	Phe	Asn	Met	Ala	Glu
			100					105					110		

## 18073

Cys Leu Gly Leu Ala Gln Thr Lys Lys Pro Lys Gly Lys  
 115 120 125

<210> 41063

<211> 121

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (57)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41063

Arg Cys Val Ala Cys Leu Leu Ile Leu Phe Trp Ser Val Ile Leu Ala  
 1 5 10 15  
 Thr Ile Ser Leu Thr Asp Gly Asn Leu Gly Glu Leu Asp Gly Gln Ile  
 20 25 30  
 Ser Pro Arg Leu Ala Val Asn Leu Gly Ser Asn Asn Pro Phe Arg Asn  
 35 40 45  
 Arg Ala Leu Ser Pro Ala Gly Cys Xaa Thr Ser Gly Ser Arg Pro Pro  
 50 55 60  
 Arg Pro Thr Phe Thr Asn Pro Phe Leu Asp Asp Thr Asp Ser Leu Ser  
 65 70 75 80  
 Ser Pro Arg Ser Ala Pro Val Gly Thr Leu Phe Ser Pro Val Glu Gln  
 85 90 95  
 Gln Asp Met Thr Ser Asn Thr Arg Glu Leu Phe Val Arg Leu Ser Tyr  
 100 105 110  
 Ser Leu Gly Gly Phe Ser Gly Pro Ile  
 115 120

<210> 41064

<211> 264

<212> PRT

<213> A.fumigatus

<400> 41064

Ser Pro Val Leu Val Phe His His Asp Gly Pro Phe Asp Ala Cys Asn  
 1 5 10 15  
 Pro His Arg Asn Arg Lys Gly Ser Arg Thr Ala Pro Met Gln Ala Phe  
 20 25 30  
 Pro Lys Asp Ser Pro Asn Met Ala Leu Gly Gly Ser Gly Pro Val Asn  
 35 40 45  
 Lys Asn Ile Asn Leu Asp Gln Phe His Gly Thr Met Glu Glu Gly Phe  
 50 55 60  
 Asn Asp Tyr Ser Ser Thr Gly Ala Ala Arg Ser Gly Glu Ala Val Ser  
 65 70 75 80  
 Phe Asp Pro Lys Ser Arg Ile Glu Pro Ile His Gly Ala Glu Ser Met  
 85 90 95  
 Gly Leu Gly Thr Ser Thr Phe Leu Glu Gly Ala Pro Ala Ser Arg Ala  
 100 105 110  
 Ala Met Gln Arg Arg Ala Ser Glu Asn Glu Asn Gln Leu Ser Gln Asn  
 115 120 125  
 Gly Gly Leu Gln Arg Lys Lys Ser Leu Ala Gln Arg Leu Arg Gly Ile  
 130 135 140  
 Asn Lys Pro Gln Gly Gly Arg Met Ala Ser Pro Asp Ala Ser Tyr Asn

## 18074

```

145          150          155          160
Pro Pro Leu Ser Ser Ser His Ser Gly Pro Leu Arg Ala Asn Glu Lys
          165          170          175
Asn Pro Phe Phe Gln Asp Tyr Asp Asp Ala Trp Asp Lys Lys Gly Ala
          180          185          190
Arg Ile Asn Thr Ala Glu Glu Ser Arg Ser Gly Ile Glu Gly Gly Arg
          195          200          205
Ala Arg Ser Ser Ser Ser Pro Lys Gln Ser Thr Asn Leu Glu Arg Arg
          210          215          220
Phe Thr Asn Glu Arg Ser Asn Thr Gly Gly Glu Asp Gly Lys Ser Gly
225          230          235          240
Gly Gly Gly Gly Phe Ile Asn Arg Met Lys Ser Leu Arg Lys Pro Arg
          245          250          255
Pro Glu Arg Arg Ile Ser Asn Asp
          260

```

&lt;210&gt; 41065

&lt;211&gt; 319

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41065

```

Pro Ile Ile Lys Asp Ile Ser Ala Lys Asp Tyr Ser Lys Tyr Ser Asn
1          5          10          15
Ser Ser Ile Ile Asp Ile Leu Leu Glu Met Pro Ala Leu Val Ser Arg
          20          25          30
Gln Ile Ser Thr Pro Glu Ser Asn Ile Ser Val Gln Asn Gly Thr Lys
          35          40          45
Val Pro Ser Thr Thr Ser Cys Gly Leu Leu Val Asn Ala Ala Arg Lys
          50          55          60
Gly Asn Val Asp Val Ile Arg Phe Leu Ile Tyr Leu Gly Ala Asp Val
65          70          75          80
Asn Glu Tyr Tyr Asp Gly Val Thr Pro Leu Leu Ala Ala Ala Ile Ala
          85          90          95
Gly Gln Glu Ala Ala Met Thr Glu Leu Leu Gln Asn Asp Ala Ser Pro
          100          105          110
Thr Ala Arg Asp Ser Glu Gly Cys Thr Ile Phe Lys Leu Leu Leu Asp
          115          120          125
Asn Gly His Tyr Asn Ile Ala Glu Met Leu Ile Lys Lys Tyr Pro Asp
          130          135          140
Leu Thr Val Thr Asp Pro Arg Leu Pro Lys Gly Glu Lys Trp Leu Arg
145          150          155          160
Glu Gln Phe Glu Glu Ile Ser Asp Asn Val Lys Asp Pro Lys Ser Lys
          165          170          175
Pro Ser Lys Glu Ile Leu Glu Tyr Leu Ile Ser Gly Gln Leu Pro Gln
          180          185          190
Glu Glu Gly Arg Ser Val Ser Asp Val Tyr Trp Glu His Ile Leu Leu
          195          200          205
Arg Tyr Ile Gly Asp Val Pro Leu Asp Ile Lys Arg Asn Tyr Ser Arg
          210          215          220
Ser Leu Arg Leu Ser Leu Met Gly Thr Phe Asp Arg Phe Phe Leu Gly
225          230          235          240
His Glu Gly Ile Lys Glu Ser Ala Arg Leu Leu Asn Ser Lys Leu Pro
          245          250          255
Thr Thr Ala Tyr Thr Ile Glu Gly Thr Val Val Asp Gly Asp Gly Gly
          260          265          270

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## 18075

Trp Val Thr Glu Arg Trp Ser Tyr His Asp Ala Tyr Gly Ile Asp Val  
 275 280 285  
 Arg Asp Gly Ile Asp Ser Phe Leu Ile Asp Ser Glu Lys Gly Lys Ile  
 290 295 300  
 Met Val Lys Met Ile Asn Tyr Asn Val Cys Glu Lys Thr Lys Gly  
 305 310 315

<210> 41066  
 <211> 92  
 <212> PRT  
 <213> A.fumigatus

<400> 41066  
 Thr Ala Asp Gly Ser Pro Leu Leu Ala Gly Asp Val Leu Ala Ser Ser  
 1 5 10 15  
 Leu Pro Trp Trp Ala Thr Met Leu Ala Val Ala Met Pro Ala Leu Glu  
 20 25 30  
 Met Ala Leu Ile Ile Ala Gly Trp Leu Tyr Cys Gly Leu Asn Ala Lys  
 35 40 45  
 Arg Leu Ala Pro Ser Gly Val Val Gly His Gly Met Leu Trp Leu Ser  
 50 55 60  
 Val Val Val Gly Leu Ser Leu Cys Ile Arg Ala Leu Phe Thr Leu Arg  
 65 70 75 80  
 Asn Gln Gly Lys Arg Pro Phe Gly Arg Asp Leu Ala  
 85 90

<210> 41067  
 <211> 217  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (2)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 41067  
 Ile Xaa Ser Glu Leu Pro Ser His Ser Thr Ser Pro Val Val Lys Thr  
 1 5 10 15  
 Met Gly Thr Ala Leu Ala Ser Arg Phe Leu Glu Glu Lys Tyr Lys Val  
 20 25 30  
 Ala Val Trp Asn Arg Ser Pro Glu Lys Ala Ser Ser Leu Leu Gly Lys  
 35 40 45  
 Gly Ala Thr Leu Ser His Thr Ala Val Asp Gly Ile Asn Ala Ser Asp  
 50 55 60  
 Leu Ile Ile Ile Cys Leu Leu Asp Asn Ala Ala Val Glu Ala Thr Leu  
 65 70 75 80  
 Ala Gly Ala Leu Asp His Leu His Gly Lys Thr Ile Ile Asn Leu Thr  
 85 90 95  
 Asn Gly Thr Pro Asp Gln Ala Arg Lys Leu Ser Asp Arg Phe Val Ser  
 100 105 110  
 His Gly Ala Arg Tyr Ile His Gly Gly Ile Met Ala Thr Pro Ser Met  
 115 120 125  
 Ile Gly Ser Pro Tyr Ala Leu Val Leu Tyr Ser Gly Ser Pro Asp Ala  
 130 135 140  
 Phe Lys Ala Ala Glu Gly Asp Leu Ser Val Leu Ala Lys Cys Val Phe

## 18076

145		150		155		160
Leu	Gly	Glu	Asp	Ala	Gly	Thr
		165		170		175
Ser	Gly	Met	Tyr	Gly	Leu	Phe
		180		185		190
Arg	Glu	Val	Glu	His	Ala	Arg
		195		200		205
Val	Ala	Gly	Gly	Asn	Asp	Pro
		210		215		

<210> 41068  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 41068
Arg Asp Gly Gln Ser Arg Leu Met Arg Gly Ser Thr Pro Ala Lys Asp
1 5 10 15
Arg Ile Ser Pro Met Gln Leu Val Gly Ile Gln Asn Ile Ile Asp Ala
20 25 30
Ser Glu Ala Gln Gln Val Ser Ala Glu Phe Ile Arg Pro Met Lys Glu
35 40 45
Phe Met Gln Lys Ala Val Ala Ala Gly His Gly Gly Asp Asp Ile Ser
50 55 60
Ser Leu Ile Asp Phe Val Lys Ser Thr
65 70

<210> 41069  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 41069
Ser Leu Ser His Asn Arg His Thr Asp Leu Phe Leu Gly Arg Leu Ala
1 5 10 15
Arg Tyr Val Tyr Glu Arg Cys Arg Val Asp Ser Val Ile Gly Asn Glu
20 25 30
Leu Leu Lys Tyr Ile Val Leu Lys Ala Asp Val Leu Cys Thr Val Val
35 40 45
Tyr Val Met Leu Phe Thr Ile Gln Leu Ser Trp Ser Ser Leu Ala Leu
50 55 60
Ala Ile Phe Phe Leu Phe Ile
65 70

<210> 41070  
 <211> 319  
 <212> PRT  
 <213> A.fumigatus

<400> 41070
Ala Ser Phe Tyr Lys Pro Asn Asn Pro Val Leu His Gln Ile Cys Tyr
1 5 10 15
Cys His Leu Ser Ile Leu Met Pro Asp Leu Gly Thr Ser Lys His Arg
20 25 30
Ser Ser Arg Ala Cys Thr Ala Cys Arg Ala Lys His Val Arg Cys Asp
35 40 45

Ala Ala Leu Pro Arg Cys Thr Arg Cys Val Gly Glu Glu Lys Glu Cys  
 50 55 60  
 Val Tyr Val Lys Ser Arg Arg Gly Gly Arg Arg Arg Val Leu Asn Thr  
 65 70 75 80  
 Leu Thr Ser Ser Met Asn Gly Thr Lys Met Asp Gln Glu Ser Phe Ile  
 85 90 95  
 Ser Ile Leu Pro Ile Leu Ser Gln Thr Gly Thr Arg Glu Leu Asn Pro  
 100 105 110  
 Gly Phe Asn Leu Thr Thr Ser Thr Ser Ala Pro Ser Gly Thr Val Asp  
 115 120 125  
 Asp Gln Leu Leu Ser Leu Tyr Tyr Arg Tyr Phe His Ser Ala His Pro  
 130 135 140  
 Cys Ala Val Pro Arg Phe Ala Ile Gln Arg Tyr Ala Val Ser Asp Arg  
 145 150 155 160  
 Arg Ala Ile Gln Pro Leu Tyr Ala Val Met Lys Tyr Ile Gly Ser Leu  
 165 170 175  
 His Asn Ala Leu Ile Pro Ser Ser Gln Leu Lys Asp His Val Glu Ala  
 180 185 190  
 Glu Leu Ala Val Ala Arg Ser Thr Asp His Val Val Ser Pro Phe Ala  
 195 200 205  
 Val Gln Ala Val Leu Leu Tyr Ser Ile Ala Val Tyr Trp Cys Asp Glu  
 210 215 220  
 Thr Glu Lys Gly Leu Asp Leu Leu Glu Glu Ala Ile Gln Met Ala Leu  
 225 230 235 240  
 Gly Leu Gly Met Asn Arg Ser Asn Phe Ala Thr Glu His Gly Arg Asn  
 245 250 255  
 Asp Pro Ile Leu Glu Glu Ser Trp Arg Arg Thr Trp Trp Gln Ile Tyr  
 260 265 270  
 Ile Thr Asp Ala His Ile Ala Gly Ser Thr His Ser Tyr Pro Phe Arg  
 275 280 285  
 Thr Asp Gly Ile Leu Met Asp Val His Leu Pro Cys Glu Glu Glu Glu  
 290 295 300  
 Tyr Glu Ser Gly Val Gly Gly Leu Pro Ser Gly Met Leu Cys Cys  
 305 310 315

&lt;210&gt; 41071

&lt;211&gt; 340

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41071

His Arg Lys Lys Asn Thr Asn Ser Ser Lys Met Ser Ile Pro Lys Thr  
 1 5 10 15  
 Met Arg Ala Leu Leu Gln Pro Ser Ile Glu Glu Pro Arg Leu Val Ile  
 20 25 30  
 Thr Ala Asp His Pro Val Pro Thr Ala Thr Glu Gly Thr Asp Glu His  
 35 40 45  
 Leu Ile His Val His Cys Val Ser Pro Cys Ala Asn Glu Leu Asn Trp  
 50 55 60  
 Ala Lys Ala Phe Pro Ala Leu Gln Gln Arg Glu Gln Ile Pro Cys Tyr  
 65 70 75 80  
 Asp Val Ala Gly Thr Val Val Thr Ala Pro Pro Ser Ser Asp Phe Gln  
 85 90 95  
 Pro Gly Thr Glu Val Tyr Ala Arg Ser Asn Tyr Leu Arg Pro Gly Cys  
 100 105 110  
 Ala Arg Asp Tyr Ala Val Ile Ser Gly Ala Asp Leu Ala Arg Arg Pro

## 18078

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      115              120              125
Gln Asn Leu Gly Trp Val Ala Ser Thr Ala Ile Pro Leu Ser Ala Gln
      130              135              140
Thr Ala Leu Gln Ala Leu Phe Val Gln Ser Gly Ile Gly Glu Leu Gly
145              150              155              160
Asp Gln Ala Trp Lys Gly Lys Arg Val Leu Val Thr Ala Ala Ser Gly
      165              170              175
Gly Val Gly Ile Trp Val Val Gln Leu Ala Arg Leu Ala Gly Ala Thr
      180              185              190
Val Ile Gly Thr Cys Gly Pro Arg Asn Val Glu Phe Val Lys Ser Phe
      195              200              205
Gly Ala Ser Asn Val Ile Asn Tyr Arg Glu Ala Asp Leu Lys Glu Trp
      210              215              220
Gly Gln Arg Pro Glu Asn Gln Val Asp Leu Val Val Asp Cys Thr Gly
225              230              235              240
Lys Lys Ser Leu Glu Asp Ala Trp Trp Cys Val Arg Asp Gly Gly Ile
      245              250              255
Leu Ile Ser Ile Cys Gln Pro Pro Glu Gln Val Gln Pro Glu Glu Cys
      260              265              270
Lys Gly Lys Asn Val Arg Asn Phe Phe Phe Ile Val Ser Ala Asn Arg
      275              280              285
Ala Asp Leu Glu Lys Val Thr Lys Leu Val Glu Glu Gly Lys Cys Arg
      290              295              300
Gly Val Val Asp Ser Val Trp Pro Leu Glu Gln Phe Glu Asp Ala Phe
305              310              315              320
Lys Arg Leu Asp Glu Gly His Ala Arg Gly Lys Ile Ile Leu Asp Leu
      325              330              335
Ser Leu Asn His
      340

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<210> 41072
<211> 69
<212> PRT
<213> A.fumigatus

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<400> 41072
Arg Ile His Asn Gly Asn Phe Pro Ile Leu Gly Leu Leu Leu Val Tyr
1              5              10              15
Ile Val Gln Glu Ile Gly Ile Thr Leu Asn Cys Gly Val Ala Leu Leu
      20              25              30
Tyr Ala Glu Met Arg Ile Leu Ala Phe Gln Tyr Gly Thr Ser Gly Lys
      35              40              45
Asp Asn Asp Glu Asn Lys Ile Asp Asn Leu Asn Leu Asp Phe Asp Lys
      50              55              60
Ser Ala Trp Thr Thr
65

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<210> 41073
<211> 663
<212> PRT
<213> A.fumigatus

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<400> 41073
Val Lys Thr Leu Val Gly Leu Asp Asp Leu His Val Glu Gly Thr Gly
1              5              10              15
Asp Ile Pro Gly Leu Gly Asn Leu Leu Ser Asn Leu Leu Asp Thr Thr

```



	20		25		30									
His	Asp	Leu	Ile	Gln	Arg	Ser	Arg	Arg	Glu	Asp	Gln	Ser	Ser	Ile
	35					40					45			
Ala	Arg	Val	His	Pro	Ser	Gly	Leu	Asp	Met	Leu	Ala	Asp	Gly	Val
	50					55					60			
Glu	Glu	Leu	Ala	Val	Gly	Gly	Asn	Ser	Ile	Asp	Ile	Asn	Leu	Ser
65					70					75				80
Thr	Leu	Asp	Glu	Leu	Gly	Asp	Asp	Asp	Gly	Val	Val	Gly	Arg	Asp
				85					90					95
Ala	Gly	Val	Glu	Lys	Leu	Leu	Leu	Glu	Leu	Val	Thr	Thr	Val	Asp
				100				105						110
Thr	His	Gly	Ser	Thr	Arg	Gln	Asp	Val	Thr	Gly	Thr	Asp	Gln	Asp
	115						120					125		
Val	Thr	Asp	Arg	Leu	Ser	Glu	Ala	Leu	Gly	Leu	Gly	Asn	Arg	Arg
	130					135					140			
Leu	Ile	Pro	Ser	Arg	Leu	Ile	His	Thr	Asp	Ala	Val	Gln	Asp	Leu
145					150					155				160
Glu	Leu	Val	Ser	Val	Leu	Ser	Phe	Val	Asp	Ile	Leu	Arg	Ile	Gly
				165					170					175
Lys	Asn	Val	Gly	Thr	Ala	Ser	Leu	Leu	Gln	Ala	Glu	Gly	Asp	Val
			180					185					190	
Gly	Gln	Leu	Thr	Thr	Asp	Gly	His	Asp	Asn	Thr	Ala	Gly	Thr	Leu
	195						200					205		
Phe	Val	Asp	Ile	His	Asp	Thr	Leu	Val	Ala	Glu	Phe	Leu	Lys	Val
	210					215					220			
Leu	Val	Ser	Ser	Val	Glu	Val	Gly	Gly	Val	Cys	Leu	Arg	Val	Val
225					230					235				240
Asp	His	Asn	Ser	Leu	Leu	Ala	His	Val	Pro	Gln	Arg	Gln	Gly	Gly
				245					250					255
Asp	Arg	Thr	Pro	Ile	Glu	Leu	Asp	Arg	Ala	Ser	Asn	Thr	Val	Asp
			260					265					270	
Thr	Ser	Gln	Asn	Asp	Asp	Ala	Val	Val	Ile	Glu	Ser	Asp	Val	Val
	275						280						285	
Gly	Ser	Val	Ile	Gly	Gly	Val	Glu	Val	Val	Gly	Ile	Ser	Gly	Glu
	290					295					300			
Ser	Gly	Gln	Ser	Ile	Asn	Leu	Leu	Asp	Pro	Gly	Ser	Asp	Ala	Glu
305					310					315				320
Leu	Ser	Ala	Ser	Ala	Asp	Ile	Ile	Phe	Gly	Gly	Thr	Asn	Glu	Glu
				325					330					335
Asp	Leu	Leu	Val	Arg	Glu	Thr	Lys	Phe	Leu	Gly	Leu	Gln	His	His
			340					345					350	
Leu	Leu	Asp	Ala	Lys	Gln	Ala	Ala	Asn	Leu	Leu	Glu	Phe	Ile	Val
	355						360					365		
Ile	Asp	Asn	Val	Leu	Glu	Leu	Val	Glu	Glu	Pro	Leu	Val	Asp	Phe
	370					375					380			
Gln	Leu	Val	Asn	Leu	Val	Asn	Arg	Ile	Val	Leu	Val	Lys	His	Ser
385				390						395				400
Thr	Asn	Gly	Gln	Pro	Ala	Ala	Ile	Ser	Gly	Val	Leu	Gln	Gly	Leu
				405					410					415
Gln	Val	Leu	Lys	Phe	Val	Thr	Leu	Glu	Thr	Tyr	Glu	Ala	Arg	Ile
			420					425					430	
Leu	Ala	Asn	Ser	Leu	Leu	Glu	Arg	Leu	Leu	Lys	Gly	Thr	Thr	Asp
	435						440					445		
His	Asp	Leu	Thr	Asp	Arg	Leu	His	Gly	Thr	Ala	Asn	Val	Pro	Leu
	450					455					460			
Val	Leu	Glu	Leu	Ala	Gln	Ile	Pro	Pro	Gly	Asn	Leu	Gly	Asp	Asn

## 18080

465                      470                      475                      480  
 Val Glu Thr Arg Leu Lys Val Gly Gly Ser Gly Leu Gly Asn Arg Ile  
                                  485                      490                      495  
 Gly Lys Phe Arg Glu Ser Val Ser Gln Ala Asn Leu Arg Ser Ser Val  
                                  500                      505                      510  
 Arg Gln Arg Val Thr Gly Ser Leu Gly Ser Gln Ser Arg Arg Thr Thr  
                                  515                      520                      525  
 Glu Thr Cys Ile Asp Phe Asn Asp Thr Ile Val Lys Ser Ile Arg Leu  
                                  530                      535                      540  
 Gln Ser Val Leu His Val Thr Phe Thr Asn Asn Thr Glu Val Ala Asp  
 545                                   550                                   555                                   560  
 Asp Leu Asp Gly Ser Gly Thr Glu His Val Val Leu Phe Ile Arg Lys  
                                  565                                   570                                   575  
 Gly Leu Thr Gly Ser Asn Asp Asn Thr Val Thr Gly Met Asp Thr Gln  
                                  580                                   585                                   590  
 Gly Val Lys Val Leu His Val Ala Asp Ser Asp Thr Val Val Gly Gly  
                                  595                                   600                                   605  
 Ile Thr Asp Asp Phe Val Leu Asp Leu Leu Pro Ala Leu Glu Gly Leu  
 610                                   615                                   620  
 Leu Asp Gln Asp Leu Gly Ser Lys Gly His Gly Thr Arg Ser Gln Ile  
 625                                   630                                   635                                   640  
 Leu Gln Leu Leu Arg Ile Leu Ser Glu Thr Gly Asn Pro Asp Leu Gln  
                                  645                                   650                                   655  
 Ala Arg Lys Pro Asn Gly Gln  
                                  660

&lt;210&gt; 41074

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41074

Phe Asn Met Leu Tyr Thr Ser Cys Ser Thr Cys Ser Ala Ser Val Ala  
 1                                      5                                      10                                      15  
 Ala Ser Trp Pro Cys Thr Ser Leu Phe Ser Thr Tyr Trp Cys Ser Phe  
                                  20                                      25                                      30  
 Val Ala Ala Ala Ser Asp Ala Lys Ala Gln Asp Ser Ala Lys Val Thr  
                                  35                                      40                                      45  
 Thr Ser Ser Gly Phe Gly Asn Pro Val Ala Leu Val Ala Cys Leu Glu  
                                  50                                      55                                      60  
 Leu Ile Cys Leu Lys Arg Gly  
 65                                      70

&lt;210&gt; 41075

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41075

Phe Gly Gly Leu Gln Ser Leu Val Asn Ser Val Asp Gly Asp Gly Leu  
 1                                      5                                      10                                      15  
 Gly Asn Gly Asp Val Asp Leu Leu Gln Ser Leu Gly Glu Gln Val Thr  
                                  20                                      25                                      30  
 Val Leu Thr Ser Leu Glu Gly Pro Asp Ala Cys Ser Gln Asn Ser Asp  
                                  35                                      40                                      45  
 Thr Val Ala Leu Lys Asp Ala His Ala Val His Leu Tyr Thr Lys Val

## 18081

50                      55                      60  
 Gln Gly Ser Leu Thr Thr Glu Arg Gln Glu Asp Ala Val Gly Ala Phe  
 65                      70                      75                      80  
 Ser Leu Asn Asn Val Ser His Ile Phe Gly Gly Asn Gly Glu Ile Val  
                     85                      90                      95  
 His Leu Ile Gly Glu Leu Val Ile Gly Leu Asp Ser Arg Asp Val Gly  
                     100                      105                      110  
 Ile Asp Gln Asp Gly Leu Asp Thr Gly Leu Leu Glu Ser Leu Glu Gly  
                     115                      120                      125  
 Leu Arg Thr Cys Asp Tyr  
                     130

&lt;210&gt; 41076

&lt;211&gt; 545

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41076

Leu Leu Ser Glu Ser Leu Val Met Ala Asp Arg Ser Glu Ala Asp Ile  
 1                      5                      10                      15  
 Pro Thr Asp Val Pro Pro Phe Ala Arg Pro Leu Ala Pro Tyr Ile Arg  
                     20                      25                      30  
 Thr Arg Gln Glu Ala Leu Arg Ile Arg Gln Ala Leu Thr Tyr Tyr Leu  
                     35                      40                      45  
 Arg Ser Gln Ile Asp Phe Ala Glu Asp Asp Ser Glu Asn Pro Asn Cys  
                     50                      55                      60  
 His Ser Gln Ser His Leu Ser Leu Cys Val Pro Gln Asp Ala Ala Val  
 65                      70                      75                      80  
 Asn Val Lys Arg Ile Pro Ala Glu Leu Thr Gly Leu Arg Lys Glu Tyr  
                     85                      90                      95  
 Leu Gln Ala Leu Gln Ala Asn Leu Ala Arg Lys Glu Tyr His Ser  
                     100                      105                      110  
 Leu Thr Glu Lys Val Ala Ser Ala Lys Glu Arg Thr Lys Gly Ser Lys  
                     115                      120                      125  
 Thr Glu Pro Pro Ser Ile Asp Pro Ser Ser Glu Leu Gln Thr Tyr Leu  
                     130                      135                      140  
 Arg Leu Leu Arg Gly Arg Arg Arg His Ala Lys Leu Gln Val Phe Gln  
 145                      150                      155                      160  
 His Tyr Leu His Glu Leu Lys Glu Arg Asp Ser Asn Ile Ser Glu Arg  
                     165                      170                      175  
 Ile Gly Asp Arg Ala Ser His Ser Gln Gln Ile Val Ser Leu Glu Glu  
                     180                      185                      190  
 Thr Glu Glu Glu Cys Lys Pro Thr Gly Arg Asp Ala Asp Asp Gly Ile  
                     195                      200                      205  
 Glu Gly Leu Ile His Lys Leu Glu Arg Ala Val Ile Arg Ala Lys Ala  
                     210                      215                      220  
 Gln Leu Asp Arg Glu Arg Ser Leu Leu Asp Gly Leu Lys Ser Gln Leu  
 225                      230                      235                      240  
 Ala Ser Asp Ser Thr Asp Val Pro Pro Ala Val Lys Val Ala Ala Leu  
                     245                      250                      255  
 Gln Arg Thr Arg Asp Glu Leu Val Gln Trp Val Glu Glu Lys Leu Val  
                     260                      265                      270  
 Ser Val Gly Asn Ala Asp Asp Ala Pro Val His Asp Leu Ser Pro Glu  
                     275                      280                      285  
 Glu Ile Glu Glu Ser Thr Arg Leu Val Glu Asp Gln Lys Ala Glu Ile  
                     290                      295                      300

## 18082

Val Ala Gln Tyr Ile Ala Tyr Val Glu Ala Arg Lys Arg Val Leu Asp  
 305 310 315 320  
 Ala Ala Ser Arg Ala Cys Gln Pro Met Thr Met Pro Ser Thr Lys Pro  
 325 330 335  
 Ser Arg Gln Ser Ile Asp Leu Gly Lys Leu Glu Thr Gly Asp Arg Ser  
 340 345 350  
 Ser Leu Gly Pro Leu Glu Val Leu Ser Phe Thr Ser Glu Asn Ile Leu  
 355 360 365  
 Pro Leu Ser Lys Ala Gln Arg Ala Leu Ala Leu Gln Lys Asn Tyr Leu  
 370 375 380  
 Ser Gly Leu Leu Thr Lys Glu Arg Ser Met Thr Leu Arg Ile Leu Asn  
 385 390 395 400  
 Arg Leu Ser Asp Glu Ser His Leu Leu Pro Glu Tyr Pro Leu Leu Thr  
 405 410 415  
 His Gln Pro Arg Phe Lys His Ile Ser Ser Arg His Ala Thr Ser Ala  
 420 425 430  
 Thr Gly Leu Pro Lys Pro Asp Glu Val Val Thr Leu Ala Glu Ser Trp  
 435 440 445  
 Ala Phe Ala Ser Glu Ala Ala Ala Thr Asn Glu His Gln Tyr Val Glu  
 450 455 460  
 Lys Arg Leu Val Gln Gly Gln Glu Ala Ala Thr Asp Ala Glu His Val  
 465 470 475 480  
 Leu Gln Glu Val Tyr Asn Met Leu Asn Gln Asp Leu Glu Glu Thr Leu  
 485 490 495  
 Arg Asp Leu Gln Ser Ser Glu Glu Asp Ser Ile Asp Ile Trp Ala Ser  
 500 505 510  
 Glu Ala Arg Ser Thr Arg Pro Arg Thr Arg Gly Thr Arg Ser Gln Lys  
 515 520 525  
 Gln Ser Lys Gly Pro Trp Ala Lys Leu Asp Gly Gln Leu Gly Met Thr  
 530 535 540  
 Glu  
 545

&lt;210&gt; 41077

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41077

Leu Thr Leu His Ser Ser Ile Ile Thr Gly Ser Gln Ala Leu Lys Ala  
 1 5 10 15  
 Leu Lys Glu Ala Gly Val Lys Ser Val Leu Ile Asn Pro Asn Ile Ala  
 20 25 30  
 Thr Ile Gln Thr Asp His Lys Leu Ala Asp Glu Val Tyr Tyr Leu Pro  
 35 40 45  
 Val Thr Pro Glu Tyr Val Thr His Val Ile Glu Arg Glu Arg Pro Asp  
 50 55 60  
 Gly Ile Phe Leu Ser Phe Gly Gly Gln Thr Ala Leu Asn Leu Gly Val  
 65 70 75 80  
 Gln Met Asn Arg Met Gly Ile Phe Glu Arg Tyr Gly Val Arg Val Leu  
 85 90 95  
 Gly Thr Ser Ile Arg Thr Leu Glu Thr Ser Glu Asp Arg Asp Leu Phe  
 100 105 110  
 Ala Gln Ala Leu Lys Glu Ile Asn Ile Pro Ile Ala Glu Ser Ile Ala  
 115 120 125  
 Val Asn Thr Val Asp Glu Ala Leu Lys Ala Ala Glu Ser Val Gly Tyr

## 18083

130                      135                      140  
 Pro Ile Ile Val Arg Ser Ala Tyr Ala Leu Gly Gly Leu Gly Phe Arg  
 145                      150                      155                      160  
 Phe Arg

<210> 41078  
 <211> 104  
 <212> PRT  
 <213> A.fumigatus

<400> 41078  
 Lys Lys Lys Lys Pro Pro His Thr Gly Ala Leu Ile Thr Ser Pro Lys  
 1                      5                      10                      15  
 Lys Leu Leu Trp Tyr Leu His Leu Phe Trp Arg Glu Ile Leu Val Asn  
                     20                      25                      30  
 Pro Leu Gly Pro Ile Pro Ile Leu Cys Ser Ser Pro Glu Asn Arg Ile  
                     35                      40                      45  
 Asp Ser Tyr Pro Thr Tyr Ser Ser Lys Ser His Pro Ile His Leu Phe  
                     50                      55                      60  
 Ser Pro Pro Val Cys Phe Leu Phe Ser Pro Asn Ser Ser Leu Ile Ala  
 65                      70                      75                      80  
 Ser Cys Thr Ser Gly Pro Arg Pro Pro Val Leu Pro Asn Ser Ser Leu  
                     85                      90                      95  
 Val Leu Pro Cys Gln Leu Gly Val  
                     100

<210> 41079  
 <211> 187  
 <212> PRT  
 <213> A.fumigatus

<400> 41079  
 Ser Ser Ile Ser Ile Ile Phe Ser Leu Ala Gln Cys Ala Met Val Leu  
 1                      5                      10                      15  
 Ala Ala Arg Cys Gly Gln Ala Thr Ser Ser Ile Leu Arg Gln Arg Cys  
                     20                      25                      30  
 Leu Thr Glu Ser Arg Arg Ser Ala Phe Ala Leu Arg Pro Phe Ser Ala  
                     35                      40                      45  
 Gln Thr Thr Ala Arg Ser Thr Ala Ser Gly Leu Arg Leu Gln Gln Lys  
                     50                      55                      60  
 Val Ala Ser Pro Leu Arg Ser Gln Gln Leu Arg Ser Phe Ser Ser Ala  
 65                      70                      75                      80  
 Leu Arg Arg Leu Ala Ser Gln Ala Asn Asn Pro Pro Ser Ala Asp Ser  
                     85                      90                      95  
 Tyr Leu Ala Ser Gly Val Val Lys Pro Gly Ser Asn Leu Val Asp Val  
                     100                      105                      110  
 Lys Lys Val Leu Val Ile Gly Ser Gly Gly Leu Ser Ile Gly Gln Ala  
                     115                      120                      125  
 Gly Glu Phe Asp Tyr Ser Gly Arg Leu Gln Phe Gly Ser Tyr Phe Cys  
                     130                      135                      140  
 Ala Trp Tyr Pro Lys Ala Ala Leu Ile Val Asp Ser Thr Ile Ser Glu  
 145                      150                      155                      160  
 Met Pro Ser Trp Thr Gly Thr Lys Arg Asn Thr Thr Lys Lys Gly Gln  
                     165                      170                      175  
 Lys Lys Pro Phe Ser Thr Glu Asp Ser Ser Asp

180

185

&lt;210&gt; 41080

&lt;211&gt; 673

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41080

Arg	Pro	Pro	Asn	Gln	Leu	Ala	Thr	Leu	Ser	Leu	Ser	Val	Arg	Leu	Thr
1				5					10					15	
Arg	Leu	Glu	Val	Trp	Val	Ser	Gly	Phe	Ala	Glu	Asn	Pro	Glu	Glu	Leu
			20					25					30		
Lys	Asn	Leu	Ala	Ser	Arg	Ser	Met	Thr	Leu	Ala	Pro	Gln	Ile	Leu	Val
		35					40						45		
Glu	Lys	Ser	Leu	Lys	Gly	Trp	Lys	Glu	Val	Glu	Tyr	Glu	Val	Val	Arg
	50					55					60				
Asp	Ala	Ala	Asn	Asn	Cys	Ile	Thr	Val	Cys	Asn	Met	Glu	Asn	Phe	Asp
65					70					75					80
Pro	Leu	Gly	Ile	His	Thr	Gly	Asp	Ser	Ile	Val	Val	Ala	Pro	Ser	Gln
				85					90					95	
Thr	Leu	Ser	Asp	Glu	Glu	Tyr	His	Met	Leu	Arg	Thr	Ala	Ala	Ile	Lys
			100					105						110	
Ile	Val	Arg	His	Leu	Gly	Val	Val	Gly	Glu	Cys	Asn	Val	Gln	Tyr	Ala
		115					120						125		
Leu	Gln	Pro	Asp	Gly	Leu	Asp	Tyr	Arg	Val	Ile	Glu	Val	Asn	Ala	Arg
		130				135						140			
Leu	Cys	Arg	Ser	Ser	Ala	Leu	Ala	Ser	Lys	Ala	Thr	Gly	Tyr	Pro	Leu
145					150					155					160
Ala	Tyr	Thr	Ala	Ala	Lys	Ile	Gly	Leu	Gly	His	Thr	Leu	Pro	Glu	Leu
				165					170					175	
Pro	Asn	Ala	Val	Thr	Lys	Thr	Thr	Thr	Ala	Asn	Phe	Glu	Pro	Ser	Leu
			180					185					190		
Asp	Tyr	Ile	Val	Thr	Lys	Ile	Pro	Arg	Trp	Asp	Leu	Ser	Lys	Phe	Gln
	195						200					205			
His	Val	Lys	Arg	Asp	Ile	Gly	Ser	Ala	Met	Lys	Ser	Val	Gly	Glu	Val
	210					215					220				
Met	Ala	Ile	Gly	Arg	Thr	Phe	Glu	Glu	Ser	Phe	Gln	Lys	Ala	Ile	Arg
225					230					235					240
Gln	Val	Asp	Pro	Arg	Phe	Val	Gly	Phe	Gln	Gly	Asp	Lys	Phe	Glu	Asn
				245					250					255	
Leu	Asp	Glu	Ala	Leu	Lys	Asn	Pro	Thr	Asp	Arg	Arg	Trp	Leu	Ala	Val
			260					265					270		
Gly	Gln	Ala	Met	Leu	His	Glu	Asn	Tyr	Ser	Val	Asp	Lys	Val	His	Glu
		275					280					285			
Leu	Thr	Lys	Ile	Asp	Lys	Trp	Phe	Leu	Tyr	Lys	Leu	Gln	Asn	Ile	Val
	290					295					300				
Asp	Cys	Asn	Asn	Glu	Leu	Lys	Glu	Ile	Gly	Ser	Leu	Phe	Gly	Ile	Gln
305					310					315					320
Lys	Glu	Met	Met	Leu	Lys	Ala	Lys	Lys	Leu	Gly	Phe	Ser	Asp	Lys	Gln
				325					330					335	
Ile	Ala	Leu	Leu	Val	Gly	Ser	Thr	Glu	Asn	Asp	Val	Arg	Ala	Arg	Arg
			340					345					350		
Lys	Ser	Phe	Gly	Ile	Arg	Pro	Trp	Val	Lys	Lys	Ile	Asp	Thr	Leu	Ala
		355					360					365			
Ala	Glu	Phe	Pro	Ala	Asp	Thr	Asn	Tyr	Leu	Tyr	Thr	Thr	Tyr	Asn	Ala
	370					375						380			

## 18085

Thr Ser His Asp Val Thr Phe Asp Asp His Gly Ile Ile Ile Leu Gly  
 385 390 395 400  
 Ser Gly Val Tyr Arg Ile Gly Ser Ser Val Glu Phe Asp Trp Cys Ala  
 405 410 415  
 Val Asn Ala Thr Leu Ser Leu Arg Asn Met Gly Lys Lys Thr Val Met  
 420 425 430  
 Ile Asn Tyr Asn Pro Glu Thr Tyr Ser Thr Asp Phe Asp Thr Ala Asp  
 435 440 445  
 Lys Leu Tyr Phe Glu Glu Leu Ser Tyr Glu Arg Val Met Asp Ile Tyr  
 450 455 460  
 Glu Leu Glu Ser Ala Ser Gly Val Val Val Ser Val Gly Gly Gln Leu  
 465 470 475 480  
 Pro Gln Asn Ile Ala Leu Arg Leu Gln Glu Thr Gly Gly Ala His Val  
 485 490 495  
 Leu Gly Thr Asp Pro Gln Asp Ile Asp Lys Ala Glu Asp Arg His Lys  
 500 505 510  
 Phe Ser Gln Ile Leu Asp Ser Ile Gly Val Asp Gln Pro Ala Trp Asn  
 515 520 525  
 Glu Leu Thr Ser Val Ala Glu Ala Glu Arg Phe Ala Glu Ser Val Gly  
 530 535 540  
 Tyr Pro Val Leu Val Arg Pro Ser Tyr Val Leu Ser Gly Ala Ala Met  
 545 550 555 560  
 Ser Val Ile Tyr Ser Gly Asp Glu Leu Lys Glu Lys Leu Leu Asn Ala  
 565 570 575  
 Ser Ala Val Ser Pro Asp His Pro Val Val Ile Thr Lys Phe Ile Glu  
 580 585 590  
 Gly Ala Gln Glu Ile Asp Ile Asp Ala Val Ala Ser Asn Gly Lys Leu  
 595 600 605  
 Leu Leu His Ala Val Ser Glu His Val Glu Pro Ala Gly Val His Ser  
 610 615 620  
 Gly Asp Ala Thr Leu Val Leu Pro Pro Ala Ser Leu Asp Glu Lys Val  
 625 630 635 640  
 Met Gly Arg Val Lys Glu Ile Ala Glu Lys Val Ala Lys Ala Trp Asn  
 645 650 655  
 Ile Thr Gly Pro Phe Asn Met Gln Ile Ile Lys Ala Asp Gln Gly Leu  
 660 665 670  
 His

<210> 41081  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 41081  
 Met Gly Ile Asp Cys Thr Asp Val Trp Arg Ser Ser Gly Glu Ser Pro  
 1 5 10 15  
 Val Ile Val Pro Pro Leu Met Leu Lys Val Gly Thr Met Ala Val Gln  
 20 25 30  
 Tyr Ser Ala Ile Ile Thr Pro Val Cys Ser Val Trp Ile Gly Ile Ser  
 35 40 45  
 Asp Ala Leu Ser Tyr Gly Ile Cys Asn Phe Cys Asn Lys Lys  
 50 55 60

<210> 41082  
 <211> 191

18086

<212> PRT  
<213> A.fumigatus

<400> 41082

```

Pro Arg Ile Gln Leu Ile Phe Ile Leu Ile Arg Gln Gly Asp Leu Glu
1          5          10          15
Ala Tyr Val Ala His Val Leu Asp Arg Leu Val Arg His Ser Asn Ala
20          25          30
Leu Asp Thr Glu Ser Leu Cys Ile Leu Lys Gly Val Ser Cys Trp Ser
35          40          45
Ile Arg Ala Asp Val His Val Thr Asp Tyr Asp Gly Asn Leu Val Asp
50          55          60
Ala Ala Cys Ile Gly Val Met Ala Gly Leu Gln His Phe Arg Arg Pro
65          70          75          80
Asp Ala Val Val Lys Asp Gly Gln Val Ile Val Tyr Gly Leu Asp Glu
85          90          95
Arg Val Pro Val Pro Leu Asn Ile Thr His Lys Pro Leu Ser Val Thr
100         105         110
Phe His Thr Phe Asp Glu Gly Lys Arg Val Ile Leu Asp Ala Thr Arg
115         120         125
Lys Glu Glu Gln Ala Ser Glu Ala Asp Val Val Phe Gly Met Asn Asn
130         135         140
Ala Gly Asp Val Cys Phe Val Ser Lys Phe Ser Gly Ser Pro Val Asp
145         150         155         160
Ala Leu Val Phe Val Ser Lys Ser Ser Val Ala Leu Glu Lys Val Lys
165         170         175
Glu Ile Asn Ala Ile Ile Asp Lys Ala Leu Gln Ala Asp Phe Cys
180         185         190

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<210> 41083  
<211> 137  
<212> PRT  
<213> A.fumigatus

<400> 41083

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Tyr Ser Phe Gln Asn Ala Phe Ser Gly Glu Val Ile Tyr Glu Ser Trp
1          5          10          15
Thr Leu Ser Phe Tyr Asn Val Phe Phe Thr Val Leu Pro Pro Phe Val
20          25          30
Met Gly Ile Cys Asp Gln Phe Ile Ser Ala Arg Leu Leu Asp Arg Tyr
35          40          45
Pro Gln Leu Tyr Gln Leu Gly Gln Lys Gly Met Phe Phe Lys Arg His
50          55          60
Ser Phe Trp Ser Trp Ile Ala Asn Gly Phe Tyr His Ser Leu Leu Leu
65          70          75          80
Tyr Ile Val Ser Gln Leu Ile Phe Leu Trp Asp Leu Pro Gln Gly Asp
85          90          95
Gly Lys Val Ala Gly His Trp Val Trp Gly Ser Ala Leu Tyr Thr Ala
100         105         110
Val Leu Ala Thr Val Leu Gly Lys Ala Ala Leu Ile Pro Lys Ser Ser
115         120         125
Pro Arg Gly Trp Lys Asp Pro Arg Tyr
130         135

```

<210> 41084  
<211> 703



&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41084

```

Arg Arg Ser Leu Pro Ala Pro Ser Ile Met Ala Ser Gly Arg Pro Pro
1      5      10      15
Gly Leu His Pro Ala Ala Gly Arg Asp Glu Asp Leu Met Gln Met Glu
      20      25      30
Glu Ser Thr Pro Ile Tyr Ser Thr Gly Gln Arg Pro Pro Val Asn Asp
      35      40      45
Asp Tyr Leu Leu Arg Gln Tyr Asn Ile Asp Asp Ser Asp Gln Pro Gln
      50      55      60
Pro Arg Pro Ser Val Ser Tyr Asp Ser Phe Val Gly Gly Arg Ala Pro
65      70      75      80
Pro Ala Ala Gly Ser His Ala Ser Thr Ser Ala His Pro Pro Ala Gln
      85      90      95
Pro Gly Ala Tyr Leu Ser Asp Pro Tyr Ser Gly Ala Glu Met Ser Arg
      100      105      110
Thr Tyr Ser Gln Thr Ser Gly Leu Asn Asn Tyr Gln Arg Tyr Ser Val
      115      120      125
Asp Asp Phe Asp Asp Asp Arg Asp Met His Gly Tyr Tyr Asn Met Asp
      130      135      140
Asp Asp Asp His Met Ala Ser Pro His Arg Val Arg Gln Ala Lys Asp
145      150      155      160
Arg Asn Ser Ile Leu Gly Leu Gly Gly Gly Leu Met Gly Arg Ala Lys
      165      170      175
His Met Leu Gly Met Gly Pro Glu Tyr Ser Glu Met Asp Leu Pro Leu
      180      185      190
Thr Glu Ala Gly Ala Arg Ala Ala Arg Val Asp Ser Val Glu Gly Asp
      195      200      205
Thr Ala Ala Pro Arg Ala Gln Lys Lys Ser Arg Lys Ser Asp Phe Lys
210      215      220
Phe Gly Phe Gly Arg Gly Lys Val Asp Pro Ser Thr Leu Gly Pro Arg
225      230      235      240
Met Ile Thr Leu Asn Asn Pro Pro Ala Asn Ala Val His Lys Phe Val
      245      250      255
Asp Asn His Val Ser Thr Ala Lys Tyr Asn Ile Val Thr Phe Ile Pro
      260      265      270
Lys Phe Leu Phe Glu Gln Phe Ser Lys Tyr Ala Asn Leu Phe Phe Leu
      275      280      285
Phe Thr Ala Val Leu Gln Gln Ile Pro Ser Val Ser Pro Thr Asn Arg
290      295      300
Tyr Thr Thr Ile Val Pro Leu Met Ile Val Leu Leu Val Ser Ala Ile
305      310      315      320
Lys Glu Leu Val Glu Asp Phe Lys Arg Arg Asn Ser Asp Lys Ser Leu
      325      330      335
Asn His Ser Lys Thr Gln Val Leu Lys Gly Ser Ala Phe His Glu Thr
      340      345      350
Lys Trp Val Asp Val Ala Val Gly Asp Ile Val Arg Val Glu Ser Glu
      355      360      365
Gln Pro Phe Pro Ala Asp Leu Val Leu Leu Ala Ser Ser Glu Pro Glu
370      375      380
Gly Leu Cys Tyr Ile Glu Thr Ala Asn Leu Asp Gly Glu Thr Asn Leu
385      390      395      400
Lys Ile Lys Gln Ala Ile Pro Glu Thr Ala His Leu Val Ser Pro Ala
      405      410      415

```

## 18088

```

Asp Leu Ser Arg Leu Ser Gly Arg Ile Arg Ser Glu Gln Pro Asn Ser
      420                      425                      430
Ser Leu Tyr Thr Tyr Glu Ala Thr Leu Thr Met His Ala Gly Gly Gly
      435                      440                      445
Glu Lys Glu Leu Pro Leu Ala Pro Asp Gln Leu Leu Leu Arg Gly Ala
      450                      455                      460
Thr Leu Arg Asn Thr Pro Trp Ile His Gly Ile Val Val Phe Thr Gly
465                      470                      475                      480
His Glu Thr Lys Leu Met Arg Asn Ala Thr Ala Thr Pro Ile Lys Arg
      485                      490                      495
Thr Ala Val Glu Arg Met Val Asn Val Gln Ile Leu Met Leu Val Ser
      500                      505                      510
Ile Leu Val Ser Leu Ser Val Val Ser Ser Val Gly Asp Leu Ile Ile
      515                      520                      525
Arg Gln Thr Gln Ala Lys Lys Leu Val Tyr Leu Tyr Tyr Gly Ser Thr
      530                      535                      540
Ser Pro Val Lys Gln Phe Val Leu Asp Ile Phe Thr Tyr Trp Val Leu
545                      550                      555                      560
Tyr Ser Asn Leu Val Pro Ile Ser Leu Phe Val Thr Ile Glu Ile Val
      565                      570                      575
Lys Tyr Ala Gln Ala Phe Leu Ile Asn Ser Asp Leu Asp Ile Tyr Tyr
      580                      585                      590
Asp Lys Thr Asp Thr Pro Ala Thr Cys Arg Thr Ser Ser Leu Val Glu
      595                      600                      605
Glu Leu Gly Gln Ile Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu
      610                      615                      620
Thr Cys Asn Gln Met Glu Phe Lys Gln Cys Ser Ile Tyr Gly Val Gln
625                      630                      635                      640
Tyr Gly Asp Glu Val Ser Glu Asp Arg Arg Ala Thr Ala Asp Asp Gly
      645                      650                      655
Gly Glu Pro Gly Ile Tyr Asp Phe Lys Lys Leu Lys Glu Asn Leu His
      660                      665                      670
Ser His Pro Ser Ala Asp Ala Ile His His Phe Leu Thr Leu Leu Ala
      675                      680                      685
Thr Cys His Thr Val Ile Pro Glu Arg Asn Ala Val Asp Pro Asp
      690                      695                      700

```

&lt;210&gt; 41085

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41085

```

Tyr Gln Ala Ala Ser Pro Asp Glu Gly Ala Leu Val Gln Gly Ala Ala
1      5      10      15
Ala Leu Gly Tyr Arg Phe Thr Asn Arg Met Pro Arg Ser Val Leu Phe
      20      25      30
Thr Thr Asn Gly Gln Glu Tyr Glu Tyr Glu Leu Leu Ala Ile Cys Glu
      35      40      45
Phe Asn Ser Thr Arg Lys Arg Met Ser Thr Ile Phe Arg Cys Pro Asp
      50      55      60
Gly Lys Ile Arg Ile Tyr Thr Lys Gly Ala Asp Thr Val Ile Leu Glu
      65      70      75      80
Arg Leu Gly Pro Asp Asn Pro Ile Val Glu Ala Ile Val Gln His Leu
      85      90      95
Glu Glu Tyr Ala Ser Glu Val Leu Arg Thr Leu Cys Leu Ala Met Arg

```

## 18089

100 105 110  
 Glu Ile Pro Glu Glu Glu Tyr Gln Gln Gly Ile Gln Ile Tyr Glu Lys  
 115 120 125  
 Gly Ala Thr Thr Val Gly Gly Asn Arg Ala Glu Glu Leu Asp Lys Ala  
 130 135 140  
 Ala Glu Leu Ile Glu Lys Asp Phe Tyr Leu Leu Gly Ala Thr Ala Ile  
 145 150 155 160  
 Glu Asp Arg Leu Gln Asp Gly Val Pro Asp Thr Ile His Thr Leu Gln  
 165 170 175  
 Thr Ala Gly Ile Lys Ile Trp Val Leu Thr Gly Asp Arg Gln Glu Thr  
 180 185 190  
 Ala Ile Asn Ile Gly Met Ser Cys Lys Leu Ile Ser Glu Asp Met Thr  
 195 200 205  
 Leu Leu Ile Val Asn Glu Glu Asn Ala Gln Ala Thr Arg Glu Asn Leu  
 210 215 220  
 Thr Lys Lys Leu Gln Ala Val Gln Ser Gln Gly Thr Ser Gly Glu Ile  
 225 230 235 240  
 Glu Ala Leu Ala Leu Ile Ile Asp Gly Arg Ser Leu Thr Phe Ala Leu  
 245 250 255  
 Glu Lys Asp Met Glu Lys Leu Phe Leu Asp Leu Ala Val Leu Cys Lys  
 260 265 270  
 Ala Val Val Cys Trp  
 275

<210> 41086  
 <211> 122  
 <212> PRT  
 <213> A.fumigatus

<400> 41086  
 Val Thr Ala Leu Thr Phe His Ser Ile His Asp Ala Asp Ser Leu Ile  
 1 5 10 15  
 Val Val Tyr Pro Pro Leu Gln Lys Ala Leu Val Val Lys Leu Val Lys  
 20 25 30  
 Arg His Leu Lys Ser Leu Leu Leu Ala Ile Gly Asp Gly Ala Asn Asp  
 35 40 45  
 Val Ser Met Ile Gln Ala Ala His Val Gly Val Gly Ile Ser Gly Val  
 50 55 60  
 Glu Gly Leu Gln Ala Ala Arg Ser Ala Asp Val Ser Ile Ala Gln Phe  
 65 70 75 80  
 Arg Tyr Leu Arg Lys Leu Leu Leu Val His Gly Ala Trp Ser Tyr His  
 85 90 95  
 Arg Ile Ser Arg Val Ile Leu Tyr Ser Phe Tyr Lys Asn Ile Ala Leu  
 100 105 110  
 Tyr Met Thr Gln Phe Trp Val Ser Lys Leu  
 115 120

<210> 41087  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 41087  
 Glu Arg Glu Arg Ala Ala Lys Glu Glu Glu Gln Arg Glu Tyr Asp Ile  
 1 5 10 15  
 Ala Arg Gly Asn Pro Leu Leu Asn Pro Gln Asp Phe Asn Leu Lys Arg

Variable	Mean	Standard Deviation	Minimum	Maximum
Age	34.5	12.5	18	65
Gender	0.5	0.5	0	1
Marital Status	0.7	0.5	0	1
Education	12.5	2.5	9	16
Income	3500	1500	1000	8000
Health	0.8	0.4	0	1
Smoking	0.3	0.5	0	1
Alcohol	0.2	0.4	0	1
Exercise	0.5	0.5	0	1
Stress	0.6	0.5	0	1
Sleep	0.7	0.4	0	1
Diet	0.6	0.5	0	1
Work	0.8	0.4	0	1
Family	0.7	0.5	0	1
Friends	0.6	0.5	0	1
Hobbies	0.5	0.5	0	1
Travel	0.4	0.5	0	1
Volunteering	0.3	0.5	0	1
Religion	0.5	0.5	0	1
Politics	0.4	0.5	0	1
Environment	0.3	0.5	0	1
Technology	0.6	0.5	0	1
Art	0.4	0.5	0	1
Music	0.5	0.5	0	1
Gardening	0.3	0.5	0	1
Fishing	0.2	0.4	0	1
Reading	0.7	0.4	0	1
Writing	0.4	0.5	0	1
Cooking	0.6	0.5	0	1
Cleaning	0.5	0.5	0	1
Shopping	0.4	0.5	0	1
Driving	0.7	0.4	0	1
Traveling	0.6	0.5	0	1
Volunteering	0.3	0.5	0	1
Religion	0.5	0.5	0	1
Politics	0.4	0.5	0	1
Environment	0.3	0.5	0	1
Technology	0.6	0.5	0	1
Art	0.4	0.5	0	1
Music	0.5	0.5	0	1
Gardening	0.3	0.5	0	1
Fishing	0.2	0.4	0	1
Reading	0.7	0.4	0	1
Writing	0.4	0.5	0	1
Cooking	0.6	0.5	0	1
Cleaning	0.5	0.5	0	1
Shopping	0.4	0.5	0	1
Driving	0.7	0.4	0	1
Traveling	0.6	0.5	0	1
Volunteering	0.3	0.5	0	1
Religion	0.5	0.5	0	1
Politics	0.4	0.5	0	1
Environment	0.3	0.5	0	1
Technology	0.6	0.5	0	1
Art	0.4	0.5	0	1
Music	0.5	0.5	0	1
Gardening	0.3	0.5	0	1
Fishing	0.2	0.4	0	1
Reading	0.7	0.4	0	1
Writing	0.4	0.5	0	1
Cooking	0.6	0.5	0	1
Cleaning	0.5	0.5	0	1
Shopping	0.4	0.5	0	1
Driving	0.7	0.4	0	1
Traveling	0.6	0.5	0	1
Volunteering	0.3	0.5	0	1
Religion	0.5	0.5	0	1
Politics	0.4	0.5	0	1
Environment	0.3	0.5	0	1
Technology	0.6	0.5	0	1
Art	0.4	0.5	0	1
Music	0.5	0.5	0	1
Gardening	0.3	0.5	0	1
Fishing	0.2	0.4	0	1
Reading	0.7	0.4	0	1
Writing	0.4	0.5	0	1
Cooking	0.6	0.5	0	1
Cleaning	0.5	0.5	0	1
Shopping	0.4	0.5	0	1
Driving	0.7	0.4	0	1
Traveling	0.6	0.5	0	1
Volunteering	0.3	0.5	0	1
Religion	0.5	0.5	0	1
Politics	0.4	0.5	0	1
Environment	0.3	0.5	0	1
Technology	0.6	0.5	0	1
Art	0.4	0.5	0	

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<210> 41088
<211> 235
<212> PRT
<213> A.fumigatus
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<210> 41089
<211> 1654
<212> PRT
<213> A.fumigatus
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<400> 41089

## 18091

Phe	Gly	Tyr	Val	Pro	Ile	His	Ile	Ser	Leu	Arg	Gln	His	Gly	Val	Phe
1				5					10					15	
Ser	Leu	Leu	Xaa	Ile	Val	Tyr	Arg	Val	Phe	His	Arg	Asn	Val	Val	Lys
			20					25					30		
Lys	Lys	Gly	Ile	Ala	Tyr	Thr	Phe	Phe	Val	Asn	Asp	Glu	Ala	Glu	Asn
		35					40					45			
Gly	Val	Ser	Ser	Thr	Gly	Pro	Ala	Asp	Glu	Glu	Asp	Gly	Asp	Asp	Gly
	50					55					60				
Glu	Glu	Thr	Asp	Pro	Met	Leu	Phe	Lys	Ala	Thr	Gln	Leu	Glu	Gln	Thr
65					70					75					80
Arg	Leu	Glu	Phe	Asp	Arg	Pro	Arg	Gly	Gln	Ile	Ala	Ile	Ile	Thr	Leu
				85					90					95	
Glu	Ile	Ala	Ala	Leu	Val	Gly	Leu	Val	Ile	Thr	Phe	Val	Ile	Val	Leu
			100					105					110		
Asn	Thr	Asn	Ala	Trp	Gly	Asp	Asn	Gly	Met	Leu	Pro	Ala	Val	Gly	Lys
		115					120					125			
Leu	Ile	Ser	Trp	Ser	Tyr	Ile	Leu	Phe	Leu	Val	Leu	Val	Arg	Phe	Ile
130						135					140				
Leu	Ser	Thr	Leu	Lys	Leu	Gln	Ser	Ser	Pro	Arg	Leu	Trp	Asn	His	Thr
145					150					155					160
Ala	Ala	Leu	Tyr	Gly	Met	Gln	Trp	Leu	Phe	Asn	Leu	Phe	Val	Phe	Arg
				165					170					175	
Ser	Ala	Val	Ile	Tyr	Pro	Ser	Ser	Lys	Arg	Ala	Leu	Thr	Leu	Ser	Ala
			180					185					190		
Val	Glu	Phe	Ala	Leu	Ser	Thr	Leu	Leu	Phe	Ile	Ile	Ala	Val	Thr	Thr
		195					200					205			
Arg	Arg	Gly	Asn	Lys	Ala	Val	Val	Val	Gln	Arg	Glu	Asp	Gly	Leu	Glu
210					215						220				
Pro	Pro	Arg	His	Pro	Thr	Ala	Ser	Leu	Leu	Ser	Leu	Val	Thr	Phe	Ser
225					230					235					240
Trp	Leu	Asp	Pro	Leu	Ile	Trp	Lys	Gly	Tyr	Arg	Gln	Pro	Leu	Glu	Leu
			245						250					255	
Asp	Asp	Val	Trp	Asn	Leu	Thr	Thr	Ser	Gln	Lys	Ala	Ala	Thr	Val	Leu
		260						265					270		
Glu	Asp	Phe	Arg	Arg	Lys	His	Pro	Lys	Gly	Ser	Leu	Val	Trp	Arg	Leu
		275					280					285			
Gly	Arg	Tyr	Phe	Tyr	Gly	Thr	Leu	Leu	Leu	Gln	Gly	Ala	Trp	Thr	Ile
290					295						300				
Phe	Ser	Asn	Leu	Phe	Thr	Tyr	Leu	Pro	Thr	Leu	Leu	Leu	Lys	Ala	Ile
305					310					315					320
Leu	Glu	Tyr	Val	Glu	Asp	Pro	Arg	Ser	Thr	Thr	Ala	Tyr	Ala	Ala	Trp
			325						330					335	
Leu	Tyr	Ala	Ile	Leu	Leu	Phe	Ser	Ser	Gly	Ala	Ile	Gln	Gly	Ile	Ala
		340						345					350		
Asp	Gly	Gln	Ala	Leu	Trp	Ile	Gly	Arg	Lys	Leu	Gly	Val	Lys	Leu	Arg
		355					360					365			
Ala	Ile	Ile	Ile	Gly	Glu	Ile	Tyr	Ala	Lys	Ala	Leu	Arg	Arg	Lys	Ala
	370					375					380				
Gly	Ser	Ser	Pro	Asp	Ala	Pro	Lys	Lys	Lys	Glu	Glu	Pro	Gln	Lys	Val
385					390					395					400
Ser	Lys	Lys	Asn	Arg	Ile	Phe	Ser	Phe	Gly	Gly	Lys	Lys	Lys	Lys	Lys
			405						410					415	
Ala	Thr	Val	Asp	Ser	Glu	Asn	Pro	Ala	Pro	Ala	Glu	Ser	Thr	Lys	Ala
			420					425					430		
Asp	Pro	Ala	Gln	Leu	Ala	Asn	Val	Gly	Thr	Ile	Ile	Asn	Leu	Met	Ala
		435					440						445		

[illegible][illegible]

## 18093

Ala Gln Gly Arg Pro Asp Asp Val Ala Ser Ser Gly Val Phe Gly Glu  
 900 905 910  
 Asp Tyr Phe Lys Ser Arg Pro Ala Ser Arg Ala Ser Thr Pro Arg Leu  
 915 920 925  
 Ser Arg Met Pro Ser Asp Gly Ser Asp Gly His Ala Glu Glu Gln Pro  
 930 935 940  
 Ser Thr Asn Gly Lys Val Asn Gly Ser Ser Lys Pro Thr Thr Gln Asp  
 945 950 955 960  
 Gln Lys Gly Asp Asn Glu Gln Ser Lys Leu Thr Glu Ser Lys Ala Val  
 965 970 975  
 Gly Ser Ile Lys Trp Pro Thr Ile Gln Leu Tyr Leu Arg Ser Met Gly  
 980 985 990  
 Pro Trp Ser Tyr Trp Ile Ser Ala Ala Leu Val Phe Ser Leu Gln Gln  
 995 1000 1005  
 Val Gly Ser Val Ser Thr Asn Ile Trp Ile Arg Gln Trp Ala Asn Ser  
 1010 1015 1020  
 Tyr Gln Val Glu Ala Asn Gly Ser Val Asp Ala Gly Thr Tyr Ala Ala  
 1025 1030 1035 1040  
 Ala Thr Thr Leu Lys Phe Pro Ser Phe Asn Val Arg Gly Val Pro Arg  
 1045 1050 1055  
 Thr Ser Asn Ser Tyr Val Pro Gln Phe Gly Val Gln Arg Ser Pro Ala  
 1060 1065 1070  
 Thr Asp Gly Asp Val Asn Val Ser Tyr Tyr Leu Gly Val Tyr Ala Leu  
 1075 1080 1085  
 Leu Gly Ile Gly Tyr Val Leu Ile Ser Leu Phe Arg Glu Gly Val Leu  
 1090 1095 1100  
 Phe Trp Gly Ser Leu Asn Ala Ser Ser Arg Ile His Arg Arg Leu Leu  
 1105 1110 1115 1120  
 Glu Thr Val Met His Ala Lys Phe Lys Phe Phe Asp Ser Thr Pro Leu  
 1125 1130 1135  
 Gly Gln Leu Met Asn Arg Phe Ser Lys Asp Ile Glu Ala Val Asp Gln  
 1140 1145 1150  
 Glu Val Ala Pro Val Ala Ile Gly Met Ile His Cys Leu Ala Ser Val  
 1155 1160 1165  
 Ile Met Ile Val Ile Leu Ile Ser Val Ile Thr Pro Gly Phe Leu Ile  
 1170 1175 1180  
 Ala Ala Ile Phe Ile Ser Met Ile Tyr Phe Ala Leu Gly Ala Val Tyr  
 1185 1190 1195 1200  
 Leu Asn Ala Ser Arg Asp Met Lys Arg Leu Glu Ser Val Gln Arg Ser  
 1205 1210 1215  
 Pro Leu Tyr Gln Gln Phe Gly Glu Thr Leu Asn Gly Ile Val Thr Ile  
 1220 1225 1230  
 Arg Ala Tyr Gly Asp Gly Pro Arg Phe Ile Val Asp Asn His Arg Arg  
 1235 1240 1245  
 Ile Asn Ala Tyr Asn Arg Pro His Ile Tyr Leu Trp Ala Ala Asn Arg  
 1250 1255 1260  
 Trp Leu Ala Phe Arg Val Asp Ile Thr Gly Ala Leu Val Ser Phe Phe  
 1265 1270 1275 1280  
 Thr Ala Thr Phe Val Leu Ile Asn Ile Gly Lys Ile Asp Ala Gly Ala  
 1285 1290 1295  
 Ala Gly Leu Ser Leu Thr Tyr Ala Val Thr Phe Thr Glu Asn Val Leu  
 1300 1305 1310  
 Trp Leu Val Arg Leu Tyr Ser Glu Val Gln Gln Asn Met Asn Ser Val  
 1315 1320 1325  
 Glu Arg Val Lys Glu Tyr Leu Asp Val Glu Gln Glu Ala Lys Ala Val  
 1330 1335 1340

## 18094

```

Ile Val Asp Ser Arg Pro Pro Ala Asp Trp Pro Thr Gly Gly Ala Val
1345                1350                1355                1360
Glu Phe Ile Asn Tyr Thr Thr Arg Tyr Arg Ala Asp Leu Asp Pro Val
                1365                1370                1375
Leu Arg Ser Val Ser Phe Ala Val Lys Pro Gly Glu Lys Val Gly Ile
                1380                1385                1390
Val Gly Arg Thr Gly Ala Gly Lys Ser Ser Leu Ala Leu Ala Leu Phe
                1395                1400                1405
Arg Gly Leu Glu Ala Glu Gln Gly Gln Ile Leu Ile Asp Gly Leu Asp
                1410                1415                1420
Ile Gly Thr Ile Gly Leu Arg Asp Leu Arg Glu Ala Ile Thr Ile Val
1425                1430                1435                1440
Pro Gln Asp Pro Thr Leu Phe Thr Gly Thr Ile Arg Ser Asn Leu Asp
                1445                1450                1455
Pro Phe His Leu Phe Ser Asp Glu Gln Ile Phe Thr Ala Leu Arg Arg
                1460                1465                1470
Val His Leu Ile Gly Ser Gly Thr Ser Gly Ser Ala Thr Pro Ile Thr
                1475                1480                1485
Ala Ser Thr Gly Ser Val Ala Glu Ala His Leu Leu Ser Ile His Gly
                1490                1495                1500
Ala Asp Val Asp Gly Ala Ser Val Gln Asp Asn Lys Asn Ile Phe Arg
1505                1510                1515                1520
Asn Leu Glu Ser Pro Val Ser Glu Ser Gly Ser Asn Leu Ser Gln Gly
                1525                1530                1535
Gln Arg Gln Leu Leu Cys Leu Ala Arg Ala Leu Leu Lys Asn Pro Lys
                1540                1545                1550
Val Leu Met Met Asp Glu Ala Thr Ala Ser Ile Asp Tyr Asn Thr Asp
                1555                1560                1565
Ser Lys Ile Gln Glu Thr Leu Arg Glu Leu Arg Glu Ser Thr Ile Ile
                1570                1575                1580
Thr Ile Ala His Arg Leu Gln Thr Ile Ile Asp Tyr Asp Lys Val Leu
1585                1590                1595                1600
Val Leu Asp His Gly Arg Val Ile Glu Tyr Asp His Pro Trp Thr Leu
                1605                1610                1615
Ile Asn Lys Gln Asp Gly Leu Phe Arg Ser Met Cys Glu Asn Ser Gly
                1620                1625                1630
Asn Leu Glu Val Leu Leu Asp Gly Ala Lys Lys Ala Trp Glu Asn Lys
                1635                1640                1645
Arg Leu Val Asp Asp Ser
                1650

```

&lt;210&gt; 41090

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41090

```

Glu Ser His Ser Ala Arg Val Arg Leu Ala Gln Ala Val Phe Cys Ser
1      5      10      15
His Tyr Lys Val Tyr Gln Leu Arg Leu Arg Ser Arg Arg Ile Ile Gln
      20      25      30
Thr Asn Pro Ser Asp Ser Leu Thr Leu Thr Met His Ile Leu Pro Thr
      35      40      45
Leu Ser Ser Leu Leu Leu Ala Gly Ala Ala Thr Thr Ala Ala Leu Asn
      50      55      60
Asn Ser Tyr Cys Ala Pro Lys Ser Gly Asp Ala Gln Val Val Gln Tyr

```



## 18095

65		70		75		80									
Ala	Trp	Ala	Leu	Glu	Tyr	Met	Val	Gln	Gln	Tyr	Tyr	Ala	Ser	Val	Ala
		85						90						95	
Thr	Asn	Gln	Thr	Phe	Leu	Asn	Ser	Ala	Gln	Asn	Ser	Ser	Thr	Ala	Asn
		100						105						110	
Val	Val	Ser	Asn	Leu	Gln	Gly	Ile	Gly	His	Gln	Asn	Arg	Leu	Gly	Val
		115						120						125	
Arg	Ala	Ala	Gln	Gln	Leu	Arg	Lys	Arg	Ile	Gly	Asn	Phe	Thr	Ser	Pro
		130						135						140	
Gly	Leu	Gln	Leu	His	Leu	Pro	Arg	Ser	Arg	Gln	Arg	Pro	Gly	Leu	Pro
		145								155				160	
Asp	Asp	Arg	Pro	Gly	Val										
				165											

&lt;210&gt; 41091

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41091

Ser	Gly	Phe	His	His	Thr	Val	Ala	Phe	Met	Thr	Gly	Trp	Thr	Val	Val
1			5						10					15	
Val	Val	His	Asn	Asp	Cys	Lys	Asp	Leu	Gly	Tyr	Ala	Thr	Glu	Gly	Thr
			20					25					30		
Tyr	Lys	Arg	Val	Thr	Gln	Arg	Glu	Tyr	Ala	Trp	His	Lys	Leu	Tyr	Ser
		35					40					45			
Val	Pro	Thr	Ile	Arg	Tyr	Ile	Asn	Cys	Ala	Tyr	Gly	Leu	Asp	Ala	Ser
		50					55				60				
Phe	Lys	Arg	Thr	Pro	Val	Thr	Leu								
65					70										

&lt;210&gt; 41092

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41092

Ala	Ala	Ser	Cys	Trp	Pro	Ala	Arg	Pro	Pro	Pro	Pro	Pro	Ser	Ile	Ile
1			5						10					15	
Ala	Thr	Ala	Pro	Pro	Ser	Leu	Ala	Thr	Pro	Arg	Leu	Ser	Asn	Met	Pro
			20					25					30		
Gly	Pro	Ser	Asn	Thr	Trp	Ser	Ser	Asn	Thr	Thr	Pro	Pro	Ser	Gln	Pro
		35					40						45		
Thr	Arg	Pro	Ser	Ser	Thr	Arg	Arg	Arg	Thr	Ala	Pro	Pro	Gln	Thr	Ser
	50					55					60				
Ser	Pro	Thr	Cys	Arg	Val	Leu	Ala	Thr	Arg	Thr	Ala	Ser	Ala	Ser	Ala
65					70				75					80	
Pro	Arg	Asn	Asn	Ser	Ala	Ser	Ala	Ser	Ala	Thr	Ser	Pro	His	Leu	Gly
			85						90					95	
Cys	Asn	Phe	Thr	Phe	Pro	Ala	Pro	Ala	Ser	Gly	Gln	Ala	Phe	Leu	Thr
			100					105					110		
Thr	Ala	Gln	Ala	Phe	Glu	Ser	Asn	Ala	Ser	Ala	Ala	Leu	Ile	Gly	Leu
			115				120						125		
Glu	Gly	Tyr	Thr	Gln	Ala	Pro	Glu	Val	Ser	Phe	Leu	Ile	Ala	Arg	Leu
		130					135				140				
Ala	Ala	Gln	His	Ala	Gly	His	Ala	Ala	Tyr	Leu	Ala	Thr	Thr	Gln	Gln

## 18096

145                      150                      155                      160  
 Ala Ser Val Phe Gln Ser Asn Val Thr Ser Leu Val Arg Ala Tyr Ser  
                          165                      170                      175  
 Pro Ser Tyr Val Leu Ser Asn Gly Thr Ser Pro Gly Gln Leu Gly Arg  
                          180                      185                      190  
 Tyr Phe Lys Gly Cys Val Ser Ala Pro Gln Pro Pro Cys Gly Asn Leu  
                          195                      200                      205  
 Thr Val Gly Pro Leu Ile Ala Thr Phe Gly Asn Asn Ser Thr Ser Ser  
                          210                      215                      220  
 Ser Ser Ser Ser Ser Thr Ala Thr Ala Ser Ser Ala Ser Gly Thr Ala  
 225                      230                      235                      240  
 Thr Ser Thr Gly Ser Ser Asn Arg Arg Phe Trp  
                          245                      250

&lt;210&gt; 41093

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41093

Val Leu Gly Ser Val Lys Ile Tyr Phe Leu Pro Ala Gly Gly Phe Gly  
 1                      5                      10                      15  
 Asn Asn Thr Thr Tyr Ser Pro Phe Arg Phe Leu Pro Glu Pro Pro Ile  
                          20                      25                      30  
 Ala Arg Pro Arg Arg Ser Gly Arg Thr Arg Ser Gly Ala Ser Arg Gly  
                          35                      40                      45  
 Gly Gly Arg Gly Gly Arg Arg Ala Arg Arg Val Val Thr Lys Gly Ser  
                          50                      55                      60  
 Asp Gln Arg Pro Asp Gly Lys Ile Thr Ala Arg Arg Leu Arg Arg Arg  
 65                      70                      75                      80  
 Asn Ala Ser Leu Glu Ile Ala Ala Gln Leu Ala Gly Ala Gly Ala Val  
                          85                      90                      95  
 Gly Glu His Val Ala Arg Ala Val Arg Ala His Gln Arg Gly Asn Val  
                          100                      105                      110  
 Ala Leu Glu Asp Gly Gly Leu Leu Gly Arg Arg Glu Val Gly Gly Val  
                          115                      120                      125  
 Ala Gly Met Leu Gly Gly Gln Thr Gly Asp Gln Glu Gly Asp Leu Gly  
                          130                      135                      140  
 Gly Leu Cys Ile Ala Leu Glu Pro Asp Lys Gly Gly Gly Gly Ile Gly  
 145                      150                      155                      160  
 Leu Lys Arg Leu Gly Gly Arg Gln Glu Gly Leu Ala Ala Gly Gly Ser  
                          165                      170                      175  
 Gly Glu Gly Glu Val Ala Ala Gln Val Arg  
                          180                      185

&lt;210&gt; 41094

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41094

Cys Ser Ala Arg Asp Met Asp Gly Ala Asp Leu Gln Arg Phe Arg Val  
 1                      5                      10                      15  
 Asp Ser His Pro Ser Asp Glu Gln Pro Arg Ser Leu Ser Ser Leu Ala  
                          20                      25                      30  
 Asp Asp Ala Ala Ala Leu Ala Ala Thr Gln His Gln His His Gln Ser

## 18097

35	40	45
His Thr Gln Glu Leu Ala Asp Pro Gln Asp Ala Gln Ser Leu Gln Pro		
50	55	60
Leu Gln Thr Ala Leu Glu His Ser Glu Leu His Leu His His Pro Gln		
65	70	75
Lys Gln Gln His His Gln Asn Ala Gly His Pro Leu Asn Ile Pro Ala		
85	90	95
Ser Met Gln Pro Pro Ser Arg Pro Gly Glu Pro Val Asn Thr Glu Leu		
100	105	110
Ile Ser Pro Arg Gln Phe Asn Glu Lys Leu His Asn Tyr His Gln Ala		
115	120	125
Ser Arg Glu His Thr Phe Pro Gly Ser Leu Ser Asp Gly Gln Gln Thr		
130	135	140
Gln Ser Cys Leu Ser His Ser Gly Asn Gln Asp Gly His His Glu Gln		
145	150	155
Val Leu Ser Gln Val Arg Ser Asp Leu Ala His Thr Ala Val Glu Cys		
165	170	175
Asn Gly Asn Gly Ala Asp Asp Val Thr His Met Arg Asn Thr Ser Leu		
180	185	190
Gln Val Ser Pro Ser Phe Pro His His Leu Gln Leu Gln Pro Gln Ser		
195	200	205
Asn Gly Tyr Ser Val Ala Pro Glu Leu Ser Arg Gln Asp Gly Cys Leu		
210	215	220
Lys Asp Met Lys Leu Val Pro Asn Pro Pro Asp Leu Glu Tyr Trp Arg		
225	230	235
Glu Lys Leu Phe Asn Val Asp Glu Thr Ile Thr Leu Thr Glu Asp Gln		
245	250	255
Tyr Val His Ala Val Leu Ile		
260		

&lt;210&gt; 41095

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41095

Ala Ser Ser Leu Ser Ala Gln Ser Gln Leu Asn Lys Ala Tyr Ser Ser	
1	15
Pro Phe Val Gln Arg Val Trp Ile Ala Leu Glu Ile Lys Gly Ile Pro	
20	30
Tyr Gln Tyr Ile Glu Val Asp Pro Tyr Gln Lys Pro Gln Ser Leu Leu	
35	45
Glu Val Asn Pro Arg Gly Leu Val Pro Ala Leu Arg His Gly Asp Trp	
50	60
Gly Ser Tyr Glu Ser Ser Val Leu Leu Glu Tyr Val Gly Phe Asn Pro	
65	80
His Phe Pro Phe Leu Glu Glu Ala Ile Ile Ser	
85	90

&lt;210&gt; 41096

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41096

Asn Ser Val Lys Leu Gly Tyr Leu Thr Thr Trp Pro Ala Thr Arg Phe

## 18098

```

1           5           10           15
Arg Thr Tyr Phe Pro His Val Asp Asn Val Tyr Ser His Arg Ser Thr
      20      25      30
Gln Arg Tyr Lys Arg Lys Pro Phe Val Ser His Tyr Trp Asp Cys Arg
      35      40      45
Leu Lys Gly Arg Pro Pro Gly Thr Pro Lys Ser Asp Asp Pro Asn Lys
      50      55      60
Lys Lys Arg Lys Arg Thr Ala Arg Gln Arg Asp Leu Cys Asp Val Lys
65      70      75      80
Ile Lys Ile Thr Glu Tyr Phe Pro Gly Tyr Gly Val Ala Ala Val Ser
      85      90      95
Asp Phe Ala Ala Thr Gly Pro Glu Thr Ser Phe Pro Ser Ser Glu Phe
      100     105     110
Leu Pro Ser Val Asn Ser Leu Phe His Glu Ser Ser Ala Leu Gly Gln
      115     120     125
Arg Arg Gly Ser Gln Pro Phe Gly Val Leu Thr Pro Asn Pro Thr Leu
130     135     140
Pro Glu Asp His Pro Gly Ala Asn Gly Glu Arg Phe Phe Thr Ile Gln
145     150     155     160
Arg Val Asn Gly Asn Gly Ala Asn Gly Lys Asn Asp Gly Val Gly Gly
      165     170     175
Gly His Arg His Thr Leu Glu Glu Ser Asp Arg Val Lys Lys Asn Ser
      180     185     190
Val Gln Arg Tyr Leu Leu Lys Glu Ala Lys Glu Lys Lys Lys Thr Gly
      195     200     205
Ser Val Ser Val Arg Ser Val Leu Leu Phe Thr Ser Cys Gln Ile
      210     215     220

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&lt;210&gt; 41097

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41097

```

Met Cys Ser Arg Val Cys Leu Leu Thr Arg Ser Arg Tyr Leu Leu Gly
1           5           10           15
Gln Ala Leu Gly Gly Ile Leu Phe Pro Pro Tyr Ser Glu Ala Phe Gly
      20      25      30
Arg Lys Lys Leu Tyr Ile Ile Ser Thr Ala Leu Tyr Ser Ile Ser Cys
      35      40      45
Leu Val Val Ala Ala Val Pro Ser Leu Ser Gly Ala Thr Val Gly Arg
      50      55      60
Phe Val Ser Gly Phe Leu Ser Ala Ile Pro Thr Thr Val Val Ile Gly
65      70      75      80
Ser Ile Glu Asp Met Phe Asn Ala Arg Asp Arg Val Trp Met Val Cys
      85      90      95
Ile Trp Ala Ile Thr Ser Asn Leu Gly Leu Ile Val Gly Pro Ile Leu
      100     105     110
Ser Ile Tyr Val Val Ala Asp Leu Asp Trp
      115     120

```

&lt;210&gt; 41098

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41098

```

Arg Arg Trp Leu Phe Tyr Ile Ala Ala Ile Val Thr Gly Leu Leu Thr
1          5          10          15
Phe Leu Leu Leu Thr Ile Arg Glu Ser Arg Pro Ser Leu Leu Leu Ala
20          25          30
Arg Glu Val Ala Gln Leu Arg Lys Ala Ser Lys Val Glu Ser Leu Glu
35          40          45
Gly Val Asn Pro Asp His Thr Pro Asp Leu His Ser Phe Val Arg Leu
50          55          60
Ala Leu Ser Arg Pro Val Leu Leu Phe Phe Thr Glu Pro Ile Val Phe
65          70          75          80
Ile Val Ser Met Ile Ser Ala Ile Ser Ile Ala Leu Val Tyr Leu Phe
85          90          95
Thr Glu Ala Leu Pro Pro Ile Tyr Glu Ser Phe Gly Phe Ser Pro Arg
100         105         110
Gln Ala Ser Leu Pro Phe Val Ala Ile Gly Val Gly Leu Ser Leu Gly
115         120         125
Leu Leu Thr Arg Phe Phe Asp Leu Tyr Ile Ile Asp Gln His Arg Gln
130         135         140
Gln Gly Arg Val Leu Leu Pro Glu His Lys Leu Leu Gly Leu Trp Leu
145         150         155         160
Gly Thr Pro Ile Leu Ala Gly Gly Leu Trp Val Phe Ala Trp Thr Ile
165         170         175
Pro Pro Gly Val Lys Asp Leu His Trp Ser Val Ser Val Ile Ala Leu
180         185         190
Leu Leu Val Gly Tyr Ser Leu Thr Glu Leu Asp Tyr Val Leu Gly Gly
195         200         205
Tyr Leu Thr Asp Ser Tyr Leu Ser Tyr Ala Ser Ser Gly Phe Ser Ala
210         215         220
Leu Ser Phe Leu Arg Ser Ile Leu Ser Ala Val Phe Pro Leu Val Ser
225         230         235         240
Pro His Leu Phe Ser Ala Leu Gly Ala Asn Leu Ala Val Thr Val Leu
245         250         255
Ala Ala Met Ala Thr Ile Phe Cys Ile Val Pro Pro Leu Phe Thr Arg
260         265         270
Tyr Gly Glu Lys Leu Arg Ala Arg Ser Ala Phe Ala Lys Gln Ser Leu
275         280         285
Thr Thr Tyr Arg Gln Tyr Ser Val Asp Glu Asn Gly Tyr
290         295         300

```

&lt;210&gt; 41099

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41099

```

Val Ser Arg Asn Pro Thr Leu Val Ser Arg Pro Cys Ala Glu Gln Leu
1          5          10          15
Gln Ile Asn Arg His Ile Val Pro Ser Phe Tyr Arg Val Leu Gln Glu
20          25          30
Gln Glu Glu Gln Lys Gln Thr Ala Asn Val Gln Glu Leu Gln Asp Gly
35          40          45
Leu Lys Ala Leu Ile Thr Ala Ala Asn Pro Glu Gly Pro Phe Phe Leu
50          55          60
Gly Pro Thr Ile Ser Phe Val Asp Val Gln Ile Ala Pro Trp Ile Leu
65          70          75          80

```

## 18100

Arg Leu Ser Arg Val Leu Lys Pro Tyr Arg Gly Trp Pro Asp Pro Glu  
                           85                          90                          95  
 Pro Gly Ser Arg Trp Ala Ala Trp Val Asn Ala Ile Glu Ala Asn Glu  
                           100                          105                          110  
 His Val Lys Ala Thr Thr Ser Ser Asp Glu Leu Tyr Leu Asp Ser Tyr  
                           115                          120                          125  
 Glu Arg Tyr Ala Arg Gly Tyr Thr Phe Thr Ala  
           130                          135

&lt;210&gt; 41100

&lt;211&gt; 705

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41100

Ala Ser Lys Tyr Leu Leu Ser Pro Ser Gly Asp Leu Lys Pro Leu Phe  
 1                          5                          10                          15  
 Phe Pro Ile Phe Cys Leu Glu Arg Pro Ala Pro Ala Ala Gln Gln Ser  
                           20                          25                          30  
 Ser Lys Met Pro His Arg Ala Ala Ser Pro Ala Val Ser Glu Asn Glu  
                           35                          40                          45  
 Phe Asp Ile Thr Gly Ala Leu Phe Gln Asn Asp Ser Asp Ser Asp Asn  
           50                          55                          60  
 Glu Gln Pro Ser Ala Lys Ser Lys Arg Gln Pro Pro Lys Lys Val Pro  
 65                          70                          75                          80  
 Ser Gln Ala Leu Asp Phe Leu Gly Asp Val Asn Glu Asp Asp Asn Asp  
                           85                          90                          95  
 Asp Glu Ala Phe Ile Ala Glu Gln Gln Thr Ser Ala Asn Arg Lys Ala  
                           100                          105                          110  
 Ser Asn Leu Lys Gly Arg Thr Val Lys Lys Gly Gly Gly Phe Gln Ala  
           115                          120                          125  
 Met Gly Leu Ser Ala Asn Leu Lys Ala Ile Ala Arg Lys Gly Phe  
           130                          135                          140  
 Ser Val Pro Thr Pro Ile Gln Arg Lys Thr Ile Pro Val Ile Met Asp  
 145                          150                          155                          160  
 Asp Gln Asp Val Val Gly Met Ala Arg Thr Gly Ser Gly Lys Thr Ala  
                           165                          170                          175  
 Ala Phe Val Ile Pro Met Ile Glu Lys Leu Lys Ser His Ser Thr Lys  
                           180                          185                          190  
 Val Gly Ala Arg Gly Leu Val Leu Ser Pro Ser Arg Glu Leu Ala Leu  
           195                          200                          205  
 Gln Thr Leu Lys Val Val Lys Glu Leu Gly Arg Gly Thr Asp Leu Lys  
           210                          215                          220  
 Ser Val Leu Leu Val Gly Gly Asp Ser Leu Glu Glu Gln Phe Ala Met  
 225                          230                          235                          240  
 Ile Ala Gly Asn Pro Asp Ile Ile Ile Ala Thr Pro Gly Arg Phe Leu  
                           245                          250                          255  
 His Leu Lys Val Glu Met Asn Leu Asp Leu Ser Ser Ile Arg Tyr Val  
                           260                          265                          270  
 Val Phe Asp Glu Ala Asp Arg Leu Phe Glu Met Gly Phe Ala Ala Gln  
           275                          280                          285  
 Leu Thr Glu Ile Leu His Gly Leu Pro Ala Asn Arg Gln Thr Leu Leu  
           290                          295                          300  
 Phe Ser Ala Thr Leu Pro Lys Ser Leu Val Glu Phe Ala Arg Ala Gly  
 305                          310                          315                          320  
 Leu Gln Glu Pro Thr Leu Val Arg Leu Asp Thr Glu Ser Lys Ile Ser

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
2	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
3	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
4	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81																		

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<210> 41101
<211> 92
<212> PRT
<213> A.fumigatus
<400> 41101
```

## 18102

Lys Gln Thr Ser Gln Ile Cys Ala His Cys Ile Met His Ser Ala Gly  
 1 5 10 15  
 Ala Val Cys Asp Phe Ser Ser Leu Arg Val Gly Tyr Ser Asn Ser Ser  
 20 25 30  
 Met Lys Thr His Asn Pro Asn Glu Leu Arg Pro Leu Lys Met Lys Gln  
 35 40 45  
 Gln Glu Val Leu Asn Ile Ile Arg Gln Asp Met Tyr Phe Val Met Asn  
 50 55 60  
 Cys Tyr Glu Ser Gly Ser Tyr Ser Gln Thr Ala Glu His Asn His Tyr  
 65 70 75 80  
 Gly Glu Leu Gln Leu Leu Phe Leu Arg Trp Lys Ala  
 85 90

&lt;210&gt; 41102

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41102

Ser Pro Arg Arg Ser Val His Lys Arg Met Lys Ser Pro Ser Ser Ser  
 1 5 10 15  
 Lys Thr Val Pro Thr Thr Gly Lys Ala Val Asn Glu Ala Lys Glu Thr  
 20 25 30  
 Glu Ser Glu Gly Ala Phe Ser Asp Glu Glu Glu Thr Phe Pro Pro Ala  
 35 40 45  
 Trp Gln Ile Thr Cys Arg Trp His Ser His Ser Glu Trp Lys Ser Leu  
 50 55 60  
 Leu Val Ile Phe Lys Phe Lys Asp Asn Lys Ala Arg Lys Arg Ala Arg  
 65 70 75 80  
 His Leu Ser Arg Thr Leu Asn Thr Ser Cys Pro Ile Pro Arg Asn Asn  
 85 90 95  
 Thr Ser Leu Ala Glu Asp Arg Ala Tyr Gly Val His Ser Val Pro Asn  
 100 105 110  
 Ser Asn Phe Ala Gln Pro Ser Arg Ser Ala Thr Met Asp Leu Ala Gly  
 115 120 125  
 Asp Asp Gly Gly Arg Gly Phe Gly Glu Ala Arg Thr Leu Met Arg Trp  
 130 135 140  
 Asp Lys Arg His Lys Lys Tyr Val Ala Arg Gln Asn Asp Glu Asp Gly  
 145 150 155 160  
 Ser Lys Gly Thr Arg Ile Phe Arg Gly Glu Ser Gly Ala Lys Ile Ala  
 165 170 175  
 Ala Ser Phe Arg Ser Gly Arg Phe Asp Ala Trp Lys Arg Glu Asn Arg  
 180 185 190  
 Leu Gly Arg Leu Pro Arg Val Gly Glu Ala Glu Ala Asn Leu Ala  
 195 200 205  
 Ala Gly Leu Asn Ala Ala Ile Ser Gly Lys Arg Phe Arg His Arg Lys  
 210 215 220  
 Glu Gln Ala Pro Lys Lys Ala Asp Pro Leu Arg Gly Asp Tyr Glu Lys  
 225 230 235 240  
 Met Lys Lys Lys Ala Glu Leu Ala Lys Glu Arg Ala Met Ser Lys Ala  
 245 250 255  
 Gly Gly Ala Ala Pro Arg Gly Lys Ser Glu Leu Lys Ser Thr Asp Asp  
 260 265 270  
 Ile Arg Ile Ala Arg Lys Leu Lys Gln Lys Arg Arg Glu Lys Asn Ala  
 275 280 285  
 Arg Pro Ser Arg Lys Lys



## 18103

290

&lt;210&gt; 41103

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41103

Thr	Trp	Val	Gly	Ala	Thr	Gln	Thr	Ser	Pro	Gly	Val	Ile	Thr	His	Ile
1				5					10					15	
Lys	Ser	Glu	Asp	Met	Gln	Ile	Gly	Leu	Phe	Pro	Asn	Pro	Ser	Val	Glu
		20						25				30			
Ala	Ser	Val	Glu	Asn	Ser	Arg	Leu	Glu	Glu	Phe	Thr	Ser	Phe	Leu	Ala
		35					40					45			
Ala	Gly	Gly	Thr	Lys	Phe	Gln	Val	Val	Glu	Asp	Met	Gln	Leu	Pro	Arg
	50					55					60				
Trp	Glu	Lys	Val	Val	Trp	Asn	Ala	Ala	Trp	Asn	Ser	Ile	Thr	Ala	Leu
65					70					75					80
Thr	Met	Val	Asp	Thr	Gln	Thr	Trp	Leu	Thr	Ser	Ser	Ala	Asp	Ala	Thr
			85						90					95	
Pro	Leu	Thr	Arg	Arg	Leu	Met	Gly	Glu	Val	Ile	Ala	Val	Gly	Arg	Gly
			100					105					110		
Cys	Gly	Val	Asp	Leu	Asp	Lys	Gly	Leu	Val	Asp	Arg	Leu	Met	Asp	Lys
		115					120					125			
Ile	Asn	Ala	Leu	Pro	Gly	Ile	Gly	Ser	Ser	Met	Gln	Val	Asp	Cys	Arg
	130					135					140				
Asn	Gly	Lys	Pro	Met	Glu	Ile	Glu	Val	Ile	Leu	Gly	Val	Pro	Leu	Arg
145					150					155					160
Arg	Ala	Asn	Glu	Leu	Gly	Ile	Asp	Thr	Pro	Val	Leu	Glu	Thr	Leu	Thr
			165						170						175
Cys	Leu	Leu	Arg	Ala	Val	Asp	Gly	Arg	Phe	Arg					
			180					185							

&lt;210&gt; 41104

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41104

Ser	Ser	Cys	His	Ser	Phe	Leu	Thr	His	Leu	Phe	Ile	Pro	Leu	Ile	Asn
1				5					10					15	
Lys	Met	Tyr	Arg	Asn	Phe	Leu	Leu	Ala	Val	Leu	Ala	Leu	Leu	Ser	Ala
			20					25					30		
Ser	Ala	His	Ala	His	Thr	Thr	Phe	Thr	Thr	Leu	Tyr	Val	Asp	Gly	Glu
		35					40					45			
Asn	Gln	Gly	Asp	Gly	Val	Cys	Val	Arg	Met	Asn	Arg	Asp	Ala	Ser	Lys
	50					55					60				
Ala	Ser	Phe	Pro	Ile	Glu	Pro	Leu	Ser	Ser	Lys	Asp	Ile	Ala	Cys	Gly
65					70					75					80
Lys	Val	Leu	Pro	Tyr	His	Gly	Phe								
					85										

&lt;210&gt; 41105

&lt;211&gt; 451

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41105

Val Pro Arg Leu Thr Asp Lys Gly Tyr Asp Gly Glu Lys Ala Val Ala  
 1 5 10 15  
 Arg Val Cys Pro Ala Lys Ala Ser Ser Ile Leu Thr Phe Glu Phe Arg  
 20 25 30  
 Glu Tyr Ala Asp Gly Ser Arg Pro Gly Ser Ile Asp Gly Ser His Lys  
 35 40 45  
 Gly Pro Cys Ala Val Tyr Met Lys Lys Val Asp Asp Ala Thr Ala Asp  
 50 55 60  
 Asn Asn Ala Ala Gly Asp Gly Trp Phe Lys Ile Trp Gln Ser Asp Tyr  
 65 70 75 80  
 Asp Ala Ala Glu Gly Lys Trp Cys Thr Glu Lys Met Ile Glu Asn Asn  
 85 90 95  
 Gly His Ile Ser Val Gln Ile Pro Ala Asp Ile Glu Gly Gly Tyr Tyr  
 100 105 110  
 Leu Val Arg Pro Glu Leu Leu Ala Leu His Ala Ser Gln Asp Asn Pro  
 115 120 125  
 Pro Asp Pro Gln Phe Tyr Val Gly Cys Ala Gln Val Phe Val Gln Ser  
 130 135 140  
 Thr Gly Thr Ala Lys Pro Ala Thr Val His Ile Gly Glu Gly Thr Tyr  
 145 150 155 160  
 Asp Leu Ser Leu Pro Gly Met Thr Tyr Asn Ile Tyr Lys Thr Pro Leu  
 165 170 175  
 Glu Leu Pro Tyr Pro Met Tyr Gly Pro Pro Val Tyr Gln Ala Ser Lys  
 180 185 190  
 Thr Ala Ser Ala Ser Pro Ala Leu Thr Asn Thr Ala Ser Ala Asn Ala  
 195 200 205  
 Gly Ser Asp Gln Ala Glu Phe Ala Pro Ala Pro Val Ala Ser Gly Ser  
 210 215 220  
 Thr Gly Ser Glu Lys Ser Thr Asp Thr Gly Ser Ala Asn Thr Thr Pro  
 225 230 235 240  
 Thr Asn Ala Ala Ser Ala Asn Thr Glu Ser Gly Lys Ser Ala Asp Thr  
 245 250 255  
 Ala Ser Gly Asn Ala Ala Ser Thr Asn Thr Ala Ser Glu Lys Thr Asp  
 260 265 270  
 Ser Ala Pro Ala Asn Val Cys Lys Asn Lys Thr Lys Arg Asn Lys Asn  
 275 280 285  
 Lys Lys Lys Asn Lys Asn Lys Lys Lys Arg Ala Met Leu Val Gln Thr  
 290 295 300  
 Lys Gly Leu Lys Pro Glu Gly Cys Ile Leu Glu Arg Asp Asn Trp Cys  
 305 310 315 320  
 Gly Phe Glu Val Pro Ser Tyr Thr Asp Glu Gln Gly Cys Trp Ala Val  
 325 330 335  
 Ser Ser Ser Ser Pro Ser Phe Leu Gln Arg Ile Lys Leu Thr Glu Thr  
 340 345 350  
 Val Ile Gln Lys Leu Leu Gly Ser Ser Arg Arg Met Leu Glu His Gly  
 355 360 365  
 Ser Pro Asp Arg Leu Ser Thr Leu Pro Asp Leu Val Arg Gln Met His  
 370 375 380  
 Gly Ala Arg Arg Ile Met Gln Gln Gly Val Pro Trp Ser Ala Lys  
 385 390 395 400  
 Cys Arg Pro Gly Ser His Ala Glu Glu Gly Phe Val Gly Gly Val Asp  
 405 410 415  
 Gln Asp Ile Trp Ala Gly Arg Thr Val Ala Tyr Gln Glu Lys Lys Thr  
 420 425 430

## 18105

Tyr Ser Cys Leu Ala Leu Arg Val Asn Leu Asp Ile His Leu Glu Ala  
 435 440 445  
 Ile Glu Lys  
 450

<210> 41106  
 <211> 191  
 <212> PRT  
 <213> A.fumigatus

<400> 41106  
 Pro His Gln Cys Leu Ala Leu Ser Thr Ile Leu Gly Asp Lys Val Ser  
 1 5 10 15  
 Phe Pro Pro Thr His Arg Tyr Lys Ser Cys Thr Asn Ser Tyr Phe Ser  
 20 25 30  
 Gln Gln Asn Ser Lys Leu Gln Pro Leu Cys Phe Val Ser Pro Thr Thr  
 35 40 45  
 Val Glu Asp Val Ser Thr Ala Val Thr Thr Ile Thr Asn Ser Asn Cys  
 50 55 60  
 Gln Phe Ala Ile Arg Ser Gly Gly His Thr Ser Phe Gly Gly Ala Cys  
 65 70 75 80  
 Asn Val Ala Asn Gly Ile Thr Ile Asp Leu Arg Ala Leu Asn Ala Ile  
 85 90 95  
 Thr Leu Ser Asp Asp Arg Thr Thr Leu Ser Val Gly Val Gly Ala Ser  
 100 105 110  
 Trp Gly Asp Val Tyr Ala Phe Leu Asp Pro Leu Gly Leu Ser Val Ala  
 115 120 125  
 Gly Gly Arg Ala Ala Gln Val Gly Val Gly Gly Leu Thr Ile Gly Gly  
 130 135 140  
 Gly Ile Ser Tyr Phe Ser Pro Arg Tyr Gly Trp Thr Cys Asp Thr Val  
 145 150 155 160  
 Thr Asn Phe Glu Val Val Leu Ala Asp Gly Thr Val Val Gln Ala Asn  
 165 170 175  
 Glu Asn Glu Asn Pro Glu Leu Leu Val Ala Leu Arg Gly Gly Ala  
 180 185 190

<210> 41107  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

<400> 41107  
 Leu Ser Asp Leu Cys Pro Leu Thr Thr Thr Asp Tyr Asn Thr Asp His  
 1 5 10 15  
 Thr Ser Ala Ser Leu Ser Pro Pro Ser Ser Ala Thr Lys Ser His Ser  
 20 25 30  
 Pro Pro Pro Ile Ala Thr Asn His Ala Gln Thr Pro Ile Ser Arg Asn  
 35 40 45  
 Lys Thr Pro Ser Ser Ser Leu Cys Ala Ser Ser Pro Leu Pro Arg Ser  
 50 55 60  
 Lys Met Ser Leu Pro Pro Ser Pro Pro Ser Gln Thr Ala Thr Ala Ser  
 65 70 75 80  
 Ser Pro Ser Ala Leu Ala Ala Thr Pro Ala Ser Ala Ala His Ala Thr  
 85 90 95  
 Ser Pro Thr Ala Ser Pro Ser Thr Cys Ala Pro Ser Met Pro Ser Pro  
 100 105 110

## 18106

Ser Ala Met Ile Ala Pro His Cys Arg Trp Ala Ser Ala Pro Pro Gly  
 115 120 125  
 Ala Thr Ser Thr Leu Ser Ser Ile Arg  
 130 135

<210> 41108  
 <211> 153  
 <212> PRT  
 <213> A.fumigatus

<400> 41108  
 Leu Thr Pro Val Gln Cys Gln Ala Leu Thr Ser Ile Leu Gly Pro Arg  
 1 5 10 15  
 Val Leu Tyr Pro Asn Ser Thr Ala Tyr Lys Ser Ser Val Asp Ser Tyr  
 20 25 30  
 Trp Ser Gln Gln Glu Gln Leu Ile Ser Pro Ser Cys Val Leu Ser Ala  
 35 40 45  
 Thr Ser Ala Glu Asp Val Ser Lys Ala Leu Arg Val Leu Val Pro Lys  
 50 55 60  
 Ala Cys Lys Phe Ala Val Arg Ser Gly Gly His Gly Ala Ile Ala Gly  
 65 70 75 80  
 Ile Ala Asn Ile Gln Asp Gly Val Thr Ile Asp Leu Ser Ala Leu Asn  
 85 90 95  
 Trp Val Ile Pro Ser Ala Asp Arg Ser Leu Val Ser Val Gly Pro Gly  
 100 105 110  
 Gln Arg Trp Gly Arg Val Tyr Ala Ala Leu Asp Arg Leu Gly Leu Ser  
 115 120 125  
 Val Pro Gly Gly Arg Asp Ser Pro Val Gly Val Gly Gly Thr Thr Leu  
 130 135 140  
 Gly Gly Gly Leu Ile Val Asn Met Glu  
 145 150

<210> 41109  
 <211> 173  
 <212> PRT  
 <213> A.fumigatus

<400> 41109  
 Ser Leu Leu Thr Asp Arg Leu Gly Gly Phe Gly Tyr Phe Ala Thr Glu  
 1 5 10 15  
 Ala Gly Phe Ala Cys Asp Ser Val Val Glu Phe Gln Val Val Leu Ala  
 20 25 30  
 Asn Gly Arg Ile Val Asn Ala Thr Lys Asp Asn Glu His Asp Leu Cys  
 35 40 45  
 Leu Ala Leu Lys Gly Gly Ala Asn Asn Phe Gly Ile Val Thr Asn Phe  
 50 55 60  
 Ile Phe Arg Thr Phe Pro Leu Gly Arg Val Trp Gly Gly His Ile Tyr  
 65 70 75 80  
 Tyr Pro Val Ser Thr Leu Asp Gln Gln Leu Asp Ala Phe Tyr Arg Phe  
 85 90 95  
 Thr Ser Asp Pro Asn Tyr Asp Val Lys Ala Gly Leu Ile His Asn Phe  
 100 105 110  
 Ala Phe Thr Pro Ala Thr Gly Pro Leu Leu Thr Asn Leu Leu Ala Tyr  
 115 120 125  
 Ala Ser Pro Glu Glu Asn Pro Ala Pro Phe Arg Ser Phe Thr Ser Ile  
 130 135 140

## 18107

Gln Pro Gln Ile Met Ala Ser Thr Lys Val Met Thr Leu Glu Ala Leu  
 145 150 155 160  
 Ala Glu Glu Gly Gly Ser Leu Ser Pro Asn Ser Arg Gln  
 165 170

<210> 41110  
 <211> 176  
 <212> PRT  
 <213> A.fumigatus

<400> 41110  
 Asp Ile Thr Leu Thr Thr Met Thr Leu Gln Val Cys Ser Asn Asn Ser  
 1 5 10 15  
 Arg Gln Leu Thr Phe Ala Val Thr Phe Glu Asn Asn Leu Asp Leu Leu  
 20 25 30  
 Thr Gln Val Phe Asp Ile Trp Asn Ala Ser Thr Ala Asp Val Ser Ala  
 35 40 45  
 Ile Pro Ser Ile Gln Trp Ser Leu Ser Ile Glu Pro Ile Val Pro Ala  
 50 55 60  
 Ile Ala His Gln Ser Ala Ile Lys Gly Gly Asn Val Leu Gly Leu Asp  
 65 70 75 80  
 Val Pro Arg Gln Gly Leu Val Leu Ala Leu Leu Ser Ala Thr Phe Asn  
 85 90 95  
 His Ser Gln Glu Tyr Pro Ile Val Arg Ala Ala Ala Glu Lys Leu Ser  
 100 105 110  
 Asn Asn Ile Ile Ser Ala Ala Lys Ala Ala Cys Ala Tyr Asn Pro Tyr  
 115 120 125  
 Ile Asp Leu Asn His Ala Ala Pro Trp Gln Asp Pro Ile Ala Ser Tyr  
 130 135 140  
 Gly Asp Arg Ile Gln Ala Phe Leu Arg Gln Thr Ala Gly Lys Tyr Asp  
 145 150 155 160  
 Pro Gln Gly Val Phe Gln Arg Leu Cys Pro Gly Gly Phe Lys Val Asn  
 165 170 175

<210> 41111  
 <211> 105  
 <212> PRT  
 <213> A.fumigatus

<400> 41111  
 Ser Val Gln His Thr Ile Ser Ile Pro Leu Asn Gln Glu Met Thr Ser  
 1 5 10 15  
 Arg Asp Ile Arg Asn Ile Tyr Gln Glu Arg Tyr Ala Gly Glu Lys Leu  
 20 25 30  
 Val Lys Ile Ile Gly Glu Ala Pro Leu Val Lys Asn Ile Ala Gly Arg  
 35 40 45  
 His Gly Ile Glu Val Gly Gly Phe Ala Val His Ser Ser Gly Lys Arg  
 50 55 60  
 Val Val Val Cys Ala Thr Ile Asp Asn Leu Leu Lys Gly Ala Ala Thr  
 65 70 75 80  
 Gln Cys Leu Arg Lys Cys Ser Arg Leu Val Val Phe Arg Lys Asp Arg  
 85 90 95  
 Leu Leu Ile Arg Leu Ser Gln Arg Thr  
 100 105

<210> 41112

<211> 883  
 <212> PRT  
 <213> A.fumigatus

<400> 41112

Val	Phe	Ser	Arg	His	Cys	Val	Arg	Ser	Lys	Thr	Ile	Glu	Ser	Cys	Arg
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Met	Leu	Val	Asp	Lys	Met	Phe	Ser	Leu	Arg	Thr	Thr	Val	Arg	Arg	Ala
			20					25					30		
Ser	Thr	Ser	Lys	Pro	Leu	Arg	Ala	Leu	Ser	Ala	Pro	His	Ala	Val	Ser
	35					40					45				
Ser	Ala	Arg	Leu	Ser	Ser	Pro	Arg	His	Ala	Leu	Lys	Ala	Ser	Ala	Val
	50					55					60				
Pro	Leu	Leu	Gln	Ser	Arg	Ser	Tyr	Ser	Arg	Ala	Ala	Asp	Pro	His	Leu
65					70				75						80
Ser	Ser	Thr	Arg	Ser	Thr	Val	Val	Gln	Leu	Leu	Ser	Asn	Ile	Gly	Ser
			85					90					95		
Lys	Arg	Glu	Val	Gln	Gln	Tyr	Leu	Ser	His	Phe	Thr	Ser	Val	Ser	Ser
			100				105						110		
Gln	Gln	Phe	Ala	Val	Ile	Lys	Val	Gly	Gly	Ala	Ile	Ile	Thr	Glu	His
	115					120						125			
Leu	Gln	Thr	Leu	Ser	Ser	Ala	Leu	Ala	Phe	Leu	Asn	His	Val	Gly	Leu
	130					135					140				
Tyr	Pro	Ile	Val	Val	His	Gly	Ala	Gly	Pro	Gln	Leu	Asn	Arg	Met	Leu
145					150				155						160
Glu	Ala	Ala	Gly	Val	Glu	Pro	His	Phe	Glu	Asp	Gly	Ile	Arg	Val	Thr
			165					170					175		
Asp	Gly	Lys	Thr	Leu	Ala	Leu	Ala	Arg	Lys	Leu	Phe	Leu	Glu	Glu	Asn
			180					185					190		
Leu	Lys	Leu	Ile	Glu	Glu	Leu	Glu	Arg	Met	Gly	Val	Arg	Ala	Arg	Pro
	195					200						205			
Ile	Asn	Ala	Gly	Val	Phe	Tyr	Ala	Asp	Tyr	Leu	Asp	Lys	Glu	Lys	Tyr
	210					215					220				
Asn	Leu	Val	Gly	Lys	Ile	Asn	Gly	Val	Asn	Lys	Lys	Pro	Ile	Glu	Ser
225					230				235						240
Ala	Ile	Glu	Ala	Gly	Cys	Leu	Pro	Ile	Leu	Thr	Ser	Met	Ala	Glu	Thr
			245					250					255		
Pro	Asp	Gly	Gln	Val	Leu	Asn	Val	Asn	Ala	Asp	Val	Ala	Ala	Gly	Glu
			260					265				270			
Leu	Ala	Arg	Ala	Leu	Gln	Pro	Leu	Lys	Ile	Val	Tyr	Leu	Ala	Glu	Lys
	275					280						285			
Gly	Gly	Leu	Phe	Asn	Gly	Asp	Thr	Gly	Glu	Lys	Ile	Ser	Val	Ile	Asn
	290				295						300				
Leu	Asp	Glu	Glu	Tyr	Asp	His	Leu	Met	Thr	Gln	Trp	Trp	Val	Arg	His
305				310					315						320
Gly	Thr	Arg	Leu	Lys	Ile	Lys	Glu	Met	Lys	Glu	Leu	Leu	Asn	Asp	Leu
			325					330					335		
Pro	Arg	Thr	Ser	Ser	Val	Ala	Ile	Ile	His	Pro	Ala	Asp	Leu	Gln	Lys
			340					345					350		
Glu	Leu	Phe	Thr	Asp	Ser	Gly	Ala	Gly	Thr	Leu	Ile	Arg	Arg	Gly	Asn
	355					360					365				
Lys	Val	His	Thr	Lys	Thr	Ser	Leu	Ser	Glu	Phe	Glu	Asp	Leu	Glu	Lys
	370					375					380				
Leu	Lys	Asp	Val	Leu	Val	Arg	Asp	Arg	Glu	Gly	Leu	Asp	Ala	Arg	Ala
385				390					395						400
Thr	Val	Asp	Arg	Tyr	Val	Glu	Gly	Leu	Lys	Glu	Arg	Asp	Phe	Lys	Val

Tyr Tyr Asp Glu Pro Met Glu Ala Leu Ala Val Val Leu Pro Pro Ser  
 405 410 415  
 420 425 430  
 Lys Asp Asn Ser Ser Ser Phe Pro His Leu Ala Thr Phe Thr Ile Thr  
 435 440 445  
 Lys Ser Gly Trp Leu Ser Asn Val Ala Asp Asn Val Phe Ala Ala Ile  
 450 455 460  
 Lys Lys Asp Phe Pro Gln Leu Val Trp Thr Val Lys Glu Asn Asp Glu  
 465 470 475 480  
 Asn Leu Thr Trp Phe Phe Asp Lys Ala Asp Gly Ser Leu Ser Arg Asp  
 485 490 495  
 Gly Glu Val Leu Phe Trp Tyr Gly Ile Glu Ser Gly Glu Glu Val Lys  
 500 505 510  
 Gln Leu Val Gln Glu Phe Asn Gln His Gly Arg Gln Met Phe Gly Asp  
 515 520 525  
 Ile Asn Leu Glu Ala Arg Leu Gln Arg Ala Ala Gln Ala Ala Thr Asn  
 530 535 540  
 Ile Gly Lys Gly Phe Gly Ala Ser Gly Ala Ser Val Glu Gln Lys Arg  
 545 550 555 560  
 Ala Phe Ser Ser Thr Ala Asn Ala Leu Arg Ala Ala Arg Phe Gly Arg  
 565 570 575  
 Pro Ala Val Ser Pro Arg Val Val Arg Ser Tyr Ser Thr Thr Asn Pro  
 580 585 590  
 Asn Pro Pro Leu Gly Glu Lys Asn Met Ser Asn Asn Arg Pro Ser Lys  
 595 600 605  
 Val Ala Leu Ile Gly Ala Arg Gly Tyr Thr Gly Gln Ala Leu Ile Asn  
 610 615 620  
 Leu Leu Asn Ala His Pro Tyr Met Asp Leu Arg His Val Ser Ser Arg  
 625 630 635 640  
 Glu Leu Ala Gly Lys Lys Leu Gln Gly Tyr Asp Lys Arg Glu Ile Ile  
 645 650 655  
 Tyr Glu Asn Leu Ser Pro Glu Asp Val Lys Arg Met Ser Ala Asn Gly  
 660 665 670  
 Asp Val Asp Cys Trp Val Met Ala Leu Pro Asn Gly Val Cys Lys Pro  
 675 680 685  
 Phe Val Asp Ala Val Asp Gln Gly Ser Glu Thr Gly Asn Val Ile Val  
 690 695 700  
 Asp Leu Ser Ala Asp Tyr Arg Phe Asp Asp Lys Trp Thr Tyr Gly Leu  
 705 710 715 720  
 Pro Glu Leu Val Asn Arg Gly Lys Ile Ala Gln Ala Thr Arg Ile Ser  
 725 730 735  
 Asn Pro Gly Cys Tyr Ala Thr Ala Ala Gln Ile Gly Ile Ala Pro Leu  
 740 745 750  
 Val Pro Tyr Leu Gly Gly Gln Pro Thr Val Phe Gly Val Ser Gly Tyr  
 755 760 765  
 Ser Gly Ala Gly Thr Lys Pro Ser Pro Lys Asn Asp Val Gln Asn Leu  
 770 775 780  
 Thr Asn Asn Ile Ile Pro Tyr Ser Leu Thr Asp His Ile His Glu Arg  
 785 790 795 800  
 Glu Ile Ser Ala Gln Leu Gly Thr Ser Ile Ala Phe Ile Pro His Val  
 805 810 815  
 Ala Val Trp Phe Gln Gly Ile His Val Cys Thr Ser Pro Thr Phe Ile  
 820 825 830  
 Tyr Trp Pro Leu Phe Tyr Ile Leu Val Ser Gly Thr Asp Val Val Arg  
 835 840 845  
 Thr Ala His His Gln His Ser Ser Gln Pro Gly Asp Asp Phe Ser Arg

[illegible]

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<210> 41113
<211> 162
<212> PRT
<213> A.fumigatus
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<210> 41114
<211> 146
<212> PRT
<213> A.fumigatus
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<400>	41114																
Pro	His	Leu	Asp	Ser	Thr	Leu	Met	Ser	Val	Arg	Arg	Cys	Trp	Asp	Leu		
1				5					10					15			
Arg	Lys	Pro	Arg	Asn	Thr	Tyr	Ile	Pro	Thr	Val	Ser	Arg	Ala	Leu	Ser		
			20					25					30				
Ser	Val	His	His	Gln	Gln	Leu	Ile	Arg	Cys	His	His	Thr	Tyr	Asn	Phe		
		35					40					45					
Asp	Leu	Leu	Gln	Leu	Leu	Asn	His	Thr	Ile	Pro	Arg	Asp	Thr	Ile	Val		
	50					55					60						
Lys	Met	Ser	Asn	Arg	Ala	Glu	Arg	Glu	Ala	Glu	Asp	Met	Tyr	Glu	Ala		
65					70					75					80		
Glu	Asn	Asp	Ala	Ser	Pro	Val	Ser	Ala	Asp	Val	Ile	Asp	Asn	Ser	Tyr		
				85					90				95				
Val	Gly	Glu	Thr	Arg	Ser	Glu	Leu	Arg	Asn	Gln	Val	Pro	Val	Gln	Pro		
			100					105					110				
Asp	Gln	Asp	Asp	Tyr	Glu	Asp	Pro	Met	Gln	Pro	Pro	Tyr	Ser	Asn	Thr		





## 18112

Ser Tyr Phe Glu Ala Cys Leu His Ala Lys Ala Ser Arg Lys Arg Leu  
 355 360 365  
 Asp Glu Trp Asn Glu Ile Pro Tyr Phe Lys Ile Gly Gly Ala Gly Thr  
 370 375 380  
 His Tyr Pro Arg Lys Thr Lys Ala Ser Ser Asn Glu Thr Leu Pro Arg  
 385 390 395 400  
 Trp Glu Asn Ile Gln Asp Pro Thr Ser Glu Leu Pro Gln Glu Ile Gln  
 405 410 415  
 His Glu Leu Asp Gly Glu Trp Phe Asp Ile Gln Asp Leu Glu Gly Phe  
 420 425 430  
 Leu Leu Glu Lys Glu Val Ala Phe Val Val Gly Asp Thr Asn Ser Ser  
 435 440 445  
 Asp Lys Arg Asn Val Val Asn Ala Ala His Leu Ile Gln Gly Arg His  
 450 455 460  
 Leu Phe Leu Leu Leu Val Phe Ser Ser Tyr  
 465 470

&lt;210&gt; 41116

&lt;211&gt; 580

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41116

Ser Leu Phe Ile Val Asn His Phe Leu Ser Leu Ile Leu Leu Leu Ser  
 1 5 10 15  
 Trp Pro Ile Ser Gly Leu Tyr Ile Leu Ser Ile Phe Ser Ser Ser Ser  
 20 25 30  
 Gln Ile Asp Ser Ala His Leu Pro Phe Leu Pro Ala Ile Ala Arg Leu  
 35 40 45  
 His Pro Gly Arg Cys Leu Ile His Ser Leu Gln Ala Ile Leu Ser Ser  
 50 55 60  
 Ile Leu Arg Leu Ser Ser Asp Arg Leu Glu Ser Phe Ser Ala Ala Phe  
 65 70 75 80  
 Leu Thr Leu Ser Asp His Arg Ser Leu Val Leu Val Ile Val Arg Gln  
 85 90 95  
 Cys Asn Met Ala Pro Ser Ser Leu Leu Leu Ser Val Gly Ser Leu Ile  
 100 105 110  
 Thr Ser Ser Leu Val Ser Ala Thr Ala Leu Glu Ala Arg Gln Ser Gln  
 115 120 125  
 Thr Tyr Gln Leu Ala Glu Ser Trp Gln Gly Glu Ser Phe Ile Asn Asp  
 130 135 140  
 Trp Asn Phe Phe Asp Gly Ala Asp Pro Thr Asn Gly Tyr Val Thr Tyr  
 145 150 155 160  
 Val Asn Gln Ser Phe Ala Lys Gln Ser Gly Leu Val Lys Val Thr Glu  
 165 170 175  
 Ser Gly Ser Phe Tyr Met Gly Val Asp Tyr Glu Ser Thr Leu Asn Pro  
 180 185 190  
 Asn Gly Ala Gly Arg Glu Ser Val Arg Ile Glu Ser Lys Asn Tyr Tyr  
 195 200 205  
 Thr Glu Gly Leu Tyr Val Ile Asp Ile Glu His Met Pro Gly Ser Ile  
 210 215 220  
 Cys Gly Thr Trp Pro Ala Phe Trp Ser Val Gly Lys Asn Trp Pro Asn  
 225 230 235 240  
 Asp Gly Glu Ile Asp Ile Ile Glu Gly Val Asn Leu Gln Lys Ala Asn  
 245 250 255  
 Lys Ile Val Leu His Thr Ser Gly Ser Cys Asp Val Ser Gly Ser Asn

## 18113

260 265 270  
 Asp Met Thr Gly Thr Leu Ser Ser Ser Glu Cys Gly Glu Ala Ser Gly  
 275 280 285  
 Thr Val Gly Cys Val Val Lys Gly Thr Asn Gly Ser Ser Gly Asp Pro  
 290 295 300  
 Phe Asn Glu Ser Gly Gly Gly Val Tyr Ala Met Glu Trp Thr Asp Thr  
 305 310 315 320  
 Phe Ile Lys Ile Trp Phe Phe Pro Arg Ser Gln Ile Pro Ala Ser Leu  
 325 330 335  
 Ala Ser Gly Asn Pro Asp Thr Ser Ser Phe Gly Thr Pro Met Ala His  
 340 345 350  
 Leu Gln Gly Ser Cys Asp Phe Ala Glu Arg Phe Lys Ala Gln Lys Leu  
 355 360 365  
 Ile Ile Asp Thr Thr Phe Cys Gly Asp Trp Ala Gly Asn Val Phe Ala  
 370 375 380  
 Glu Ser Thr Cys Pro Met Ser Asp Pro Ser Ser Pro Met Gln Ser Cys  
 385 390 395 400  
 Val Asn Tyr Val Ala Gln Asn Pro Ala Ala Phe Lys Glu Ala Tyr Trp  
 405 410 415  
 Glu Ile Asn Ser Ile Lys Ile Tyr Gln Tyr Gly Val Ser Ala Ala Ser  
 420 425 430  
 Ser Ala Ala Val Ser Gln Ala Thr Ala Ser Lys Val Glu Gly Thr Arg  
 435 440 445  
 Val Ser Ala Gln Ala Ala Asn Thr Ala Thr Pro Thr Val Pro Ala Pro  
 450 455 460  
 Val Glu Thr Thr Thr Val Pro Gln Pro Ala Gln Thr Asn Thr Val Ala  
 465 470 475 480  
 Thr Ser Ala Ala Asp His Ala Thr Pro Ser Ser Ala Glu Thr Thr Thr  
 485 490 495  
 Val Pro Ala Ala Thr Gly Ala Pro Ser Val Ser Ala Thr Glu Gly Gly  
 500 505 510  
 Asp Ser Glu Leu Glu Ser Thr Ser Thr Val Tyr Val Thr Ser Thr Thr  
 515 520 525  
 Thr Ile Cys Pro Val Ala Glu Ser Ser Ser Ala Ala Ala Gly Gly  
 530 535 540  
 Lys Glu Asp Ala Pro Ser Asn Gly Thr Ser Gly Ala Glu Val Ala Ala  
 545 550 555 560  
 Thr Ser Val Ala Ala Ala Ala Pro Ala Ala Ser Thr Arg Arg Gly Arg  
 565 570 575  
 Gly Tyr Arg Val  
 580

&lt;210&gt; 41117

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41117

Phe Gln Leu Arg Ile Ala Ala Leu Ser Arg Arg His Thr Gly Ser Pro  
 1 5 10 15  
 Ser Gly Ser Gly Asn Ser Arg Gly Leu Gly Arg Arg Arg Cys Gly Val  
 20 25 30  
 Ile Ser Ser Gly Ser Arg Asn Ser Val Gly Leu Ser Trp Leu Gly Asn  
 35 40 45  
 Ser Gly Cys Leu Asn Arg Gly Gly Asn Gly Gly Arg Arg Gly Ile Gly  
 50 55 60

## 18114

Gly Leu Gly Arg His Pro Ser Ala Phe Asp Leu Gly Gly Cys Ser Leu  
 65 70 75 80  
 Arg Asp Gly Gly Gly Arg Ser Ser Ala Asp Thr Val Leu Val Asp Leu  
 85 90 95  
 Asp Gly Val Asp Leu Pro Val Arg Leu Leu Glu Ser Arg Gly Ile Leu  
 100 105 110  
 Ser Asp Val Val Asp Thr Ala Leu His Gly Ala Ala Gly Ile Ala His  
 115 120 125  
 Gly Ala Gly Gly Phe Gly Lys Asn Ile Thr Gly Pro Val Ala Ala Lys  
 130 135 140  
 Gly Cys Val Asn Asp Gln Leu Leu Cys Phe Glu Ala Leu Cys Lys Val  
 145 150 155 160  
 Ala

&lt;210&gt; 41118

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41118

Arg Thr Ser Leu Leu Pro Val Asp Pro Ser Ile Gln His Trp Leu Asp  
 1 5 10 15  
 Ala Ala Glu Leu Leu Gln Lys Ser His Leu Gln Tyr Thr Arg Val Ile  
 20 25 30  
 Pro Gly Phe Phe Met Asp Tyr Trp Gly Met Pro Val Val Arg Thr Asn  
 35 40 45  
 Leu Thr Pro Tyr Ile Phe Gly Ile Asn Ile Gln His Cys Gln Ala Ala  
 50 55 60  
 Ile Pro Gly Asp Gly Asn Asp Val Ile Cys Met Thr Tyr Ala Tyr Asp  
 65 70 75 80  
 Met Ala Ala Phe Leu Ile Arg Leu Leu Asp Val Ala Asp Trp Pro Glu  
 85 90 95  
 Phe Ser Ile Met Val Gly Asp Glu Val Thr Tyr Asn Gln Leu Leu Glu  
 100 105 110  
 Met Ala Glu Glu Ile Arg Gly Gln  
 115 120

&lt;210&gt; 41119

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41119

Pro Glu Ser Tyr Tyr Leu Ile Gln Lys Ser Arg Ser Asp Pro Ala Leu  
 1 5 10 15  
 Asp Arg Thr Arg Gln Val Gln Val Asp Tyr Asn Asn Ile Pro Ser Leu  
 20 25 30  
 Val Gln Val Leu Glu Gln His Thr Ile His Thr Ile Ile Ser Ala Ile  
 35 40 45  
 Gly Ile Phe Asp Ala Thr Thr Ser Gln Ser Gln Leu Asn Leu Ile Gln  
 50 55 60  
 Ala Ala Glu Glu Ser Ser Val Thr Lys Arg Phe Ile Pro Ser Glu Tyr  
 65 70 75 80  
 Ser Phe Ile Gln Thr Lys Glu Tyr Phe Pro Thr Tyr  
 85 90

<210> 41120  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 41120  
 His Gln Gly Ala Val Lys Val Trp Ser Ser Trp Thr Leu Ser Phe Arg  
 1 5 10 15  
 Leu Ser Ser Glu Glu Ser Ala Ser Thr Lys Ala Tyr Asp Gln Leu Pro  
 20 25 30  
 Gln Cys Leu Leu Phe Val Leu Ser Leu Val Gly Ile Tyr Lys Gln Thr  
 35 40 45  
 Ala Gly Thr Leu Ile Thr Phe Val Phe Thr Thr Gly Met Asp Ala Ser  
 50 55 60  
 Lys Leu Asp Tyr  
 65

<210> 41121  
 <211> 144  
 <212> PRT  
 <213> A.fumigatus

<400> 41121  
 Arg Gln Arg Met Gln Arg Tyr Val Phe Arg Lys His Leu Phe Tyr Phe  
 1 5 10 15  
 Ala Ser Met Leu Ile Cys Leu Tyr Ser Val Phe Ser Ala Lys Phe Thr  
 20 25 30  
 Pro Asp Asn Lys Tyr Ile Leu Ser Gly Ser Asp Asp Gly Asn Ile Arg  
 35 40 45  
 Leu Trp Arg Ala Asn Ala Ser Asp Arg Ser Gly Ile Lys Ser Ala Arg  
 50 55 60  
 Gln Arg Gln Lys Leu Glu Tyr Asp Gln Ala Leu Ile Thr Arg Tyr Ser  
 65 70 75 80  
 His Met Pro Glu Ile Arg Arg Ile Lys Arg Gln Arg His Val Pro Arg  
 85 90 95  
 Thr Val Lys Lys Ala Ala Glu Ile Lys Arg Glu Glu Leu Ala Ala Ile  
 100 105 110  
 Lys Arg Arg Glu Glu Asn Val Arg Lys His Ala Lys Lys Gly Ala Leu  
 115 120 125  
 Pro Pro Arg Arg Ser Glu Arg Glu Lys Met Ile Leu Thr His Glu Gln  
 130 135 140

<210> 41122  
 <211> 86  
 <212> PRT  
 <213> A.fumigatus

<400> 41122  
 Glu Trp Gln Leu His Asn Ile Cys Leu Trp Arg Gln Phe Cys Ser Met  
 1 5 10 15  
 Thr Ile Asp Asp Asn Ser Gly Ser Leu Tyr Asp Ala Tyr Ser Ile Ser  
 20 25 30  
 Arg Asn Leu Leu Val Ala Tyr Ile Leu Leu Met Ala Leu Gly His His  
 35 40 45  
 Ser Pro Ser Leu Thr Phe Ser Ser Ser Gly Asp Ile Trp Leu Asp Asn

## 18116

50                      55                      60  
 Thr Pro Cys Phe Asp Leu Ser Ala Ala Asp Asp Pro Cys Lys Ala Ala  
 65                      70                      75                      80  
 Arg Ser Ile Pro Leu Lys  
                     85

<210> 41123  
 <211> 106  
 <212> PRT  
 <213> A.fumigatus

<400> 41123  
 Phe Asp Gly Thr Thr Ser Trp Met Ile Asn Phe Cys Asn His Ser Ser  
 1                      5                      10                      15  
 Cys Leu His Tyr Ala Asp Asp Ser Met Ser Val Asn Gly Phe Ala Gln  
                     20                      25                      30  
 Ser Leu Asp Ile Gly Ala Arg Leu Thr Met Arg Met Ile Glu Arg Pro  
                     35                      40                      45  
 Leu Asp Val Ile Asp Arg Gly Ile Trp His Pro Thr Ala Phe Gln Asp  
                     50                      55                      60  
 Leu Glu Pro Phe Leu Arg Gly Phe Leu Leu Asn Ser Leu Leu Asn Gln  
 65                      70                      75                      80  
 Val Ile Lys Leu Phe Pro Met Leu Tyr Ser Val Thr Val Gly Asp Lys  
                     85                      90                      95  
 Ala Arg Val Arg Leu Pro Phe Gly Glu Pro  
                     100                      105

<210> 41124  
 <211> 494  
 <212> PRT  
 <213> A.fumigatus

<400> 41124  
 Ala Leu Ser Tyr Cys Ser Ile Arg Pro Ser Phe Leu Leu His Leu Pro  
 1                      5                      10                      15  
 Ser Asn Ser Gly Ile Met Pro Pro Ser Leu Thr Lys Gln Ile Thr Gln  
                     20                      25                      30  
 Ile Glu Gly Val Arg Leu Ala Asp Ala Asn Asp Ile Glu Trp Asp Ile  
                     35                      40                      45  
 Thr Ile Asn Tyr Pro Gly Lys Ser Ala Lys Gly Thr Ile Val Ala Ile  
                     50                      55                      60  
 Thr Pro His Arg Ser Ser Ser Pro Asn Asp Asn Cys Ser Pro Leu Ala  
 65                      70                      75                      80  
 Leu Pro Ala Leu Thr His Pro His Ile His Leu Asp Lys Ala Tyr Val  
                     85                      90                      95  
 His Ser Thr Arg Glu Tyr Ala His Leu Leu Pro Ala Glu Gly Ser Phe  
                     100                      105                      110  
 Gln Glu Ala Leu Ser Phe Thr Ala Gln Ala Lys Lys Gln Phe Ser Gln  
                     115                      120                      125  
 Ala Asp Leu Met Lys Arg Gly Glu Trp Leu Leu Ala Glu Ser Val Ser  
                     130                      135                      140  
 Ala Gly Val Thr Ala Met Arg Ala Phe Val Glu Val Asp His Thr Val  
 145                      150                      155                      160  
 Lys Leu Thr Cys Leu Glu Thr Gly Leu Lys Leu Lys Asp Glu Trp Lys  
                     165                      170                      175  
 Glu Cys Cys Asn Val Gln Ile Val Cys Phe Ala Gln Asp Pro Ile Phe

## 18117

```

      180      185      190
Ser Gly Glu Tyr Gly Asp Glu Asn Arg Asp Leu Ile Glu Lys Ala Leu
      195      200      205
Glu Arg Tyr Pro Gln Ile Asp Val Ile Gly Thr Thr Pro Tyr Val Glu
      210      215      220
Ser Ser Thr Asp Ala Ala Arg Arg Asn Ile Gly Trp Ala Ile Glu Thr
225      230      235      240
Ala Val Lys Leu Asp Lys His Ala Asp Phe His Leu Asp Tyr Ser Leu
      245      250      255
Asp Ser Ser Lys Glu Ala Leu Val Trp Tyr Val Leu Gln Ala Leu Gln
      260      265      270
Arg Asn Asn Trp Thr Ser Gln Ser Ser Ser Arg Arg Val Met Phe Gly
      275      280      285
His Cys Thr Arg Leu Thr Ser Phe Thr Asp Lys Glu Trp Ser Asp Leu
      290      295      300
Ala Lys Glu Ile Arg Asp Asn Asp Leu Pro Val Ser Phe Val Gly Leu
305      310      315      320
Pro Thr Ser Asp Met Tyr Met Ala Ser Pro Tyr Pro Ala Ala Asn Ala
      325      330      335
Pro His Asn Arg Pro Arg Gly Thr Leu His Val Leu Lys Met Ile Ser
      340      345      350
Glu His Gly Leu Asp Ala Ile Ile Gly Val Asn Asn Val Gly Asn Ala
      355      360      365
Phe Thr Pro Trp Gly Ser Ala Asp Pro Leu Ser Leu Ala Cys Leu Gly
      370      375      380
Val Gly Ile Tyr Gln Ala Gly Thr Gln Lys Asp Ala Glu Leu Leu Tyr
385      390      395      400
Glu Cys Val Ser Thr Arg Ala Arg Ala Ala Ile Gly Leu Leu Gly Ser
      405      410      415
Gln Gly Gly Ser Asn Leu Met Leu Lys Glu Gly Asp Gln Pro Asp Leu
      420      425      430
Val Val Leu His Asn Val Asp Asp Thr Gly Cys Asn Val Leu Arg Pro
      435      440      445
Arg Asn Ser Val Ala Asp Val Val Trp Asp Pro Pro Ala Arg Val Ser
      450      455      460
Arg His Ile Ile Ser Asn Gly Arg Leu Lys Leu Pro Pro His Pro Met
465      470      475      480
Tyr Pro Gly Thr Ala Arg Tyr Ala Phe Lys Asp Ser Asp Ala
      485      490

```

&lt;210&gt; 41125

&lt;211&gt; 648

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41125

```

Lys Gln Leu Ile Lys Val Gly Glu Ile Asp Lys His Phe Tyr Thr Pro
1      5      10      15
Cys Asn Val Ala Tyr Ser Val Gln Leu Trp Gly Met Ser Arg Gln Asn
      20      25      30
Gly Ala Thr Ser Ser Leu Ala Ser Thr Leu Glu Thr Thr His Gly Thr
      35      40      45
Pro Arg Thr Ile Ser Ser Pro His Pro Ser Val Ser Thr Val Glu Gly
      50      55      60
Asn Thr Ala Asn Ser Thr Pro Pro Ser Ser Ile Asp Leu Ser Ser Lys
65      70      75      80

```

Thr Ser Cys Ser Thr Gly Thr Val Arg Gly Lys Val Gln Ile Pro Lys  
 85 90 95  
 Leu Ser Ala Ala Thr Thr Glu Leu Leu Ser Arg Ile Ala Gly Asn Ile  
 100 105 110  
 Arg Gly Asp Gln Gln Lys Asn Asp Asn Phe Thr Thr Arg Trp Ser Thr  
 115 120 125  
 Ser Ile Phe Asp Pro Ser Leu Asn Ser Leu Asn Phe Gln Lys Phe Asn  
 130 135 140  
 Thr Met Lys Ala Ser Ser Thr Ile Ile Glu Leu Pro Thr Ala Pro Phe  
 145 150 155 160  
 Ala Tyr Thr Asn Asn Thr Leu Ala Pro Thr Ala Val Ser Asn Gln Ala  
 165 170 175  
 Pro Ile Thr Ser Gly Asp Gly Ser Ser Arg Pro Lys Lys Pro Val Thr  
 180 185 190  
 Ile Ala Pro Lys Pro Ser Val Thr Val Ser Ala Gly Pro Ser Ala Thr  
 195 200 205  
 Leu Ala Pro Ser Gln Ile Gln Gln Thr Leu Pro Ser Gln Pro Thr Ala  
 210 215 220  
 Leu Ile Pro Asn Pro Pro Leu Ala Pro Leu Ala Pro Ser Gln Ile Gln  
 225 230 235 240  
 Thr Thr Phe Gln Pro Gln Pro Arg Gly Leu Lys Pro Lys Ala Pro Leu  
 245 250 255  
 Val Ser Leu Ala Pro Lys Pro Ala Lys Val Pro Asp Gly Asn Pro Gln  
 260 265 270  
 Lys Ala Thr Pro Gly Gln Arg Ser Arg Lys Asn Ala Ser Asn Gly Ser  
 275 280 285  
 Arg Lys Ser Arg Lys Arg Arg Arg Gly Gly Asp Ser Asp Gly Glu Asp  
 290 295 300  
 Ile Ile Arg Ala Gly Asp Ser Ser Ser Asp Glu Ser Asp Val Ala Pro  
 305 310 315 320  
 Thr Ala Thr Gln Thr Lys Ser Gly Arg Gln Val Asn Arg Pro Ser Leu  
 325 330 335  
 Tyr Val Pro Pro Ala Ser Ser Pro Ala Ile Thr Lys Ala Asn Gly Thr  
 340 345 350  
 Ser Ser His Gly Ser Glu Thr Ile Gly Ala Arg Arg His Lys Arg Val  
 355 360 365  
 Phe Arg Lys Thr Lys Glu Ala Tyr Val Asn Cys Met His Cys Gln Arg  
 370 375 380  
 Gly His Ser Pro Gln Ser Asn Ala Ile Val Phe Cys Asp Gly Cys Asn  
 385 390 395 400  
 Arg Ala Trp His Gln Leu Cys His Asp Pro Pro Ile Asp Ser Asp Val  
 405 410 415  
 Val Asn Val Val Glu Lys Glu Trp His Cys Arg Glu Cys Lys Pro Val  
 420 425 430  
 Gln Ile Ser Ile Val Gln Pro Thr Val Val Arg Ser Asn Pro Asp Leu  
 435 440 445  
 Gln Ala Gln Ala Leu Arg His Pro Leu Gln His His Val Pro Ser Pro  
 450 455 460  
 Lys Thr Glu Val Gly Gly Glu Arg Phe Ser Ala Glu Glu Arg Arg Gly  
 465 470 475 480  
 Tyr Leu Ser Ser Leu Ser His Ala Ser Leu Val Glu Leu Leu Val Thr  
 485 490 495  
 Ile Ser Asp Arg Asn Pro Ser Leu Ser Met Phe Pro Ser Asn Leu Lys  
 500 505 510  
 Glu Leu Gln Leu Ser Lys Phe Leu Phe Thr Ser Asn Thr Ser Ala Gly  
 515 520 525



## 18119

```

Pro Val Ser Ala Ala Thr Ser Thr Glu Thr Ile Thr Thr Thr Glu Thr
  530                      535                      540
Pro Val Ser His Ser Gly Lys Asp Thr Thr Ser Glu Lys Pro Ser Thr
545                      550                      555                      560
Glu Asn Thr Glu Glu Pro Leu Pro Ser Ala Ser Ser Ser Arg Lys Arg
                      565                      570                      575
His Trp Tyr Glu Ser Asp Glu Glu Ser Glu Tyr Glu Glu Phe Gln Glu
                      580                      585                      590
His Arg Leu Tyr Pro Arg Ala Gly Asn Gly Phe Arg Leu Ser Leu Asn
                      595                      600                      605
Ala Asp Asp Val Asp Ile Met Arg Glu Asp Pro Asp Cys Pro Thr Phe
610                      615                      620
Ser Tyr Ala Leu His Gly Pro Ala Lys Ala Arg Ala Glu Ala Asn Glu
625                      630                      635                      640
Thr Ala Pro Val Trp Gly Ala Ala
                      645

```

&lt;210&gt; 41126

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41126

```

Leu Gly Thr Pro Thr Val Leu Ile Asn Cys Ala Ala Ala Gly Ile Asn
  1                      5                      10                      15
Ser Gln Pro Val Leu Thr Leu Pro Ala Glu Ala Phe Glu Lys Thr Ile
                      20                      25                      30
Arg Thr Asn Leu Leu Ala Val Phe His Thr Cys Gln Val Phe Leu Pro
                      35                      40                      45
Gly Met Leu Ser Ala Glu Asn Gly Gly Thr Ile Val Asn Ile Ser Ser
50                      55                      60
Val Leu Gly His Leu Ser Ala Ala Gly Leu Ser Asp Tyr Ser Ala Ser
65                      70                      75                      80
Lys Ala Gly Leu Ser Ala Leu His Arg Thr Leu Glu Ala Glu Leu Arg
                      85                      90                      95
Val Ser Arg Tyr Asp Gly Ile Val Lys Met Leu Leu Val Glu Thr Gly
100                      105                      110
Gln Ile Ser Thr Pro Leu Phe Lys Ser Ile Lys Thr Pro Asn Lys Phe
115                      120                      125
Phe Ala Pro Val Leu Glu Pro Val His Val Ala Gln Lys Ile Ile Thr
130                      135                      140
Ala Ile Asp Glu Gly Arg Gly Gly Leu Ile Arg Leu Pro Ala Phe Ala
145                      150                      155                      160
Val Leu Ile Asp Trp Tyr Ala Val Leu Pro Ala Ser Ile Gln Arg Ile
                      165                      170                      175
Ala Arg Tyr Leu Ser Gly Ile Asp Arg Ala Ala Leu Gln Gly Ser Ser
180                      185                      190
Ala Ala Asp Arg Ser Lys His Gly Val Leu Ser Ser Gln Ile Ser Pro
195                      200                      205
Asp Glu Leu Lys Val Lys Glu Gly Glu
210                      215

```

&lt;210&gt; 41127

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41127

His Asp Gln Ala Ser Ile Val Pro Tyr Arg Ser Tyr Gln Thr Leu Asp  
 1 5 10 15  
 Gly Asp Ile Leu Phe Gly Gly Gly Asn Asp Arg Leu Phe Gly Val Leu  
 20 25 30  
 Cys Asp Arg Leu Gly Phe Pro Glu Trp Lys Thr Asp Pro Arg Phe Ile  
 35 40 45  
 Thr Asn Arg Asp Arg Val Lys His Arg Glu Glu Leu Asp Asp Leu Ile  
 50 55 60  
 Glu Lys Arg Val Lys Gln Lys Thr Thr Gln Glu Trp Leu Glu Ile Leu  
 65 70 75 80  
 Glu Gly Ser Gly Met Pro Tyr Ala Ala Ile Asn Asp Ile Gln Gly Thr  
 85 90 95  
 Leu Asn His Ser His Gly Lys Ser Cys Ala Asp Val  
 100 105

&lt;210&gt; 41128

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41128

His Gly Ile Val Arg Val Val Gln Ala Arg Gly Met Val Thr Glu Val  
 1 5 10 15  
 Asp His Pro Ala Cys Gly Pro Val Lys Leu Val Asn Thr Pro Ile Lys  
 20 25 30  
 Tyr Ser His Ala Thr Pro Gly Val Arg Arg Pro Pro Pro Thr Leu Gly  
 35 40 45  
 Gln His Thr Asp Glu Ile Leu Lys Glu Leu Leu Asn Tyr Asp Lys Ala  
 50 55 60  
 Asp Ile Asp Leu Leu Lys Lys Glu Gly Ile Val Ser  
 65 70 75

&lt;210&gt; 41129

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41129

Phe Glu Phe Ser Lys Val Gln His Asp Glu Gly Leu Phe His Asn His  
 1 5 10 15  
 Arg Ala Ala His Gly Ala Val Arg Leu Tyr Glu Gln Tyr Thr Gly Thr  
 20 25 30  
 Tyr Ser Ser Phe Gln Pro Ser Pro Tyr Asn Val Trp Gly Arg Leu Leu  
 35 40 45  
 Glu Thr Gln Glu Ala Arg Tyr His Cys Ser Gln Thr Lys Cys Asn Ser  
 50 55 60  
 Ile Ser Trp Ser Ile Gly Asp Ile Gly Ala Ile Ser Asp Thr Thr Asn  
 65 70 75 80  
 Ile Ala Ile Thr Thr Tyr Gly Ser Asp Pro Lys Ser Ser Ser Gly Thr  
 85 90 95  
 Ala Gly Ala Val Ser Asn Thr Asn Asn Ile Pro Thr Thr Ala  
 100 105 110

&lt;210&gt; 41130

18121

<211> 268  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (15)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41130

```

Trp Thr Glu Ser Thr Ala Thr Pro Phe Arg Asp Met Thr Ala Xaa Tyr
1          5          10          15
Asp Gly Ala Arg Arg Leu Gln Glu Lys Ser His Val Pro Gly Val Leu
20          25          30
Pro Leu Asp Thr Glu Phe Gly Ser Ala Thr Ile Leu Thr Lys Arg Asp
35          40          45
Thr Gly Val Glu Asp Ile Ile Asn Asp Asn Val Arg Lys Val Ala Asp
50          55          60
Leu Gly Pro Ser His Ile Met Ser Thr Thr Ser Pro Ser Pro Ile Ser
65          70          75          80
Gln Ser Pro Asp Lys Gly Trp Leu Glu His Leu Thr Phe Asp Leu Phe
85          90          95
Met Lys Val Ile Asn Arg Thr Leu Phe His Pro Phe Leu Ala Trp Val
100          105          110
Gly Val Leu Ser Leu Arg Ala Gln Ala Thr Pro Tyr Thr His Ile Ser
115          120          125
Phe Met Ile Ala Thr Gly Tyr Ala Ala Phe Leu Thr Val Leu Ala Leu
130          135          140
Ala Arg Ala Met Asn Gln Arg Leu Ala His Gly Leu Pro Arg Pro Val
145          150          155          160
Asp Leu Ser Glu Glu Val Val Val Val Thr Gly Gly Ala Ser Gly Leu
165          170          175
Gly Leu Leu Ile Ala Arg Ile Tyr Gly Leu Arg Gly Val Ser Val Ala
180          185          190
Val Leu Asp Ile Lys Ala Glu Ser Asp Ile Glu Gly Trp Glu Glu Val
195          200          205
Thr Gly Val Asp Tyr Tyr Arg Cys Asp Ile Thr Asp Arg Glu Ala Val
210          215          220
Glu Arg Met Ala Arg Arg Ile Lys Glu Glu Val Cys Asn Arg Phe Ala
225          230          235          240
Arg Leu Gln Pro Cys Gly Arg Tyr Asn Asp Met Asn Ile Tyr Glu Ile
245          250          255
Met Leu Ile Phe Leu Ser Trp Val His Arg Leu Cys
260          265

```

<210> 41131  
<211> 197  
<212> PRT  
<213> A.fumigatus

<400> 41131

```

Tyr Ile Met Asp Gly Tyr His Val Ser His Asp Pro Ala Val Glu Tyr
1          5          10          15
Thr Val Glu Pro Thr Thr Gly Arg Lys Leu Asn Ile Leu Asp Val Pro
20          25          30
Gly Gly Lys Ser Ser Asn Pro Ala Pro Lys Thr Arg Arg Gly Ser Asn

```

## 18122

```

      35              40              45
Asp Val Val Lys Gly Arg Ala Leu Ser Pro Ser Lys Ile His His Pro
  50              55              60
Lys Pro Ser Lys Pro Tyr Ala Ser Arg Gln Ile Arg Glu Thr Asp Phe
  65              70              75              80
Ala Pro Thr Met Glu Asp Leu Thr Arg Arg Phe Ala Gly Ser Arg Met
      85              90              95
Ser Asp Glu Tyr Ser Tyr Ser Asn Ser Pro Pro Ser Ser Val Gly Ser
      100              105              110
Ser Leu Ser Ser Arg Ser Ser Gly Ser Thr Ser Pro Ser Ser Leu Ser
      115              120              125
Ser Met Ser Asp Pro Pro Thr Pro Ile Cys Arg Cys Glu Arg Tyr Gly
      130              135              140
Ile Thr Arg Lys Gly Asp Arg Val Lys Leu Asp Cys Gly Gly Ser Arg
      145              150              155              160
Cys Gly Tyr Val Thr Glu Ser Ser Asp Ala Ser Cys Ser Glu Ser Asp
      165              170              175
Ser Asp Glu Glu Tyr Arg Arg Ala Arg Thr Ala Val Arg Arg Gln Gly
      180              185              190
Ile Val Val Arg Arg
      195

```

&lt;210&gt; 41132

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41132

```

Lys Glu Cys Gly Asn Asp Gly Trp Trp Lys Lys Leu Arg Trp Lys Val
  1              5              10              15
Val Val Ala Arg Leu Leu Leu Leu Leu Met Pro Gly Glu Phe Asn Ala
      20              25              30
Phe Arg Pro Asp Tyr Pro Gly Thr Val Ile Ala Thr Ile Leu Leu Pro
      35              40              45
Pro Ser Met Lys Asp Gln Ser Tyr Gly Leu Trp Pro Lys Leu Met Lys
      50              55              60
Arg Tyr Gly Ala His Lys Tyr Pro Tyr Thr Tyr Met Leu Asp Lys Asn
      65              70              75              80
Asp Ala Gln Val Ala Ser Ile Lys Gln Ala Pro Glu His Arg Ser Ser
      85              90              95
Ser Leu Gly Leu Ile Pro Thr Val Ser Ser
      100              105

```

&lt;210&gt; 41133

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41133

```

Pro Ile Ile Ser His Asp Arg Lys Leu Lys Lys Gly Leu Phe Glu Cys
  1              5              10              15
Arg Leu Cys Asn Asn Lys His Arg Ile Ser Gln Val His Ile Pro Tyr
      20              25              30
Ala Ala Lys Leu Leu Phe Gln Glu Leu Ala Ala Met Asn Ile Ala Ala
      35              40              45
Arg Met Phe Thr Asn Arg Ser Gly Val Ser Val Arg

```

## 18123

50

55

60

&lt;210&gt; 41134

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41134

```

Arg Cys Cys Ser Arg Cys Leu Leu Asp Glu Pro Ser Leu Leu Leu Leu
1           5           10           15
Phe Leu Ser Phe Phe Ser Ser Lys Leu Leu Leu Val Arg Ala Ala Phe
          20           25           30
Ser Leu Glu Val Ser Cys Ala Leu Val Ala Leu Val Phe Val Ile Val
          35           40           45
Val Ile Thr Ala Ser Ser Ile Leu Leu Ile Thr Phe Pro Thr Leu Tyr
          50           55           60
Gln Lys Lys Ser Ser Asn Leu Ser Leu Pro Gln Phe Ala Leu Ser Asp
65           70           75           80
Glu Leu Cys Ser Leu Val Phe Leu Phe Ile Tyr Pro Cys Ser Gly Tyr
          85           90           95
Phe Leu Asp Tyr Thr Ile Phe Phe Thr Arg Phe Ser Ile Leu Val Ala
          100          105          110
Gly Arg Arg Cys
          115

```

&lt;210&gt; 41135

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41135

```

Ser Leu Val Leu Leu Gln Ser Ser Thr Ala Thr Met Thr Ala Val Gln
1           5           10           15
Leu Lys Phe Ser Leu Arg Thr Ser Ser Asn Val Lys Thr Val His Leu
          20           25           30
Val Gly Ser Trp Asp Asn Tyr Ser Arg Gln Ile Pro Leu Ser Arg Asp
          35           40           45
Asp Ser Lys Pro Gly Ser Trp Val Gly Lys Phe Arg Phe Gln Thr Ser
          50           55           60
Met Leu Lys Leu Gly Gly Arg Tyr Trp Tyr Tyr Val Ser Ile Arg Arg
65           70           75           80
Cys Arg Ile Asp Lys Gly Ser
          85

```

&lt;210&gt; 41136

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41136

```

Arg Leu Gly Val Cys Ala Ser Ile Ile Pro Phe Pro Asp His Asn Gln
1           5           10           15
Ser Pro Arg Asn Thr Tyr Gln Ser Ala Met Gly Lys Gln Ala Met Gly
          20           25           30
Val Phe Leu Thr Asn Phe Asp Gln Arg Met Glu Thr Met Ala Asn Ile
          35           40           45

```

## 18124

Leu Tyr Tyr Pro Gln Lys Pro Leu Ala Thr Thr Arg Ser Met Glu Phe  
 50 55 60  
 Leu Arg Phe Arg Glu Leu Pro Ala Gly Gln Asn Ala Ile Val Ala Ile  
 65 70 75 80  
 Ala Cys Tyr Ser Gly Tyr Asn Gln Glu Asp Ser Val Ile Met Asn Gln  
 85 90 95  
 Ser Ser Ile Asp Arg Gly Leu Phe Arg Ser Leu Phe Tyr Arg Thr Tyr  
 100 105 110  
 Thr Asp Ser Glu Lys Met Val Gly Leu Thr Val Val Glu Arg Phe Glu  
 115 120 125  
 Lys Pro Met Arg Ser Asp Thr Ile Gly Met Arg Lys Gly Thr Tyr Asp  
 130 135 140  
 Lys Leu Asp Glu Asp Gly Ile Ile Ala Pro Gly Val Arg Val Ser Gly  
 145 150 155 160  
 Glu Asp Ile Ile Ile Gly Lys Thr Ala Pro Leu Ala Pro Glu Ala Glu  
 165 170 175  
 Glu Leu Gly Gln Arg Thr Lys Ala His Thr Lys Leu Asp Val Ser Thr  
 180 185 190  
 Pro Leu Arg Ser Thr Glu Asn Gly Ile Val Asp Gln Val Leu Val Ser  
 195 200 205  
 Thr Ser Asn Asp Asp Leu Lys Phe Val Lys Val Arg Met Arg Thr Thr  
 210 215 220  
 Lys Ile Pro Gln Ile Gly Asp Lys Phe Ala Ser Arg His Gly Gln Lys  
 225 230 235 240  
 Gly Thr Ile Gly Ile Thr Tyr Arg Gln Glu Asp Met Pro Phe Thr Arg  
 245 250 255  
 Glu Gly Val Ser Pro Asp Leu Ile Ile Asn Pro His Ala Ile Pro Ser  
 260 265 270  
 Arg Met Thr Ile Ala His Leu Ile Glu Cys Gln Leu Ser Lys Val Ser  
 275 280 285  
 Ala Leu Arg Gly Phe Glu Gly Asp Ala Thr Pro Phe Thr Asp Val Thr  
 290 295 300  
 Val Asp Ser Ile Ser Arg Leu Leu Arg Glu His Gly Tyr Gln Ser Arg  
 305 310 315 320  
 Gly Phe Glu Val Met Tyr Asn Gly His Thr Gly Arg Lys Leu Val Ala  
 325 330 335  
 Gln Val Phe Leu Gly Pro Thr Tyr Tyr Gln Arg Leu Arg His Met Val  
 340 345 350  
 Asp Asp Lys Ile His Ala Arg Ala Arg Gly Pro Thr Gln Ile Leu Thr  
 355 360 365  
 Arg Gln Pro Val Glu Gly Arg Ala Arg Asp Gly Gly Leu Arg Phe Gly  
 370 375 380  
 Glu Met Glu Arg Asp Cys Met Ile Ala His Gly Ala Ser Ala Phe Leu  
 385 390 395 400  
 Lys Glu Arg Leu Phe Asp Val Ser Asp Pro Phe Arg Val His Ile Cys  
 405 410 415  
 Asp Asp Cys Gly Leu Met Thr Pro Ile Ala  
 420 425

&lt;210&gt; 41137

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41137

Met Asn Thr Ser Glu Arg Ala Gln Gln Ser Ser Asn Arg Pro Ser Lys

## 18125

```

1           5           10           15
Lys Met Thr Thr Ser Pro Ser Tyr Ala Phe Ser Ser Ser Ser Ala Thr
                20                25                30
Pro Ile Leu Leu Leu Lys Thr Lys Ser Thr Pro His Asp Gly Tyr Glu
                35                40                45
Glu Phe Phe Ser Ala His Gly Tyr Asn Pro Ala Phe Val Pro Val Leu
                50                55                60
Glu His His Phe His Gln Thr Asn Leu His Thr Val Lys Asp Leu Phe
65                70                75                80
Thr Ser Gly Ser Leu Asn Ala Gly Pro Arg Arg Lys Tyr Gly Gly Leu
                85                90                95
Ile Phe Thr Ser Gln Arg Ala Val Glu Gly Phe Ala Arg Leu Val Thr
                100                105                110
Ser Glu Val Asp Gly Thr Tyr Cys Leu Pro Cys Pro Gln Gln Ala Trp
                115                120                125
Ser Glu Leu Lys Glu Lys Tyr Pro Gln Ala Asn Gly Leu
                130                135                140

```

&lt;210&gt; 41138

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41138

```

Gly Thr Arg Glu Ala Thr Pro Ser Pro Thr Pro Tyr Gly Ser Lys Thr
1           5           10           15
Leu Ala Arg Leu Cys Cys Ser Arg Thr Pro Ile Val Leu Cys Arg Ser
                20                25                30
Gly Lys Phe Ala Ser Ser Ser Asp Asn Val Ser Asp Met Ser Pro Asn
                35                40                45
Asp Gly Ile Lys Thr Cys Gln Phe Asn Leu Thr Ser Leu Leu Leu Tyr
50                55                60
Ser Ser Tyr Leu Arg Leu Ser Glu Thr Gly Tyr Ser Thr Leu Thr Leu
65                70                75                80
Ser Leu His Phe Phe His Ile Asp Leu Phe Thr Tyr Arg Ser Glu Ala
                85                90                95
Phe Gln Ile Ile Thr Met Ser Asp Phe Thr Glu Leu Asn Arg Gln Tyr
                100                105                110
Phe Arg Ser Val His Asp Gln Tyr Arg Val Gln Ser Ala Phe Leu Thr
                115                120                125
Asn Pro His Ser Lys Leu Ala Ser Ser Tyr Arg Glu Glu Phe Arg Gln
                130                135                140
Gly Gln Glu Leu Ile Phe Asn Glu Val Gln Gly Arg Arg Ala Trp Ile
145                150                155                160
Ser Asp Thr Trp Asn Asp Thr Lys Ser Gly Lys Gly His Lys Ile Arg
                165                170                175
Met Leu Glu Tyr Ala Cys Gly Pro Gly Ala Val Ser Ala Val Cys Ile
                180                185                190
Ser Asn Arg Leu Leu Arg
                195

```

&lt;210&gt; 41139

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 18126

&lt;400&gt; 41139

```

His Glu Cys Leu Cys Phe Arg Ser Tyr Arg Tyr Cys Phe Trp Cys Tyr
1          5          10          15
Trp Leu Ser Arg Ser Leu His Cys Gln Gln Ala Arg Tyr Val Asn Glu
          20          25          30
Met Thr Arg Arg Val Glu Ala Asp Val Asp Ser Gln Leu Ala Asn Gln
          35          40          45
Gly Cys Thr Val Val Val Pro Phe Arg Glu Glu Met Thr Lys Arg His
          50          55          60
Leu Lys Pro Thr Gly Asp Leu Gly Arg Val Val Phe Ile Val Arg Asp
65          70          75          80
Arg Leu Phe

```

&lt;210&gt; 41140

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41140

```

Val Ala Ala Ser Cys Phe Phe Met Arg Trp Asp Glu Leu Leu Met Leu
1          5          10          15
Arg Arg Asn Phe Ser Tyr Thr Asp Val His Val Asp Gly Thr Glu Arg
          20          25          30
Ile Ala Glu Ala Val Ala Lys Tyr Asp Val Asp Arg Phe Ile His Val
          35          40          45
Ser Ser Tyr Asn Ala Asp Lys Asn Ser Pro Ser Glu Phe Phe Arg Thr
          50          55          60
Lys Val Arg Phe Gly Pro Leu Arg Ala Val Ala Ala Trp Gln Tyr
65          70          75

```

&lt;210&gt; 41141

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41141

```

Leu Ile Val Gln Ala Trp Gly Glu Glu Val Ala Arg Ser Ile Phe Pro
1          5          10          15
Glu Thr Thr Ile Val Arg Pro Ala Pro Met Phe Gly Phe Glu Asp Asn
          20          25          30
Leu Leu His Lys Leu Ala Gly Val Thr Asn Leu Phe Thr Ser Asn His
          35          40          45
Met Gln Glu Arg Phe Trp Pro Val His Val Ser Ser Ala Pro Ile
          50          55          60

```

&lt;210&gt; 41142

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41142

```

Thr Glu Lys Lys Ala Leu Ala Pro Phe Val Asp His Ile Val Gly Ile
1          5          10          15
Asp Val Ser Glu Glu Met Ile Lys Gln Phe Asn Ile Asn Ala Gln Glu
          20          25          30

```



## 18127

Thr Gly Phe Ala Asp Lys Met His Gly Tyr His Gly Asp Leu Leu Ala  
 35 40 45  
 Glu Pro Val Pro Asp His Leu Ser Gly Pro Glu Phe Phe Asp Phe Asp  
 50 55 60  
 Leu Val Ala Val Ser Met Ala Leu His His Phe Asp Lys Pro Asp Met  
 65 70 75 80  
 Ala Leu Gln Arg Leu Gly Glu Arg Leu Lys Lys Asp Gly Met Phe Leu  
 85 90 95  
 Ile Ile Asp Leu Val Leu Glu Asp Glu His Ser Ser Asn Ser Leu Gln  
 100 105 110  
 Lys Ala Phe Pro Gln Ala Ser Ala Thr Val Arg Thr His Gly Phe Thr  
 115 120 125  
 Ser Asp Ser Met Gln Lys Leu Phe Glu Glu Ala Gly Met Gly Gln Asn  
 130 135 140  
 Phe Asp Tyr Lys Val Ile Gln Glu Pro Ile Val Phe Arg Lys Glu Gly  
 145 150 155 160  
 Lys Glu Ile Arg Lys Thr Val Phe Ile Ala Arg Ser Gln Arg Ser  
 165 170 175

&lt;210&gt; 41143

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41143

Glu Gln Leu Ser Arg Asn Cys Ser Val Thr Gly Met Leu Thr Gly Cys  
 1 5 10 15  
 Phe Val Ile Gly Pro Leu Ser Glu Val Cys Gln Ser Ser Pro Thr Ile  
 20 25 30  
 Arg Val Ala Cys Ser Ser Pro Asn Met Asn Ala Phe Ala Leu Gly His  
 35 40 45  
 Thr Ala Thr Val Phe Gly Ala Thr Gly Phe Leu Gly Arg Tyr Ile Val  
 50 55 60  
 Asn Lys Leu Gly Met Ser Thr Arg  
 65 70

&lt;210&gt; 41144

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41144

Ala Gln His Gln Ser Asn Ser Ser Glu His Asp Ala Tyr Pro Ser Ile  
 1 5 10 15  
 Gln Val Ile Asp Val Gly Ser Ala Leu Glu Leu Met Leu His Asp Asp  
 20 25 30  
 Thr Thr Ala Gly Gln Thr Phe Glu Leu Tyr Gly Pro Lys Asn Tyr Ser  
 35 40 45  
 Thr Ala Glu Ile Ala Gln Leu Val Asp Arg Glu Ile Val Lys His Arg  
 50 55 60  
 Arg His Ile Asn Val Pro Lys Ala Val Leu Lys Pro Met Ala Tyr Tyr  
 65 70 75 80  
 Leu Asn Lys Leu Leu Trp Trp His Thr Ile Ser Ala Asp Glu Val Glu  
 85 90 95  
 Arg Glu Phe Ile Asp Gln Lys Ile Asp Lys Thr Ala Lys Thr Phe Lys  
 100 105 110

## 18128

Asp Leu Gly Met Glu Pro Ala Glu Leu Ser Asp Leu Thr Phe His Tyr  
 115 120 125  
 Leu Val Arg His Ser Pro Ser Phe Lys Leu Leu Pro Ile Leu Ile Pro  
 130 135 140  
 Pro Pro Glu Arg Leu Gln Lys Phe Leu Leu Leu Arg Ser Ala Ser Arg  
 145 150 155 160  
 His

&lt;210&gt; 41145

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41145

Leu Thr Val His Gly Met Thr Asp Asp Gln Glu Arg Leu Ser Phe Leu  
 1 5 10 15  
 Thr Ser Leu Ala Asp Lys Val Asn Lys Pro Asp Thr Gln Glu Ala Tyr  
 20 25 30  
 Val Tyr Ala Leu Ala Glu Val Ala Asn Val Lys Gln Arg Leu Gln Asp  
 35 40 45  
 Leu Asp Gly Ala Gln Lys Asp Leu Glu Val Cys Gln Lys Val Leu Asp  
 50 55 60  
 Ser Phe Asp Ser Val Glu Thr Val Val His Ala Ser Phe Tyr Lys Val  
 65 70 75 80  
 Asn Ala Asp Tyr Tyr His Val Ser  
 85

&lt;210&gt; 41146

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41146

Pro Tyr Val Lys Ala Lys Gln Glu Phe Ala Ala Tyr Tyr Lys Asn Ala  
 1 5 10 15  
 Leu Leu Tyr Leu Ala Cys Ile Asn Leu Asp Asp Leu Ser Glu Ser Glu  
 20 25 30  
 Arg Val Ser Arg Ala Tyr Ser Leu Ser Val Ala Ala Leu Val Ser Asp  
 35 40 45  
 Thr Ile Tyr Asn Phe Gly Glu Leu Leu Leu His Pro Ile Leu Asp Ser  
 50 55 60  
 Leu Thr Glu Thr Pro His Ser Trp Leu Arg Asp Leu Leu Phe Ala Phe  
 65 70 75 80  
 Asn Arg Gly Asp Leu Thr Ala Tyr Asp Val Phe Thr Thr Gly Leu Glu  
 85 90 95  
 Gly His Ala His Arg Asn  
 100

&lt;210&gt; 41147

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41147

Val Asp His His Gln Leu Thr Leu Ile Leu Asp Val Leu Gly Thr Pro

## 18129

```

1           5           10           15
Thr Met Glu Asp Tyr Tyr Gly Ile Lys Ser Arg Arg Ala Arg Glu Tyr
      20           25           30
Ile Arg Ser Leu Pro Phe Lys Lys Lys Ile Pro Phe Lys Ala Leu Phe
      35           40           45
Pro Lys Ser Asn Glu Leu Ala Leu Asp Leu Leu Glu Lys Leu Leu Ala
      50           55           60
Phe Asn Pro Ala Lys Arg Ile Thr Val Glu Glu Ala Leu Arg His Pro
65           70           75           80
Tyr Leu Glu Pro Tyr His Asp Pro Asp Asp Glu Pro Thr Ala Pro Pro
      85           90           95
Ile Pro Glu Gly Phe Phe Asp Phe Asp Lys Asn Lys Asp Ala Leu Ser
      100           105           110
Lys Glu Gln Leu Lys Ser Gln Leu Ser Leu Tyr Pro Leu Ala Ser Leu
      115           120           125
Lys Gly Arg
      130

```

&lt;210&gt; 41148

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41148

```

Lys Leu Ala Thr Met Val Gln Gln Pro Pro Gln Gly Gly Ser Arg Lys
1           5           10           15
Ile Ser Phe Asn Val Ser Glu Gln Tyr Glu Ile Gln Asp Val Ile Gly
      20           25           30
Glu Gly Ala Tyr Gly Val Val Trp Trp Val Ile Ser Ile Val Arg Ser
      35           40           45
Asp Ser Leu Ala Pro Val Leu Thr Cys Ser Ser Ser Ala Ile His Lys
      50           55           60
Pro Ser Gly Gln Lys Val Ala Ile Lys Lys Ile Thr Pro Phe Asp His
65           70           75           80
Ser Met Phe Cys Leu Arg Thr Leu Arg Glu Met Lys Leu Leu Arg Tyr
      85           90           95
Phe Asn His Glu Asn Ile Ile Ser Ile Leu Asp Ile Gln Arg Pro Arg
      100           105           110
Asn Tyr Glu Ser Phe Asn Glu Val Tyr Leu Ile Gln Val His Ser Ser
      115           120           125
Ala Gln Ala His Thr His Ala His Val
      130           135

```

&lt;210&gt; 41149

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41149

```

Leu Leu Gly Gln Glu Leu Met Glu Thr Asp Met His Arg Val Ile Arg
1           5           10           15
Thr Gln Asp Leu Ser Asp Asp His Cys Gln Tyr Phe Ile Tyr Gln Thr
      20           25           30
Leu Arg Ala Leu Lys Ala Met His Ser Ala Asn Val Leu His Arg Asp
      35           40           45
Leu Lys Pro Ser Asn Leu Leu Leu Asn Ala Asn Cys Asp Leu Lys Val

```

```
<210> 41150
<211> 249
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(6),(16),(36),(48),(55)
<223> Identity of amino acid sequences at the above locations are unknown.
```

<400> 41150																
Thr 1	Ala	Thr	Gly	Xaa 5	Xaa	Lys	Asp	Asn	Leu 10	Pro	Asn	Leu	Gly	Ile 15	Xaa	
Lys	Arg	Phe	Thr 20	Thr	Val	Leu	Gly	Arg 25	Glu	Asn	Asn	Asn	Gly 30	Ser	Ala	
Asp	Glu	Ile 35	Xaa	Asp	Thr	Pro	Thr 40	Arg	Arg	Ser	Thr	Asp 45	Gly	Arg	Xaa	
Val	His 50	His	Pro	His	His	Xaa 55	Glu	Asn	Ala	Pro	Tyr 60	Thr	Thr	Asp	Phe	
Val 65	Ser	Asp	Val	Ala	Asn 70	Lys	Ala	Ser	Ala	Met 75	Ala	Pro	Thr	Ala	Asp 80	
Gly	Leu	Val	Gly	Pro 85	Thr	Ala	Asn	Leu	Arg 90	Gly	Ala	Ala	Ala	His 95	Thr	
Lys	Leu	Ala	Thr 100	Thr	Ser	Thr	Ile	Pro 105	Arg	Ala	Lys	Ala	Ile 110	Ala	Tyr	
Leu	Glu	Arg	Thr 115	Leu	Ala	Glu	Val 120	Lys	Arg	Phe	Lys	Gln 125	Glu	Leu	Ala	
Phe	Asn 130	Pro	Ala	His	Gln	Ala 135	Glu	Asn	Arg	Tyr	Pro 140	Pro	Ala	Ala	Val	
Leu 145	Tyr	Gly	Lys	Ser	Val 150	Pro	Thr	Val	Tyr	Gly 155	Ala	Arg	Val	Trp	Ser 160	
Pro	Glu	Gln	Ile	Lys 165	Arg	Gln	Asp	Ala	Tyr 170	Asp	Asp	Leu	Ala	Phe 175	Ala	
Ala	Gly	Asp	Gly 180	Val	Cys	Leu	Ala	Ser 185	Ala	Ala	Met	Leu	Pro 190	Pro	Gly	
Tyr	Arg	Ile 195	Ile	Lys	Asp	Gly	Leu 200	Val	Lys	Ser	Glu	Arg 205	Gly	His	Val	
Gly	Leu 210	Leu	Gly	Asp	Leu	Glu 215	Gly	Val	Gly	Gln	Cys 220	Leu	Arg	Ala	Leu	
Val 225	Arg	Gly	Arg	Arg	Glu 230	Gly	Val	Gly	Leu	Gly 235	Pro	Ser	Pro	Gly	Pro 240	
Gly	Pro	Gln	Pro	Ala 245	Ala	Pro	Phe	Ser								

<210> 41151  
 <211> 197  
 <212> PRT  
 <213> A.fumigatus

<400> 41151

```

Pro Arg Leu Asp Gln His Gly Cys Ala Phe Asp Asp Gly Ile Asn Gly
1          5          10          15
Leu Glu Thr Ser Ser Leu His Gly Leu Ala Gly Phe Cys Thr Gly Gln
          20          25          30
Tyr Arg Thr Gln Ser Arg Glu Thr Asp Thr Ala Thr His Thr Asn Gln
          35          40          45
Ile Asp Asn Pro Ile Gly His Thr Gln Ser Ala Ser Ser Leu Asp Thr
          50          55          60
Thr Ala Asp Ile Leu Asp Leu Ser Ala Glu Leu Leu Pro Gln Leu His
          65          70          75          80
Ala Leu Gln Pro Arg Glu Glu Gly Leu Arg Gln Arg Arg Glu Ala Ser
          85          90          95
His Asn Ile Leu Ala Asn Gln Leu Leu Arg Leu Cys Asp Val Ala Leu
          100          105          110
Leu Arg Asn Leu His Leu Gln Leu Ala Pro Ala Glu Pro Glu Ile His
          115          120          125
Asp Leu Leu Asp Ala Arg Asp Leu Ala Leu Gly Gln Leu Arg Ile Val
          130          135          140
Phe Gly Asp Leu Val Ala Ala Gly Asp Thr Glu Val Tyr Ala Thr Leu
          145          150          155          160
Ala Asp Glu Ser Arg Asp Val Cys Gly Gly Glu Glu Asp Glu Cys Asn
          165          170          175
Arg Glu Val Leu Asp Gln Cys Asp Val Glu Ala Gly Phe Ala Ala Glu
          180          185          190
Leu Asp Val Thr Ala
          195

```

<210> 41152  
 <211> 141  
 <212> PRT  
 <213> A.fumigatus

<400> 41152

```

Ser Ala Gln Pro Pro Ile Ser Ala Ala Pro Gln Arg Thr Arg Ser Ser
1          5          10          15
Gln Gln Pro Pro Pro Ser Pro Ala Pro Arg Pro Ser Arg Thr Ser Ser
          20          25          30
Ala Pro Ser Pro Lys Ser Ser Ala Ser Ser Arg Asn Ser Pro Ser Ile
          35          40          45
Pro Pro Thr Arg Pro Arg Thr Ala Thr Arg Leu Leu Gln Ser Phe Thr
          50          55          60
Ala Ser Pro Ser Leu Pro Ser Thr Ala Arg Ala Ser Gly Arg Pro Ser
          65          70          75          80
Arg Ser Ser Gly Arg Met Pro Thr Met Ile Trp Pro Ser Arg Leu Ala
          85          90          95
Thr Ala Ser Val Ser Pro Arg Arg Arg Cys Cys Pro Arg Gly Thr Gly
          100          105          110
Ser Ser Arg Thr Gly Trp Ser Arg Ala Ser Ala Gly Met Leu Gly Cys
          115          120          125
Trp Ala Ile Trp Arg Gly Trp Ala Ser Val Ser Gly Leu

```

## 18132

130

135

140

&lt;210&gt; 41153

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41153

```

Asn Arg Leu Arg Asp Gly Asn Pro Ile Met Cys Arg Arg Thr Pro Thr
1          5          10          15
Gln Leu Ile Glu Asp Asp Gln Arg Thr Gly Arg Cys Leu Leu Glu Asp
          20          25          30
Val Gly Arg Phe Arg Gln Phe Asp His Glu Gly Arg Phe Thr Arg Gln
          35          40          45
His Val Val Glu Ser Ser His Ala Ser Lys His Gly Val Gln His Ala
          50          55          60
Glu Leu Arg Gly Pro Ser Arg His Val Gly Pro Asn Leu Cys His Asn
65          70          75          80
Gly Asn Gln Gly Tyr Leu Pro His Ile Thr Gly Leu Thr Ala His Val
          85          90          95
Arg Thr Ser Asp Glu Glu Gly Ser Ser Leu Val Thr Val Gln Ile Asn
          100          105          110
Val Val Gly Asp Ile Ala Ile Lys Gln Lys Leu Leu Asp His Trp Met
          115          120          125
Ala Pro Leu Phe His Val Asn Thr Arg Leu Ile Gly Ile Phe Gly Leu
          130          135          140
His Ile Ser Trp Leu Ala Ser Asn Cys Ser Gln
145          150          155

```

&lt;210&gt; 41154

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41154

```

Phe Ile Leu Leu Phe Ser Thr Glu Gly Arg Leu Gln Gln Ala Thr Leu
1          5          10          15
Asp Leu Leu Ser Gly Ser Asp Ile Gln Phe Arg Arg Glu Thr Arg Leu
          20          25          30
Asp Ile Ala Leu Val Lys Asn Leu Pro Ile Ala Leu Ile Phe Leu Pro
          35          40          45
Ala Ala Asp Ile Pro Thr Phe Val Gly Glu Gly Arg Val Asp Leu Gly
          50          55          60
Ile Thr Gly Arg Asp Gln Val Ala Glu His Asp Ala Gln Leu Ala Glu
65          70          75          80
Gly Glu Val Ser Gly Val Glu Glu Ile Met Asp Leu Gly Phe Gly Gly
          85          90          95
Cys Lys Leu Gln Val Gln Val Pro Gln Lys Gly Asp Ile Thr Glu Ala
          100          105          110
Lys Gln Leu Ile Gly Lys Asn Val Thr Ser Phe Thr Ala Leu Thr
          115          120          125
Gln Ala Phe Phe Ser Arg Leu Glu Gly Val Glu Leu Gly Gln Lys Leu
          130          135          140
Ser Thr Lys Ile Lys Tyr Val Gly Gly Ser Val Glu Ala Ala Cys Ala
145          150          155          160
Leu Gly Val Ala Asp Gly Ile Val Asp Leu Val Gly Met Cys Cys Arg

```

## 18133

Val Cys Phe Pro 165 170 175  
180

<210> 41155  
<211> 171  
<212> PRT  
<213> A.fumigatus

<400> 41155  
Leu Ser Ser Ile Leu Thr Gly Ala Glu Ser Gly Glu Thr Met Lys Ala  
1 5 10 15  
Ala Gly Leu Lys Ala Ile Asp Thr Val Val Glu Ser Thr Ala Val Leu  
20 25 30  
Val Lys Ser Arg Ser Thr Lys Asn Pro Leu Val Asp Leu Ile Thr Ser  
35 40 45  
Arg Ile Ser Gly Val Ile Ser Thr Ser Pro Leu Leu Arg Leu Asn Cys  
50 55 60  
Asn Phe Ala Tyr Gly Arg Ser Leu Gln Pro Leu Lys Asp Thr Ser Cys  
65 70 75 80  
Ala Ser Thr Thr Ser Phe Ala Pro Gly Ser Arg Leu Pro Arg Arg Leu  
85 90 95  
Pro Pro Ala Ser Gly Arg Pro Gln Ser Pro Leu Trp Arg Arg Arg Ala  
100 105 110  
Gly Trp Leu Ser Ala Pro Trp Trp Arg Lys Arg Arg Leu Arg Arg Ser  
115 120 125  
Trp Thr Ser Cys Ser Lys Ser Ala His Arg Thr Phe Trp Ser Ser Thr  
130 135 140  
Leu Pro Thr Arg Glu Arg Val Arg Gly Phe Leu Phe Phe Phe Val Tyr  
145 150 155 160  
Ser Phe Leu Asp Phe Tyr Ala Ala Arg Asp Leu  
165 170

<210> 41156  
<211> 507  
<212> PRT  
<213> A.fumigatus

<400> 41156  
Leu Asp Cys Thr Gly Ala Asp Ile Leu Leu Thr Trp Lys Gln Cys Thr  
1 5 10 15  
Arg Pro Glu Leu Leu Thr Val Leu Gln Thr Leu Gln Thr Ile Ala Gln  
20 25 30  
Glu Tyr Val Asp Val Lys Thr Pro Gln Asp Ser Gly Phe Thr Ser Pro  
35 40 45  
Ile Leu Gly Glu Ala Ile Ala Arg Val Pro Ser Ile Leu Gly Asp Val  
50 55 60  
Val Lys Phe Leu Asn Lys Ile Asn Met His Ala Arg Asn Asp Asp  
65 70 75 80  
Lys Tyr Glu Phe Phe Arg Glu Ser Glu Glu Thr Glu Gly Ile Ser Glu  
85 90 95  
His Lys Cys Gly Ile Ala Ser Val Glu His Glu Leu Glu Glu His Arg  
100 105 110  
Ser Val Ala Ala Gly Ile Leu Lys Trp Pro Lys Val Thr Tyr Val Thr  
115 120 125  
Ser Ser Gly Ile Glu Tyr Leu Ile Glu Val Glu Asn Ser Ala Ala Ala

[illegible]

```
<210> 41157
<211> 289
<212> PRT
<213> A.fumigatus
```

1



## 18135

Ser Gln Ser Ser Pro Pro Ser Thr Gln Asn Leu Lys Arg Lys Gln Gln  
 20 25 30  
 Thr Ile Ser Ser Phe Phe Thr Lys Arg Ala Pro Ser Ala Glu Lys Arg  
 35 40 45  
 Ser Asn Asp Ile Glu Asp Gly Arg Ala Thr Thr Gln Lys Gly Ala Glu  
 50 55 60  
 Met Pro Leu Arg Glu Thr Ala Gly Asp Gln Asn Asn Leu Glu Asp Asp  
 65 70 75 80  
 Glu Asp Gly Asp Val Val Val Arg Ala Pro Lys Arg Val Lys Thr Asn  
 85 90 95  
 Gly Val Asp Pro Glu Asn Gly Phe Gly Arg Asn Ile Lys Glu Ala Ser  
 100 105 110  
 Asn Ile Ala Arg Arg Pro Asp Pro Pro Leu Ser Ser Ser Gln Arg Thr  
 115 120 125  
 Asn Leu Tyr Lys Phe Ala Ser Ser Gln Ala Asp Asp Ala Gly Ile Glu  
 130 135 140  
 Lys Thr Asp Asp Pro Glu Ala Arg Gln Arg Gln Leu Glu Arg Glu Lys  
 145 150 155 160  
 Leu His Lys Leu Phe Val Lys Lys Leu Gly Gly Ala Asp Cys Leu Ile  
 165 170 175  
 Gly Ile Gly Arg Asp Ala Thr Thr Glu Ala Pro Ser Gly Thr Glu Asp  
 180 185 190  
 Val Ala Glu Gly Asp Glu Asp Asp Glu Ser Pro Pro Gln Pro Arg Ser  
 195 200 205  
 Lys Gly Lys Gly Leu Ser Lys Lys Gly Gly Ser Lys Leu Thr Pro Leu  
 210 215 220  
 Glu Lys Gln Val Ile Glu Ile Lys Arg Lys His Met Asp Thr Ile Leu  
 225 230 235 240  
 Val Val Glu Val Gly Tyr Lys Phe Arg Phe Phe Gly Glu Asp Ala Arg  
 245 250 255  
 Ile Ala Ala Lys Glu Leu Ser Ile Val Cys Ile Pro Gly Lys Met Arg  
 260 265 270  
 Phe Asp Glu Arg Lys Ser Val Gln Asn Thr Phe Ser Val Phe Leu Arg  
 275 280 285  
 Arg

&lt;210&gt; 41158

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41158

Trp Met Gln Leu Gln Thr Asp Pro Ser Glu Ala His Leu Asp Arg Phe  
 1 5 10 15  
 Ala Ser Ala Ser Ile Pro Val His Arg Leu His Val His Val Lys Arg  
 20 25 30  
 Leu Val Ser Ala Gly Tyr Lys Val Gly Val Val Arg Gln Met Glu Thr  
 35 40 45  
 Ala Ala Leu Lys Ala Ala Gly Asp Asn Arg Asn Ala Pro Phe Ser Arg  
 50 55 60  
 Lys Leu Thr Asn Leu Tyr Thr Lys Gly Thr Tyr Val Asp Asp Val Glu  
 65 70 75 80  
 Gly Leu Asp Gly Ala Thr Pro Ala Ala Ser Gly Gly Ala Ser Pro Ala  
 85 90 95  
 Thr Gly Tyr Met Leu Cys Ile Thr Glu Thr Asn Ala Lys Gly Trp Gly

## 18136

```

      100      105      110
Asn Asp Glu Lys Val His Val Gly Ile Val Ala Val Gln Pro Asn Thr
      115      120      125
Gly Asp Val Ile Tyr Asp Asp Phe Asp Asp Gly Phe Met Arg Ser Glu
      130      135      140
Val Glu Thr Arg Leu Leu His Ile Ala Pro Cys Glu Leu Val Ile Val
145      150      155      160
Gly Glu Leu Ser Lys Ala Thr Glu Lys Leu Val Gln His Leu Ser Gly
      165      170      175
Ser Lys Leu Asn Thr Phe Gly Asp Lys Val Arg Val Asp Arg Val Ala
      180      185      190
Lys Lys Lys Thr Ala Val Ala Glu Ser His Ser His Val Ala Asn Phe
      195      200      205
Tyr Ala Ala Lys Leu Lys Ala Ala Asn Thr Ala Asp Asp Ala Pro Ala
      210      215      220
Ser Asn Leu Leu Gln Lys Val Leu Asn Leu Pro Glu Gln Val Thr Val
225      230      235      240
Cys Leu Ser Ala Met Ile Gln His Leu Thr Glu Tyr Gly Leu Glu His
      245      250      255
Ile Phe Glu Leu Thr Lys Tyr Phe Gln His Phe Ser Ser Arg Ser His
      260      265      270
Met Leu Leu Asn Ala Asn Thr Leu Val Ser Leu Glu Ile Tyr Gln Asn
      275      280      285
Gln Thr Asp His Ser Ala Lys Gly Ser Leu Phe Trp Thr Leu Asp Arg
      290      295      300
Thr Gln Thr Arg Phe Gly Gln Arg Leu Leu Arg Lys Trp Val Gly Arg
305      310      315      320
Pro Leu Leu Asp Lys Glu Arg Leu Glu Glu Arg Val Asn Ala Val Glu
      325      330      335
Glu Leu Lys Ser Pro Glu Arg Thr Val His Ala Glu Arg Leu Lys Ile
      340      345      350
Met Leu Gly Lys Ile Lys Ser Asp Leu Glu Lys Asn Leu Ile Arg Ile
      355      360      365
Tyr Tyr Gly Lys Val Pro Cys Asp Leu Ile Val Leu Ala Arg Ile Phe
      370      375      380
Cys
385

```

<210> 41159  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 41159  
 Trp Cys His Gln Tyr Val Ser Leu Ala Pro Ile Glu Leu Gln Leu Cys  
 1 5 10 15  
 Leu Arg Ser Phe Ile Thr Ala Ala Gln Arg Tyr Val Leu Cys Gln Tyr  
 20 25 30  
 Asn Ile Leu Arg Ser Gly Leu Ser Val Ala Ser Lys Ile Thr Pro Gly  
 35 40 45  
 Lys Arg Ala Pro Thr Ile Thr Ala Leu Glu Glu Glu Gly Trp Val Ala  
 50 55 60  
 Val Ser Ser Met Val Glu Lys Lys Lys Ile Ala Thr Val Met Asp Glu  
 65 70 75 80  
 Leu Leu Lys Val Gly Ala Ser Asp Ile Leu Val Leu Asn Ile Ala Asn  
 85 90 95

Ser Arg Thr Gly  
100

<210> 41160

<211> 77

<212> PRT

<213> A.fumigatus

<400> 41160

Lys	Ser	Ser	Arg	Val	Ile	Thr	Arg	Ile	Ala	Val	Ile	Ile	Lys	Thr	Ser
1				5					10					15	
Ala	Trp	Gly	Ile	Lys	Cys	Met	Gln	Ser	Val	Glu	Glu	Leu	Thr	Lys	Lys
		20					25						30		
Ala	Gln	Gln	Ala	Glu	Val	Pro	Val	Leu	Asp	Ser	Ala	Leu	Ile	Pro	His
	35					40						45			
Leu	Pro	Val	Gly	His	Gly	Leu	Lys	Pro	Gly	Asp	Thr	Gly	Pro	Pro	Pro
	50					55					60				
Pro	Asp	Arg	Pro	Ala	Ala	Gln	His	Ala	Arg	Ala	Arg	Ser			
65					70					75					

<210> 41161

<211> 207

<212> PRT

<213> A.fumigatus

<400> 41161

Ser	Val	Gln	Leu	Ile	Leu	Thr	Phe	Tyr	Ala	Ala	Ile	Gly	Ala	Asp	Lys
1				5					10					15	
Ala	Val	Asn	Leu	Ser	His	Ala	Arg	Ile	Lys	Val	Leu	Glu	Ala	Ala	Lys
		20					25						30		
Ala	Gly	Ala	Lys	Leu	Ile	Val	Leu	Pro	Glu	Cys	Phe	Asn	Ser	Pro	Tyr
	35					40						45			
Gly	Thr	Gln	Tyr	Phe	Pro	Ser	Tyr	Ala	Glu	Thr	Leu	Leu	Pro	Ser	Pro
	50					55					60				
Pro	Thr	Lys	Glu	Gln	Ser	Pro	Ser	Tyr	His	Ala	Leu	Ser	Ala	Ile	Ala
65				70					75						80
Ala	Glu	Ala	Gln	Ala	Tyr	Leu	Val	Gly	Gly	Ser	Ile	Pro	Glu	Leu	Asp
			85					90						95	
Thr	Ser	Thr	Lys	Lys	Tyr	Tyr	Asn	Thr	Ser	Leu	Val	Phe	Ser	Pro	Thr
			100					105					110		
Gly	Ser	Leu	Ile	Gly	Thr	His	Arg	Lys	Ile	His	Leu	Phe	Asp	Ile	Asp
		115					120					125			
Ile	Pro	Gly	Lys	Ile	Thr	Phe	Lys	Glu	Ser	Glu	Val	Leu	Ser	Pro	Gly
	130					135					140				
Asn	Gln	Leu	Thr	Leu	Val	Asp	Leu	Pro	Glu	Tyr	Gly	Lys	Ile	Gly	Leu
145				150						155					160
Ala	Ile	Cys	Tyr	Asp	Ile	Arg	Phe	Pro	Glu	Leu	Ala	Met	Ile	Ala	Ala
			165					170						175	
Arg	Lys	Gly	Ala	Phe	Ala	Leu	Ile	Tyr	Pro	Gly	Ala	Phe	His	Thr	Thr
		180						185					190		
Thr	Gly	Pro	Leu	His	Trp	Ala	Leu	Pro	Cys	Ser	Arg	Ser	Cys	Gly	
		195					200					205			

<210> 41162

<211> 103

<212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41162

```

Ser Thr Leu Ala Pro Phe Ile Arg Leu Leu Val Leu Phe Thr Gly Pro
1          5          10          15
Phe Leu Val Arg Ala Arg Ala Val Asp Asn Gln Ile Tyr Val Gly Leu
          20          25          30
Cys Ser Pro Ala Arg Asp Thr Asn Ala Thr Tyr His Ala Trp Gly His
          35          40          45
Ser Leu Ile Val Asn Pro Asn Ala Glu Val Leu Thr Glu Ala Ala Glu
          50          55          60
Thr Glu Thr Ile Ile Tyr Ala Asp Leu Asp Asn Glu Ser Ile Gln Asn
65          70          75          80
Thr Arg Lys Gly Ile Pro Val Tyr Thr Gln Arg Arg Phe Asp Leu Tyr
          85          90          95
Pro Asp Val Ser Ala Glu Lys
          100

```

&lt;210&gt; 41163

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41163

```

Pro Leu Met Phe Arg Asp Gln Gly Thr Lys Asp Val Arg Leu Asp Pro
1          5          10          15
Gln Leu Asn Lys Lys Val Trp Glu Ala Gly Val Lys Gly Val Pro Phe
          20          25          30
Arg Leu Arg Val Arg Ile Ser Arg Lys Arg Asn Asp Glu Gly Ala
          35          40          45
Lys Glu Arg Leu Tyr Ser Tyr Val Gln Ala Val Asn Val Lys Asp Ala
          50          55          60
Lys Gly Leu His Thr Ala Val Val Asp Glu
65          70

```

&lt;210&gt; 41164

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41164

```

Glu Arg Arg Arg Tyr Arg Pro Arg Gly Cys Ala Gln Ser Ala Arg Val
1          5          10          15
Gly Pro Leu Ile His Ser Ser Thr Asn Pro Ala Trp Asn Ala Leu Leu
          20          25          30
Thr Lys Gln Lys Arg Ala Leu Gly Leu Pro Pro Ser Asp Ser Ser Glu
          35          40          45
Leu His Ser Ile Leu Ser Ala Val Asp Pro Thr Asn Thr Gly Phe Val
          50          55          60
Pro Tyr Ala Pro Phe Val Ser Val Ala Ala Ala Lys Leu Arg Ser Arg
65          70          75          80
Ser Asp Glu Ala Met Ser Ala Glu Val Asp Ala Ala Phe Gln Leu Phe
          85          90          95
Thr Lys Gly Thr Asp Gly Pro Ile Thr Leu Gly His Leu Arg Arg Ile
          100          105          110
Ala Arg Glu Leu Lys Glu Asp Asn Leu Gly Asp Glu Leu Leu Lys Asp

```

## 18139

115	120	125
Met Ile Leu Glu Ala Asn Gly Gly Ala Gly Val Asn Ala Gly Val Thr		
130	135	140
Leu Glu Gln Phe His Asp Val Met Thr Arg Ala Gly Val Phe		
145	150	155

&lt;210&gt; 41165

&lt;211&gt; 468

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41165

Arg Arg Leu Thr Thr Arg Leu Gly Thr Asp Val Thr Glu Ala Ile Phe		
1	5	10
Arg Leu Gly Ser Thr Ser Pro Ala Ser Val Leu Leu Asp Ser Val Asp		
20	25	30
Leu Leu Glu Lys Lys Ser Pro Lys Ala Asp Glu Asn Ile Gln Arg Ile		
35	40	45
Arg Ser Ser Leu Pro Glu Ala Val Asp Thr Cys Val Lys Ala Ala Gly		
50	55	60
His Glu Phe Asp Val Tyr Trp Gln Lys Arg Leu Leu Lys Ala Ala Ser		
65	70	75
Tyr Gly Lys Ser Val Leu Asp Leu Tyr Asn Ser Asp Glu Phe Val Glu		
85	90	95
Met Thr Glu Lys Leu Arg Val Leu Lys Ala Val Arg Asp Tyr Gln Ile		
100	105	110
Gly Leu Pro Leu Ser Tyr Glu Gln Tyr Leu Arg Leu Thr Pro Glu Lys		
115	120	125
Leu Ile Glu Arg Leu Val Asn Arg His Glu Tyr Leu Leu Ser Ile Arg		
130	135	140
Ile Ser Glu Tyr Leu Gln Ile Pro Ala Asp Arg Ile Tyr Val His Trp		
145	150	155
Ala Ser Gln Lys Val Lys Val Ser Thr Val Asp Asp Glu Ala Val Cys		
165	170	175
Lys Leu Ile Val Gln Lys Leu Glu Gly Lys Pro Gly Ile Ser Phe Glu		
180	185	190
Gln Ile Ala Gln Ala Ala Tyr Asp Glu Gly Arg Ala His Leu Ala Thr		
195	200	205
Gln Leu Leu Asn His Glu Pro Arg Gly Gly Lys Gln Val Pro Leu Leu		
210	215	220
Leu Lys Met Glu Glu Asp Glu Val Ala Leu Asp Lys Ala Ile Glu Ser		
225	230	235
Gly Asp Asp Asp Leu Ile Ile Tyr Val Leu Leu His Leu Lys Ser Lys		
245	250	255
Leu Pro Leu Ala Ser Phe Phe Arg Met Ile Asn Thr Arg Pro Ile Ala		
260	265	270
Ser Ala Leu Val Glu Ala Asn Ala Arg Gly Glu Asp Thr Glu Leu Leu		
275	280	285
Lys Gly Leu Phe Tyr Gln Asp Asp Arg Pro Ile Asp Gly Ser Asn Val		
290	295	300
Leu Leu Ser Glu Ala Leu Asn Ala Thr Asp Leu Pro His Lys Thr Glu		
305	310	315
Lys Leu Leu Leu Ala Ser Lys Leu Leu Ser Asp Ser Lys Asp Ala Thr		
325	330	335
Ala Val Gln Gln His Lys Leu Leu Ser Glu Ala Ser Gln Leu Leu Lys		
340	345	350

## 18140

Val Gln Glu Ala Leu Asp Lys Asp Ile Ala Asp Arg Ala Glu Phe Val  
 355 360 365  
 Gly Leu Ser Leu Asn Asp Thr Ile Tyr Arg Leu Ile Lys Thr Gly Asp  
 370 375 380  
 Gly Lys Arg Ala His Lys Ile Gln Ser Asp Phe Arg Met Pro Glu Lys  
 385 390 395 400  
 Thr Tyr Trp Trp Leu Arg Leu Arg Ala Leu Val Ala Lys Arg Asp Trp  
 405 410 415  
 Gly Glu Leu Glu Glu Met Ala Lys Lys Lys Ser Pro Ile Gly Trp Glu  
 420 425 430  
 Val Ser Lys Thr Leu Pro Ile Leu Arg Tyr Leu Ile Glu His Cys Pro  
 435 440 445  
 His Pro Asn Ile Ser Pro Asn Thr Thr His Ile His Lys Asn Ile Cys  
 450 455 460  
 Ser His Thr Thr  
 465

&lt;210&gt; 41166

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41166

Ala Asn Ser Arg Ala Met Asn Ala Asn Leu Ser Trp Gln Gly Ala Glu  
 1 5 10 15  
 Glu Tyr Gly Val Arg Ala Cys Lys Phe Trp Asn Asn Gly Phe Val Ala  
 20 25 30  
 Leu Leu Ser Asn Asn Gln Leu Ile Ala Val Ser Asn Tyr Asp Glu Pro  
 35 40 45  
 Arg Pro Lys Leu Leu Ala Pro Cys Pro Glu Gly Glu Ile Ser Ser Trp  
 50 55 60  
 Ser Leu Ile Pro Pro Pro Tyr Thr Leu Ser Arg Ser Val Glu Val Leu  
 65 70 75 80  
 Leu Ala Val Asp Lys Thr Ile Phe Leu Ile Asp Ser Ser Glu Ala Glu  
 85 90 95  
 Asp Lys Val Leu Gln Asn Gly Pro Phe Lys His Ala Ser Val Ser Pro  
 100 105 110  
 Thr Gly Arg Phe Val Ala Leu Tyr Thr Ala Glu Gly Gln Val Trp Val  
 115 120 125  
 Val Ser Ser Asp Phe Gln Ser Lys His Thr Glu Tyr Asp Pro Gln Ser  
 130 135 140  
 Arg Val Thr Pro Arg Thr Val Asp Trp Cys Gly Asp Asp Ala Val Val  
 145 150 155 160  
 Ile Ala Trp Glu Asp Glu Ile His Leu Ile Gly Pro Asn Gly Thr Ala  
 165 170 175  
 Ala Lys

&lt;210&gt; 41167

&lt;211&gt; 695

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41167

Ser Ser Lys Ser Leu Tyr Ala Val Val Val Leu Phe Phe Trp Leu Ala  
 1 5 10 15

Met Asn Ala Arg Arg Gly Gly Phe Asp Ile Leu Thr Gln Ser Pro Phe  
 20 25 30  
 His Asn Pro Gln Asn Ser Gln His Glu Thr Phe Leu Gln Arg Leu Gln  
 35 40 45  
 Ser Asn Asn Asn Thr Leu Thr Tyr Gly Val Ala Ile Gly Leu Leu Val  
 50 55 60  
 Tyr Phe Val Leu Asn Tyr Phe Gly Val Ala Pro Ile Leu Ile Ser Arg  
 65 70 75 80  
 Ala Leu Trp Asn Leu Ile Val Tyr Leu Thr Pro Ser Arg Ile Val Val  
 85 90 95  
 Ala Leu Asp Ser Lys Thr Ser Asn Leu Asp Ser Thr Asp Lys Ala Leu  
 100 105 110  
 Leu Ser Met Asn Phe Gln Thr Lys Ser Glu Ala Met Gln Arg Ile Leu  
 115 120 125  
 Gly Leu Asn Asn Ser Ser Leu Ser Ser Phe Leu Pro Cys Ser Thr Thr  
 130 135 140  
 Phe Ser Gly Phe Gly Thr Ala Leu Leu Gly Ala Lys Asn His Leu Pro  
 145 150 155 160  
 Pro Gly Leu Gly Asn Trp Asp Asn Ser Cys Tyr Gln Asn Ser Ile Ile  
 165 170 175  
 Gln Gly Leu Ala Ser Leu Leu Ser Leu Ala Glu Phe Leu Glu His Asn  
 180 185 190  
 Ile Arg Thr Leu Gly Asp Lys Gly Ser Phe Ser Thr His Gln Ala Leu  
 195 200 205  
 Arg Gly Val Ile Glu Arg Leu Asn Asn Ala Asp Asn His Asp Gln Arg  
 210 215 220  
 Leu Trp Ile Pro Ala Glu Leu Lys Ser Met Ser Ser Trp Gln Gln Gln  
 225 230 235 240  
 Asp Ala Gln Glu Tyr Phe Ser Lys Val Val Gly Gln Val Asp His Glu  
 245 250 255  
 Val Gln Gln Ala Thr Lys Arg Arg Thr Arg Asn Leu Gly Leu Lys Met  
 260 265 270  
 Ala Gly Pro Val Glu Asn Ile Ile Gly Ala Glu Pro His Thr Asp Val  
 275 280 285  
 Asp Gly Ala Asp Ser Ser Ser Pro Arg Leu Ala Glu Arg His Leu Thr  
 290 295 300  
 Arg Asn Pro Leu Glu Gly Leu Leu Ala Gln Arg Val Gly Cys Met Lys  
 305 310 315 320  
 Cys Gly Trp Thr Glu Gly Leu Ser Leu Ile Pro Phe Asn Cys Leu Thr  
 325 330 335  
 Val Pro Leu Gly Gly Gln Tyr Glu Tyr Asp Val Arg Gln Cys Leu Asp  
 340 345 350  
 Gln Tyr Met His Leu Glu Pro Ile Glu Gly Val Glu Cys Ala Lys Cys  
 355 360 365  
 Thr Leu Leu Arg Ala Lys Asp Gln Leu Glu Asn Leu Leu Asn Gln Ile  
 370 375 380  
 Glu Glu Asp Met Lys Leu Pro Asn Thr Pro Asp Ser Ser Lys Val Ser  
 385 390 395 400  
 Gly Ala Leu Arg Thr Ser Ala Glu Glu Arg Leu Arg Ala Val Glu Glu  
 405 410 415  
 Ala Leu Glu Glu Asp Asp Phe Ala Glu Lys Thr Leu Ser Lys Lys Cys  
 420 425 430  
 His Ile Pro Ser Lys Asn Arg Val Thr Ser Thr Lys Ser Arg Gln Ala  
 435 440 445  
 Val Ile Ala Arg Thr Pro Lys Cys Leu Val Ile His Ile Asn Arg Ser  
 450 455 460

## 18142

```

Met Phe Asp Glu Asn Thr Gly Met Leu Arg Lys Asn Tyr Ala Ala Val
465                               470                               480
Arg Phe Pro Asn Val Leu Asp Leu Asn Glu Trp Cys Leu Gly Thr Lys
                               485                               495
Ser Ser Ser Trp Gly Gln Met Asp Ile Glu Arg Trp Gly Thr Asp Pro
                               500                               510
Arg Glu Ser Met Leu Pro Glu Ala Gly Ser Ala Ser Asp Val Pro Gly
                               515                               525
Arg Phe Phe Glu Leu Arg Ala Val Val Thr His Tyr Gly Arg His Glu
                               530                               540
Asn Gly His Tyr Ile Cys Tyr Arg Lys Tyr Pro Ser Asp Val Phe Pro
545                               550                               560
Ala His Val Pro Asp Thr Val Leu Glu Ala Asp Gly Glu Lys Asp Lys
                               565                               575
Ala Glu Arg Trp Phe Arg Leu Ser Asp Asp Asp Val Gln Met Val Ser
                               580                               590
Glu Ala Ser Val Met Ser Gln Gly Gly Ala Phe Met Leu Phe Tyr Glu
                               595                               605
Ala Ile Asp Arg Gln Gly Ser Asp Tyr Thr Pro Thr His Gly Thr His
                               610                               620
Ala Val Glu Asp Glu Lys Leu Glu Ser Val Cys Asp Leu Thr Thr Ser
625                               630                               640
Asn Asp Met Ser Thr Thr Ser Thr Ile Thr Asp Gly Ser Pro Asp Thr
                               645                               655
Ser Pro Ala Thr Ser Val Ser Ala Ala Asp Arg Phe Asp Val Pro Leu
                               660                               670
Tyr Lys Leu Gln Leu Leu Thr Asp Asp His Ala Ser Ser Leu Gly Glu
                               675                               685
Ser Ser Leu Glu Val Thr Pro
                               690                               695

```

&lt;210&gt; 41168

&lt;211&gt; 498

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (338)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41168

```

Lys Thr Gly Ala Val Leu Lys Met Leu Ala Asn Asn Phe Gly Glu Ile
1                               5                               10                               15
Pro Lys Gly Thr Gly Lys Leu Pro Gly Tyr Ala Pro Val Gln Ala Ala
                               20                               25                               30
Glu Ile Tyr Ser Arg Thr His Met Ala Leu Arg His Val Met Gln Leu
                               35                               40                               45
Ile Pro Ser Gly Ser Gly Thr Leu Ser Pro Ile Leu Ser Met Gln Phe
                               50                               55                               60
Pro Phe Asp Thr Asp Ser Ala Lys Ala Asn Ile Ala Tyr Thr Arg Asn
65                               70                               75                               80
Leu Leu Lys Val Ile Ser Tyr Ala Pro Glu Leu Gln Ala Asp Ile Leu
                               85                               90                               95
Ala Leu Ile Thr Glu Lys Val Val Lys Ile Asp Val Gln Ile Gln Val
                               100                               105                               110

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## 18143

```

Asp Met Glu Asp Ile Glu Asp Glu Val Gly Glu Asp Val Leu His Ala
    115          120          125
Val Ser Pro Glu Ala Thr Met Leu Glu Asp Asp Glu Asn Glu Val Asp
    130          135          140
Asp Asn Ala Ser Val Ala Ser Asp Asp Ser Leu Asp Val Glu Ser Arg
145          150          155          160
Arg Val Lys Ala Ile Lys Asp Asn Ile Leu Lys Leu Asp Gly Met Ile
    165          170          175
Asp Ser Leu Phe Glu Tyr Tyr Ala Pro Pro Phe Thr Thr Gly Thr Leu
    180          185          190
Asp Asp Lys Glu Asn Ala Leu Asp Leu Leu Leu Ser His Phe Gln Ser
    195          200          205
Ile Ile Leu Pro Thr Tyr Arg Ser Arg His Ser Gln Phe Leu Leu Phe
    210          215          220
His Phe Ser Gln Ser Ser Pro Ile Leu Val Asp Arg Phe Ala Ala Thr
225          230          235          240
Cys Val Gln Leu Ile Phe Asn Lys Met Gln Pro Gly Ile Leu Arg Gln
    245          250          255
Ser Ala Ala Ala Tyr Leu Ala Ser Phe Val Ala Arg Gly Ala His Ile
    260          265          270
Ser Gly Glu Val Val Arg Asp Val Phe Asp Leu Leu Gly Thr His Leu
    275          280          285
Asn Asn Leu Arg Leu Asp Tyr Glu Ala Thr Cys Arg Gly Pro Asp Leu
    290          295          300
Arg Arg Tyr Gly Pro Val Tyr Ser Thr Ala Gln Ala Leu Leu Tyr Ile
305          310          315          320
Phe Cys Phe Arg Trp Arg Asp Leu Thr Thr Ala Ala Met Glu Gly Asp
    325          330          335
Thr Xaa Glu Gln Ile Asp Glu Leu Glu Pro Glu Asp Ile Thr Phe Leu
    340          345          350
Pro Ser Val Lys Glu Val Phe His Gln Ala Ile His Ser Lys Leu Asn
    355          360          365
Pro Leu Lys Val Cys Ser Pro Ala Ile Val Ser Glu Phe Ala Arg Met
    370          375          380
Ala Gln His Leu Asn Phe Met Tyr Val Phe Ser Ile Leu Glu Thr Asn
385          390          395          400
Lys Arg Leu Arg Val Ser Ser Phe Arg Ser Ile Ser Ala Met Ala Asp
    405          410          415
Pro Arg Phe Ser His Val Glu Arg Glu Thr Arg Ala Gly Asp Asp Leu
    420          425          430
Gly Tyr Gln Leu Asp Ala Tyr Phe Pro Phe Asp Pro Tyr Gln Leu Pro
    435          440          445
Arg Ser Arg Arg Trp Leu Glu Asp Asp Tyr Val His Trp Arg Gly Ile
    450          455          460
Pro Gly Val Asp Asp Gln Asp Glu Gly Asp Ser Asp Ser Asp Leu Asp
465          470          475          480
Gly Ser Glu Ser Glu Gly Asp Leu Ser Asp Val Thr Glu Thr Asp Glu
    485          490          495
Asp Asp

```

&lt;210&gt; 41169

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41169

Pro Ser Ala Arg Thr Ser Asp Ser Ser Gly Gly Tyr Leu Phe Glu Gln  
 1 5 10 15  
 Cys Arg Pro Gly Ser Leu Leu His Ser Pro Pro Ala Leu Tyr Thr Pro  
 20 25 30  
 Asp Glu Arg Glu Ala Ser Leu Pro Arg Leu Pro Ser Ala Ser His Tyr  
 35 40 45  
 Leu Ala Gly Gly Pro Ser Arg Glu Ala Trp Gly Pro Ile His Cys Asp  
 50 55 60  
 Gly Ser Val Gly Gln His Leu Arg Val Gly Ser Ile Val Arg Val Arg  
 65 70 75 80  
 Gly Ile Val Gln Thr Pro Gln Val Pro Val Leu Gly Cys Ser Ile His  
 85 90 95  
 Asp Val Glu Leu Asp Val Glu Gln Ile His Leu Val Val His Arg Glu  
 100 105 110  
 Glu Pro Val Pro Phe Ser Val Tyr Glu Ala Glu Ile Arg Thr Ala Glu  
 115 120 125  
 Glu Asp Lys Val Glu Gly Arg Arg Ser His Leu Pro Asp Arg Thr Arg  
 130 135 140  
 Leu Asn Asn Arg Ile Leu Asp Leu Arg Thr Pro Thr Ser Gln Ser Ile  
 145 150 155 160  
 Phe Arg Leu Gln Ser Ala Leu Cys Asn Ile Phe Arg Ser Ser Leu Asp  
 165 170 175  
 Glu Gln Gly Phe Ile Glu Ile His Thr Pro Lys Leu Gln Gly Ser Ala  
 180 185 190  
 Thr Glu Ser Gly Ala Ser Val Phe Gln Val Asn Tyr Phe Gly Arg Asp  
 195 200 205  
 Ala Phe Leu Ala Gln Ser Pro Gln Leu Ala Lys Gln Met Ala Ile Ala  
 210 215 220  
 Ala Asp Phe Glu Arg Val Tyr Glu Ile Gly Ala Val Phe Arg Ala Glu  
 225 230 235 240  
 Asn Ser Asn Thr His Arg His Leu Thr Glu Tyr Thr Gly Leu Asp Ile  
 245 250 255  
 Glu Met Ala Ile Glu Glu His Tyr His Glu Met Leu Asp Val Leu Asp  
 260 265 270  
 Ala Val Ile Lys Asn Met Leu Lys Gly Val Tyr Gly Arg Tyr Arg Arg  
 275 280 285  
 Glu Ile Glu Ile Val Lys His Gln Phe Pro Ser Glu Asp Val Val Trp  
 290 295 300  
 Leu Glu Glu Thr Pro Ile Ile Arg Phe Ser Asp Gly Ile Lys Met Leu  
 305 310 315 320  
 Asn Glu Ser Gly Trp Arg Asp Glu Asp Gly Asn Pro Leu Pro Glu Asp  
 325 330 335  
 Asp Asp Leu His Thr Arg Asp Glu Ile Arg Leu Gly Glu Leu Val Lys  
 340 345 350  
 Glu Lys Tyr Gly Thr Asp Tyr Tyr Ile Leu Asp Lys Phe Pro Val Ala  
 355 360 365  
 Ala Arg Pro Phe Tyr Ala Met Pro Arg Ser Arg Arg Pro Ala Leu His  
 370 375 380  
 Gln Leu Leu  
 385

&lt;210&gt; 41170

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41170

Cys Thr Lys Gly Gly Ser Cys Asn Val Asp Tyr Ile Lys Ile Ile Phe  
 1 5 10 15  
 Pro Arg Pro Arg Val Ala Tyr Tyr Thr Ile Leu Val Ile Arg Ala Met  
 20 25 30  
 Gln Val Asn Gln Ile Ala Pro Thr Tyr Arg Val Phe Phe Ser Ser Pro  
 35 40 45  
 Ser Thr Val Val Leu Ser Pro Thr Ser Arg Ser Thr Ile Ala Pro Asn  
 50 55 60  
 Ala Pro Ile Thr His Leu Ala Ser Lys Thr Ala Thr Ile Pro Thr Thr  
 65 70 75 80  
 His Arg Tyr Pro Ala Val Arg His His Ile Pro Arg Glu  
 85 90

&lt;210&gt; 41171

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41171

Leu Tyr Thr Ser Ser Asp Asn Leu Gly Gly Leu Ser Ser Val Thr Met  
 1 5 10 15  
 Ser Ile Lys Arg Ala Leu Ser Lys Ile Arg Pro Lys Ala Asp Asp Asp  
 20 25 30  
 Ser Ser Lys Ser Asn Leu Ser Asn Gly Ser Ser Pro Arg Arg Ser Ile  
 35 40 45  
 Phe Ser Ser Phe Leu Arg Asp Arg Asp Tyr Val Ser Ser Ser Asp Asp  
 50 55 60  
 Gly Ser Asp Asp Ser Gly Ser Gly Ser Leu Ser Arg Asn Gln Gln Lys  
 65 70 75 80  
 Arg Leu Ala Arg Glu Gln Arg Arg Lys Gln Arg Ser Arg Leu Ser Glu  
 85 90 95  
 Glu Gln Gln Ser Asp Asp Ser Glu Arg Arg His Lys Glu Glu Ile Ala  
 100 105 110  
 Gln Ala Ala Arg Glu Glu Thr Ala Glu Met Arg Ala Arg Tyr Gly Glu  
 115 120 125  
 Leu Pro Leu Leu Gln Ser Thr Ser Arg Pro Arg Glu Pro Arg Ile Arg  
 130 135 140  
 Leu Glu Asp Ile Ser Ser Ser Ser Val Gly Gln Glu Val Phe Phe Thr  
 145 150 155 160  
 Ala Arg Leu His Phe Ile Arg Arg Met Ser Ala Arg Leu Val Phe Leu  
 165 170 175  
 Val Phe Arg Gln Arg Leu Thr Thr Leu Arg Gly Val Leu His Glu Lys  
 180 185 190  
 Pro Gly Gly Gln Ser Ile Ala Met Val Gln Trp Ala Asn Ile Tyr Ala  
 195 200 205  
 Trp Val Pro Ser Cys Ala Cys Ala Ala Ser Ser Lys Arg Pro Arg Cys  
 210 215 220  
 Gln Cys Trp Ala Ala Leu Phe Met Thr Ser Ser Leu Met Ser Asn Arg  
 225 230 235 240  
 Phe Thr Trp Ser Ser Thr Ala Arg Asn Arg Phe Pro Leu Ala Ser Thr  
 245 250 255  
 Arg Pro Lys Phe Ala Pro Gln Arg Lys Thr Arg Ser Lys Ala Ala Ala  
 260 265 270  
 Val Thr Tyr Arg Thr Val His Gly

275

280

&lt;210&gt; 41172

&lt;211&gt; 547

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41172

Arg	Gly	Ser	Met	Ala	Ala	Thr	Ala	Ala	Arg	Ser	Arg	Leu	Ser	Ser	Ile
1				5					10					15	
Ser	Ser	Pro	Arg	Arg	Thr	Leu	Cys	Gly	Ser	Lys	Arg	His	Pro	Ser	Ser
			20					25					30		
Asp	Phe	Arg	Met	Ala	Ser	Arg	Cys	Ser	Thr	Ser	Pro	Asp	Gly	Val	Met
			35				40					45			
Arg	Met	Ala	Thr	His	Cys	Arg	Lys	Thr	Met	Thr	Cys	Ile	Pro	Glu	Thr
	50					55					60				
Arg	Tyr	Gly	Trp	Val	Ser	Leu	Ser	Arg	Arg	Ser	Met	Gly	Pro	Ile	Thr
65					70					75				80	
Thr	Phe	Leu	Thr	Ser	Phe	Arg	Ser	Gln	Leu	Val	Arg	Phe	Thr	Gln	Cys
				85					90					95	
Pro	Asp	Pro	Glu	Asp	Pro	Arg	Phe	Thr	Asn	Ser	Phe	Asp	Ile	Phe	Ile
			100					105					110		
Arg	Gly	Gln	Glu	Ile	Val	Ser	Gly	Gly	Gln	Arg	Ile	His	Asp	Pro	Arg
		115					120					125			
Met	Leu	Glu	Glu	Ser	Met	Arg	Arg	Ser	Gly	Ile	Asn	Pro	Asp	Thr	Met
	130					135					140				
Glu	Asp	Tyr	Leu	Glu	Gly	Phe	Arg	Trp	Gly	Ala	Pro	Pro	His	Ala	Gly
145					150					155				160	
Ala	Gly	Val	Gly	Leu	Glu	Arg	Leu	Leu	Met	Leu	Leu	Leu	Lys	Leu	Gly
				165					170					175	
Asn	Ile	Arg	Leu	Ala	Ser	Leu	Phe	His	Arg	Asp	Pro	Lys	Ser	Phe	Pro
			180					185					190		
Pro	Lys	Pro	Pro	Ala	Leu	Leu	Leu	Arg	His	Pro	Glu	Ser	Ser	Thr	Ile
		195					200					205			
Glu	Pro	Pro	Trp	Gln	Arg	Glu	Gly	Arg	Gly	Ser	Leu	Ala	Lys	Asp	Glu
	210					215					220				
Ser	Glu	Leu	Gln	Pro	Leu	Glu	His	Leu	Ile	Ala	Asn	Tyr	Gly	Asp	Ala
225					230					235				240	
Thr	Ser	Thr	Ser	Trp	Gly	Asp	Glu	Arg	Phe	Lys	Ile	Trp	Arg	Asp	Met
				245					250					255	
Ala	Thr	Gly	Ala	Ala	Val	Ser	Tyr	Val	Pro	Ser	Ser	Asn	Asn	Tyr	Ala
			260					265					270		
Val	Ile	Pro	Gly	Asn	Pro	Leu	Cys	Asp	Pro	Ser	Gln	Tyr	Asn	Arg	Ile
		275					280					285			
Ile	Thr	Gln	Phe	Leu	Gln	Trp	Met	Arg	Arg	Glu	Thr	Lys	Tyr	Lys	Pro
	290					295					300				
Ile	Trp	Leu	Leu	Cys	Ser	Pro	Glu	Val	Glu	Ser	Ile	Leu	Gly	Asp	Lys
305					310					315				320	
Leu	Gly	Trp	Arg	Ser	Leu	Ser	Cys	Ile	Ala	Glu	Glu	Arg	Val	Asp	Pro
				325					330					335	
Ser	Arg	Asn	Gln	Ala	Ala	Ser	Asp	Gly	Glu	Ile	Ala	Arg	Lys	Ile	Arg
			340					345					350		
Arg	Ala	Glu	Asn	Glu	Gly	Ile	Lys	Ile	Val	Glu	Met	Lys	Tyr	Gly	Glu
		355					360					365			
Met	Val	Pro	Asp	Asp	Val	Arg	Glu	Lys	Ile	Asp	Ala	Arg	Ile	Gln	Asp
	370					375					380				

## 18147

Trp Leu Ala Asn Arg Lys Gly Thr Gln Val His Leu Ser Glu Ile His  
 385 390 395 400  
 Pro Trp Arg Asp Ser Glu His Arg Trp Tyr Phe Tyr Ala Val Asp Lys  
 405 410 415  
 Ser Gly Thr Ile Cys Ala Phe Val Ala Leu Ala Met Leu Ser Pro His  
 420 425 430  
 Phe Gly Met Gln Val Lys Tyr Ser Phe Asp Phe Pro Gly Ser Pro Asn  
 435 440 445  
 Gly Val Ile Glu Tyr Ile Val Thr His Ala Ile Gln Thr Ala Ala Arg  
 450 455 460  
 Ala Gly Thr Lys Ser Leu Thr Phe Gly Ala Gly Ala Thr Ala Thr Leu  
 465 470 475 480  
 Thr Pro Gly His Asn Leu His Gly Ala Lys Ile Lys Met Leu Gln His  
 485 490 495  
 Thr Tyr Glu Thr Leu Ala Lys Gln Phe His Leu Val Arg Lys Ser Glu  
 500 505 510  
 Phe Arg Ala Lys Leu Gly Ala His Glu Glu Pro Leu Tyr Ile Ala Tyr  
 515 520 525  
 Pro Pro His Gly Leu Gly Ser Arg Gly Ile Arg Ala Val Leu His Phe  
 530 535 540  
 Phe Glu Asp  
 545

&lt;210&gt; 41173

&lt;211&gt; 351

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41173

Thr Arg Asp Gly His Arg Cys Thr Arg Ser Thr Ser Met Ala Ser His  
 1 5 10 15  
 Ala Pro Pro Arg Trp Trp Leu Tyr Ile Gln Ala Val Phe Trp Arg Phe  
 20 25 30  
 Leu Met Arg Ile Gly Met Phe Phe His Asn Leu Pro Ala Pro Arg Pro  
 35 40 45  
 Pro Arg Pro Ala Phe Val Arg Ser Val Arg Ser Gly Asn Ser Gln Ile  
 50 55 60  
 Arg Leu His Phe Tyr Cys Pro Pro Asp Tyr Gln Lys Asn Arg Arg Glu  
 65 70 75 80  
 Gly Arg Arg Leu Pro Val Val Ile Asn Phe His Gly Gly Gly Phe Thr  
 85 90 95  
 Leu Gly Cys Pro Thr Asp Asp Ser Arg Trp Ala Gln Cys Ile Leu Glu  
 100 105 110  
 Asp Val Gly Ala Val Val Val Ser Val Gly Tyr Arg Arg Ser Pro Glu  
 115 120 125  
 His Pro Phe Pro Ala Ala Val Asp Asp Gly Val Glu Ala Leu Gln Tyr  
 130 135 140  
 Leu Ala Ala His Ala Thr Glu Leu Gly Leu Asp Val Thr Arg Ile Ala  
 145 150 155 160  
 Leu Ser Gly Phe Ser Ala Gly Gly Asn Leu Ala Val Thr Val Pro Leu  
 165 170 175  
 Arg Leu Arg Ser Leu Met Ala Lys Glu Gln His Gly Pro Pro Leu Asp  
 180 185 190  
 Arg Ala Asn Ser Thr Gln Gln Leu Leu Asp Thr Ser Gly Asp Ile Ser  
 195 200 205  
 Ile Val Ala Leu Phe Cys Trp Tyr Pro Ile Leu Asp Phe Glu Glu Ser

## 18148

210		215		220
Arg Ala Phe Arg Arg Ala Ala Ser Ile Met Pro Glu Gln Thr Leu Pro				
225		230		235
Lys Phe Leu Thr Asp Leu Phe Asp Asn Ser Tyr Leu Pro Asn His Glu				240
	245		250	255
His Arg Arg Ser Pro Tyr Ala Ser Pro Val Arg Ala Thr Asp Glu Ile				
	260		265	270
Leu Ala Asp Ala Leu Pro His Asp Ile Phe Leu Tyr Ile Cys Glu Trp				
	275		280	285
Asp Met Leu Met Asn Glu Gly Gln Leu Phe Met Arg Arg Leu Lys Asp				
	290		295	300
Ser Gly Lys His Ala Arg Ala Met Met Ile Glu Lys Ala Arg His Ala				
305		310		315
Trp Asp Lys Ser Pro Asn Pro Phe Arg Asp Gln Ala Lys Val Asn Val				320
	325		330	335
Leu Tyr Arg Asp Ala Cys Ala Asp Met Lys Ala Ile Phe Asp Arg				
	340		345	350

&lt;210&gt; 41174

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41174

Ser His Ser Tyr Ser Thr Ser Ser Leu Ser Thr Val Met Ala Glu Lys		
1	5	10
Thr Leu Ala Ser Asn Pro Val Thr Ser Ser Ser Pro Glu Ala Gly Asp		15
	20	25
Asp Gln Lys Gln Pro Lys Asp Ile Asn His Val Glu Arg Val Leu Ser		30
	35	40
Asp Gly Leu Lys Lys Asp Glu Ala Asp Tyr Ser Arg Met Asp Lys Asp		45
	50	55
Leu Gln Glu Tyr Val Ala Arg Gly Gln Val Asp Val Asp Glu Ala Thr		60
65	70	75
Ser Lys Arg Leu Lys Arg Met Ile Asp Arg Arg Val Leu Ile Ile Met		80
	85	90
Ile Leu Thr Tyr Phe Leu Gln Ala Leu Asp Lys Gly Thr Leu Ser Phe		95
	100	105
Ala Ser Ile Met Gly Ile Arg Thr Asp Leu His Leu Gln Asn Gly Gln		110
	115	120
Lys Val Thr Leu Val Phe Pro Phe Ser Leu Gly Tyr Leu Leu		125
	130	135
		140

&lt;210&gt; 41175

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41175

Tyr Ser Trp Leu Thr Thr Cys Ile Tyr Ile Ala Val Leu Ile Val Glu		
1	5	10
Tyr Pro Thr Asn Trp Ile Ile Gln Arg Val Pro Ile Ala Lys Tyr Leu		15
	20	25
Gly Ile Asn Ile Cys Leu Trp Gly Ser Val Leu Ala Leu His Ala Ala		30
	35	40
Ser Lys Asn Phe Thr His Met Val Val Leu Arg Thr Leu Leu Gly Ile		45

18149

50		55		60												
Phe	Glu	Ala	Cys	Cys	Gln	Pro	Thr	Phe	Val	Leu	Leu	Ser	Ser	Met	Trp	
65					70					75					80	
Tyr	Lys	Arg	Glu	Glu	Gln	Ala	Ala	Thr	Val	Thr	Tyr	Trp	Tyr	Val	Asp	
			85						90					95		
His	Thr	Thr	Leu	Thr												
			100													

<210> 41176  
 <211> 169  
 <212> PRT  
 <213> A.fumigatus

<400> 41176																
Ser	Ser	Pro	Cys	Ser	Ser	Thr	Ala	Leu	Ile	Thr	Ala	Gly	Asp	Arg	Phe	
1			5						10					15		
Leu	Arg	Asp	Gly	Pro	Ile	Leu	Arg	Ala	Asn	Val	Pro	Leu	Ala	Asp	Gly	
		20						25					30			
Phe	Gln	Asp	Ala	Ile	Arg	Lys	Pro	Arg	Gly	Cys	Gly	Arg	Phe	Asp	Ile	
	35					40						45				
Arg	Val	Arg	Met	Val	Gln	Glu	Gly	Val	Pro	Glu	Thr	Arg	Leu	Ala	Leu	
	50				55						60					
Leu	Gln	Pro	Leu	Gln	Gly	Leu	Thr	Leu	Gly	Leu	Glu	Arg	Val	Asp	Glu	
65				70						75					80	
Val	Asp	Ala	Asp	Arg	Ile	Cys	Arg	Leu	Lys	Val	Glu	Gln	Leu	Asp	Asn	
			85						90					95		
Leu	Arg	Asn	Asp	Asp	Gly	Asp	Pro	Ala	Val	Thr	Ala	Gly	Pro	Ala	Arg	
		100					105						110			
Ser	Cys	Lys	Val	Val	Pro	Ser	Leu	Leu	Glu	Gly	Pro	Ala	Val	Glu	Pro	
	115					120					125					
Lys	Pro	Cys	Leu	Gly	Val	Lys	Glu	Val	Leu	Asp	Val	Asn	Glu	Lys	Leu	
	130				135						140					
Pro	Leu	Gly	Leu	Gly	Asn	Val	Leu	Gly	Thr	Val	Gln	Glu	Leu	Ala	Asp	
145					150					155					160	
Leu	Arg	Gln	Arg	Gln	Asn	Gly	His	His								
			165													

<210> 41177  
 <211> 177  
 <212> PRT  
 <213> A.fumigatus

<400> 41177																
Gln	Ser	Ile	Arg	Tyr	Met	Met	Asn	Gly	Gly	Gln	Gln	Ile	Val	Gly	Gly	
1			5						10					15		
Leu	Leu	Ala	Tyr	Cys	Phe	Ser	Leu	Ile	Gly	Lys	Asp	Lys	Ala	Ile	His	
		20						25					30			
Ser	Trp	Gln	Ala	Leu	Phe	Ile	Thr	Tyr	Gly	Val	Ile	Ser	Val	Leu	Trp	
	35					40					45					
Gly	Leu	Phe	Val	Ile	Phe	Trp	Met	Pro	Asp	Ser	Pro	Met	Arg	Ala	Lys	
	50				55						60					
Cys	Phe	Ser	Glu	Glu	Asp	Lys	His	Leu	Met	Val	Glu	Arg	Val	Arg	Ala	
65				70						75					80	
Asn	Gln	Thr	Gly	Met	Gln	Asn	Lys	Lys	Phe	Arg	Ala	Tyr	Gln	Met	Trp	
			85					90						95		
Glu	Ala	Phe	Arg	Asp	Pro	Gln	Met	Tyr	Cys	Tyr	Cys	Ala	Ile	Gln	Ile	

## 18150

```

          100          105          110
Phe Thr Thr Leu Pro Thr Ser Gly Leu Gly Ala Phe Ala Asn Ile Ile
      115          120          125
Ile Ser Gly Phe Asn Phe Thr Val Leu Gln Thr Gln Leu Leu Ala Met
      130          135          140
Val Leu Gly Phe Tyr Ile Ile Ile Val Leu Leu Gly Ser Ala Trp Leu
145          150          155          160
Val Lys Lys Thr Gly Gln Asn Leu Phe Val Met Leu Gly Phe Val Ile
          165          170          175
Pro

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<210> 41178
<211> 109
<212> PRT
<213> A.fumigatus

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<400> 41178
Val Phe Leu Phe Ala Pro Phe Ser Thr Thr Ser Ala Pro Ser Thr Asp
1          5          10          15
Ile His Asp Pro Arg Ser Tyr Ile Gly Thr Ile Val Leu Met Thr Val
      20          25          30
Glu Asn Lys Asn Leu Gly Thr Lys Val Gly Leu Leu Ile Ser Tyr Tyr
      35          40          45
Ile Thr Leu Ser Phe Trp Ser Ala Gln Thr Leu Cys Leu Ser Met Val
      50          55          60
Ser Arg Asn Ile Ala Gly Ala Thr Lys Lys Ser Thr Val Val Ala Ala
65          70          75          80
Thr Phe Val Ser Trp Ala Val Gly Asn Ser Ile Gly Ser Pro Pro Ser
      85          90          95
Phe Leu Pro Pro Pro Pro Thr Lys Lys Gln Thr Ser Asn
          100          105

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<210> 41179
<211> 85
<212> PRT
<213> A.fumigatus

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<400> 41179
His Glu Ser His Pro Gly Pro Gln Val Phe Leu Asp Arg Asp Ala Pro
1          5          10          15
Arg Tyr Phe Ile Ala Phe Gly Val His Leu Gly Cys Tyr Val Cys Leu
      20          25          30
Thr Leu Ala Ile Ile Phe Leu Arg Phe Trp Leu Ala Leu Gln Asn Lys
      35          40          45
Lys Lys Ala Arg Val Leu Glu Glu Asn Gly Leu Ser Ala Ala Asp Asn
      50          55          60
Asn Leu Thr His Ala Phe Glu Asp Arg Thr Asp Gln Glu Asn Leu His
65          70          75          80
Phe Arg Tyr Ile Tyr
          85

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<210> 41180
<211> 337
<212> PRT
<213> A.fumigatus

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&lt;400&gt; 41180

Thr Arg Met Ala Ser Gln Ser Thr Ser Gln Thr Asp Val His Gln Thr  
 1 5 10 15  
 Val Lys Gln Leu Ile Tyr Asn Leu Val Asn Ile Arg Asp Ala Thr Gly  
 20 25 30  
 Lys Phe Leu Leu Arg Leu Gln Asp Gly Arg Val Ile Asp Thr Lys Ser  
 35 40 45  
 Trp His Gly Trp Glu Trp Thr His Gly Ile Gly Leu Tyr Gly Ile Trp  
 50 55 60  
 Lys Tyr Tyr Glu Met Thr Gly Asp Glu Ser Leu Leu Arg Ile Ile Glu  
 65 70 75 80  
 Asp Trp Phe Ala Ala Arg Phe Ala Glu Gly Gly Thr Thr Lys Asn Ile  
 85 90 95  
 Asn Thr Met Ala Val Phe Leu Thr Leu Ala Tyr Val Tyr Glu Lys Thr  
 100 105 110  
 Gly Asn Val Thr Tyr Leu Pro Trp Leu Asp Ala Trp Ala Glu Trp Ala  
 115 120 125  
 Met Tyr Glu Leu Pro Arg Thr Arg Tyr Gly Gly Met Gln His Ala Thr  
 130 135 140  
 Tyr Leu Thr Glu Asn Tyr Gln Gln Leu Trp Asp Asp Thr Leu Met Met  
 145 150 155 160  
 Thr Val Leu Pro Leu Ala Lys Ile Gly Lys Leu Leu Asn Arg Pro Glu  
 165 170 175  
 Tyr Ile Ala Glu Ala Lys Arg Gln Phe Leu Val His Ile Lys Tyr Leu  
 180 185 190  
 Phe Asp Thr Gln Thr Gly Leu Trp Phe His Gly Trp Thr Phe Glu Glu  
 195 200 205  
 Gly Gly His Asn Phe Ala Arg Ala Arg Trp Ala Arg Gly Asn Ser Trp  
 210 215 220  
 Val Thr Ile Val Ile Pro Glu Ile Ile Glu Leu Leu Asp Leu Glu Pro  
 225 230 235 240  
 Thr Asp Pro Ile Arg Ile His Leu Ile Asp Thr Leu Glu Ala Gln Cys  
 245 250 255  
 Glu Ala Leu Gln Arg Leu Gln Glu Ser Glu Thr Gly Phe Trp His Thr  
 260 265 270  
 Leu Leu Asp His Pro Asp Ser Tyr Val Glu Ser Ser Ala Thr Ala Gly  
 275 280 285  
 Phe Ala Tyr Gly Ile Leu Lys Ala Val Arg Lys Arg Tyr Ile Gly Ala  
 290 295 300  
 Gln Tyr Arg Pro Val Ala Glu Lys Ala Ile Ala Gly Arg Asp Glu Arg  
 305 310 315 320  
 Arg Gly Arg Ala Arg Arg Ala Ser Glu Tyr Gln Leu Arg His Arg Asn  
 325 330 335  
 Gly

&lt;210&gt; 41181

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41181

Tyr Pro Arg Trp Leu Tyr Ile Glu Ile Ile Asn Thr Leu Asp Ile Phe  
 1 5 10 15  
 Phe Leu Ser Ala Ala Lys Ala Val Val Lys Glu Arg Gly Ile Ser Ile

## 18152

20 25 30  
 Tyr Ser Ile Gly Leu Ile Pro Glu Thr Ser Gly Thr Pro Ser Pro Ser  
 35 40 45  
 Thr Thr Leu Ala Leu Ala Ile Ser Tyr Thr Gly Ser Ser Ala Ser Arg  
 50 55 60  
 Glu Met Thr  
 65

&lt;210&gt; 41182

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41182

Ala Phe Met Phe Leu Arg Ala Cys Arg Gly Ser Leu Val Arg Ile Trp  
 1 5 10 15  
 Thr Cys Ser Leu Ala Tyr Ser Ser Ala Ser Phe Gln Ala Ser Ser Ile  
 20 25 30  
 Glu Ser Thr Thr Ile Thr Ser Pro Asn Arg Ser His Glu Val Pro Ala  
 35 40 45  
 Ser Ser Ala Val Asp Arg Phe Phe Lys Ser Ser Val Ile Ile Arg Ile  
 50 55 60  
 Asp Ser Arg Pro Thr Ala Ser Asp Val Val Met Ile Thr Ala Gly Glu  
 65 70 75 80  
 Ser Gly Pro Cys Ser Ala Cys Glu Arg Met Ser Val Ala Thr Val Lys  
 85 90 95  
 Gly Leu Ala Val Ser Ser Ala Thr Ile Arg Ile Ser Val Gly Pro Ala  
 100 105 110  
 Lys Arg Ser Ile Pro Ile Ser Pro Asn Asn Cys Leu Phe Ala Ser Ala  
 115 120 125  
 Thr Lys Ala Leu Pro Gly Pro Ala Met Lys Ser Thr Leu Ser Met Val  
 130 135 140  
 Ser Val Pro Ser Ala Met Ala Ala Met Ala Trp Thr Pro Pro Ser Thr  
 145 150 155 160

&lt;210&gt; 41183

&lt;211&gt; 319

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41183

Ser Trp Arg His Gln Phe Asn Ser Val Gln Gln Trp Leu Leu Ala His  
 1 5 10 15  
 Arg Ile Asp Leu His Asn Gln Leu Lys Arg Ala Ala Thr Ser Thr Asp  
 20 25 30  
 Ala Gly Arg Glu Ala Ile Pro Phe Arg Thr Ala Ser Arg Val Val His  
 35 40 45  
 Val Asp Pro Ala Ser Ala Thr Ile Thr Leu Glu Asp Gly Thr Gln Phe  
 50 55 60  
 Gln Gly Asp Leu Val Val Gly Ala Asp Gly Val His Ser Val Thr Arg  
 65 70 75 80  
 Ser Ala Ile Pro Gly Gly Asn Val Lys Ala Ser Cys Cys Gly Lys Ser  
 85 90 95  
 Ala Phe Arg Phe Leu Val Ser Lys Asp Ala Ala Leu Gly Asp Pro Glu  
 100 105 110  
 Thr Ala Ala Leu Val Glu Arg Pro Gly Gln Leu Ser Ile Trp Tyr Gly

## 18153

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      115              120              125
Thr Asp Arg Arg Ile Val Leu Tyr Pro Thr Ser Asn Asn Thr Val Leu
  130              135              140
Asn Phe Val Leu Ile His Pro Glu Glu Glu Ser Ala Glu Glu Ala Asp
 145              150              155              160
Glu Ser Trp Gly Gln Ser Gly Asn Leu Gln Lys Met Leu Gln Ile Phe
              165              170              175
Ser Ser Phe Asp Pro Ala Val Leu Lys Leu Val Ser Met Ala Asp Pro
              180              185              190
Gln Ser Val Arg Val Trp Lys Leu Leu Asp Met Glu Glu Ile Pro Cys
 195              200              205
Trp Tyr Glu Gly Arg Leu Ala Leu Leu Gly Asp Ala Ala His Pro Phe
 210              215              220
Leu Pro His Gln Gly Gln Gly Ala Gly Val Ala Ile Glu Asp Ala Ala
 225              230              235              240
Ser Leu Ala Val Val Leu Pro Phe Gly Thr Thr Val Glu Glu Ile Pro
              245              250              255
Glu Arg Leu Gln Leu Tyr Asp Glu Ile Arg His Glu Arg Ala Ser Arg
              260              265              270
Ile Gln Gln Tyr Ser Arg Leu Ala Gly Arg Asp Arg Val Asp Gly Gln
 275              280              285
Glu Thr Ala Asp Ser Lys Arg Ser Thr Phe Ile Pro Arg Asn Ser His
 290              295              300
Ser Asn Cys Val Ser Val Trp Leu His Gln Leu Gln Phe Trp Pro
 305              310              315

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&lt;210&gt; 41184

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41184

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Gln Ile Arg Pro Ala Ala Ser Leu His Leu Cys Phe His Ser Leu Leu
 1              5              10              15
Phe Tyr Asp Thr Trp Ser Arg Ser Ile Lys Asp Val Cys Arg Arg Ala
 20              25              30
His Asp Pro Asp His Pro Arg Asp Arg Ser Arg Cys Arg Arg Val Pro
 35              40              45
Gly Ala Cys Tyr His Cys Arg Cys Val Leu Ser Ser Pro Ala Arg Leu
 50              55              60
Trp His Gly Val Ser Val Leu Thr Leu Arg Trp Ser Arg Arg Ser Glu
 65              70              75              80
Lys Leu Thr Ala Cys Met Thr Arg Ile Tyr Asn Ala Ala Leu Ser Ala
              85              90              95
Gly Val Ala Phe Gly Ile Ile Ile Ser Gly Leu Val Thr Ile Lys His
 100              105              110
Asp Trp Arg Thr Ile Tyr Trp Val Gly Cys Ala Leu Val Gly Ala Leu
 115              120              125
Thr Val Val Val Val Leu Phe Phe Pro Glu Thr Ala Tyr Arg Arg Val
 130              135              140
Gly Asn Pro Leu Val Glu Arg Ala Val Glu Ile Gln Lys Leu Ser Asp
 145              150              155              160
Ser Asn Asn Val Glu Phe Ala Ser Val Pro Ser Ile Leu Pro Lys Val
              165              170              175
Ser Tyr Leu Ala
              180

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<210> 41185  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 41185  
 Leu Thr Asp Phe Lys Lys Gly Trp Gly Trp Ala Cys Glu Arg Val Lys  
 1 5 10 15  
 Ala Val Asp Val Val Thr Ala Glu Gly Glu Leu Leu His Cys Asn Glu  
 20 25 30  
 Asn Gln Asn Glu Asp Leu Tyr Trp Ala Ala Arg Gly Ala Gly Pro Gly  
 35 40 45  
 Lys Ala Leu Asn Leu His His Gln Phe Leu Met Leu Ile Leu Glu Ser  
 50 55 60  
 Ser Ser Trp Gln Ala Ser Leu Val  
 65 70

<210> 41186  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<400> 41186  
 Pro Ser Lys Val Ile Gly Thr Asn His Val Leu Pro Thr Lys Lys Ala  
 1 5 10 15  
 Ala Arg Phe Thr Gly Gly Leu Trp Val Gly Lys Tyr Leu Arg Thr Val  
 20 25 30  
 Thr Tyr Gln Glu Val Thr Ser Arg Gln Ala Ser Gly Glu Leu Gly Arg  
 35 40 45  
 Leu Cys Gly Arg Ala Ala Arg Ala Glu Asn Phe Glu Gly His Ala Arg  
 50 55 60  
 Ser Gly Asp Leu Arg Ala Tyr Asn Tyr Leu Gly Asp Gln Phe Glu Trp  
 65 70 75 80  
 Ile Gln Arg Asp Ile  
 85

<210> 41187  
 <211> 384  
 <212> PRT  
 <213> A.fumigatus

<400> 41187  
 Arg Thr Leu Leu Pro Trp Leu Ser Cys Cys Leu Leu Gly Arg Arg Ser  
 1 5 10 15  
 Arg Lys Tyr Gln Ser Val Phe Ser Cys Met Met Arg Phe Ala Met Asn  
 20 25 30  
 Ala Arg Ala Ala Ser Asn Asn Thr Leu Gly Trp Pro Ala Val Ile Val  
 35 40 45  
 Ser Met Asp Arg Lys Pro Leu Thr Val Ser Val Pro Leu Ser Phe Leu  
 50 55 60  
 Glu Ile Arg Thr Leu Thr Ala Leu Val Tyr Gly Phe Thr Asn Tyr Asn  
 65 70 75 80  
 Phe Gly His Asp Glu Trp Asp Asn Ser Thr Gln Arg Leu Arg Glu Trp  
 85 90 95  
 Thr Trp Lys Arg Ile Pro Asn Pro Tyr Trp Arg Met Pro Ile Ala Phe

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<210> 41188
<211> 246
<212> PRT
<213> A.fumigatus
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Lys	Gln	Leu	Arg	Arg	Cys	Thr	Ser	Leu	His	Trp	Leu	Leu	Pro	Phe	Ser
1				5					10					15	
Lys	Tyr	Phe	Trp	Ala	Gly	Ile	Asn	Ala	Leu	Pro	Thr	Ser	Arg	Leu	Phe
			20					25					30		
Ser	Arg	Gln	Leu	Ser	Ser	Ser	Leu	Val	Thr	Leu	His	Phe	Thr	Met	Ala
			35				40					45			
Asp	Thr	Ile	Leu	Lys	Thr	Thr	Glu	Thr	Ile	Glu	His	Val	Glu	Asp	Ser
	50					55					60				
Gln	Ser	Arg	Asp	Leu	Phe	His	Leu	His	Asn	Leu	Gly	His	Val	Arg	Leu
65					70					75					80
Arg	His	Glu	His	Thr	Asn	Glu	Val	Ile	Leu	Ile	Pro	Ala	Pro	Ser	Leu
				85					90					95	
Asp	Pro	Asn	Asp	Pro	Leu	Arg	Trp	Ser	Thr	Gly	Tyr	Lys	Ile	Tyr	Ile
			100					105					110		

## 18156

Ala Ile Leu Val Ser Leu Ala Met Val Met Cys Asn Phe Met Ala Ala  
 115 120 125  
 Gly Pro Thr Val Ala Met Val Ala Ile Ala Thr Asp Phe Lys Glu Gly  
 130 135 140  
 Gly Asn Thr Thr Met Ser Asp Trp Ile Ser Arg Ala Ala Tyr Phe Phe  
 145 150 155 160  
 Asn Asn Ser Ala Leu Met Gln Gly Val Ser Cys Leu Phe Trp Val Pro  
 165 170 175  
 Leu Leu Asn Lys Phe Gly Arg Arg Pro Val Tyr Ile Ser Ala Phe Ile  
 180 185 190  
 Leu Tyr Phe Phe Met Ile Leu Gly Ala Gly Leu Ser Lys Thr Tyr Ala  
 195 200 205  
 Gly Glu Leu Thr Thr Arg Thr Ile Leu Gly Ile Gly Ala Gly Ala Gly  
 210 215 220  
 Glu Cys Leu Ala Pro Val Thr Ile Ala Asp Val Phe Tyr Leu His Gln  
 225 230 235 240  
 Arg Gly Tyr Gly Met Ala  
 245

&lt;210&gt; 41189

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41189

Ala Thr Trp Arg Ser Leu Arg Phe Trp Ser Gly Glu Thr Tyr Thr Asp  
 1 5 10 15  
 Glu Ser Phe Trp Arg Met Phe Val Arg Pro Phe Gly Leu Ile Leu Ile  
 20 25 30  
 Pro Pro Ile Phe Trp Ala Thr Ile Val Met Ser Val Thr Ile Gly Phe  
 35 40 45  
 Leu Val Ala Val Val Ser Asn Phe Ala Ser Ala Phe Ser Thr Thr Tyr  
 50 55 60  
 Gly Phe Glu Ala Trp Gln Ser Gly Leu Cys Phe Ile Ala Gly Met Leu  
 65 70 75 80  
 Gly Cys Phe Leu Gly Thr Phe Ala Gly Gly Pro Phe Ser Asp Trp Val  
 85 90 95  
 Ala Asp Tyr Phe Thr Arg Arg Asn Gly Gly Ile Arg Glu Pro Glu Met  
 100 105 110  
 Arg Leu Pro Ala Ile Ile Pro Ser Val Ile Ala Ala Pro Leu Ser Leu  
 115 120 125  
 Val Leu Tyr Gly Cys Gly Ile Ala Asn Gly Trp His Trp Met Val Pro  
 130 135 140  
 Thr Phe Gly Leu Gly Leu Cys Met Phe Val Leu Ser Phe Ser Phe Lys  
 145 150 155 160  
 Pro Ser Thr

&lt;210&gt; 41190

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41190

Ser Arg Gln Thr Gln Thr Ala Ile Phe Phe Gln Val Thr Ile Leu His  
 1 5 10 15

## 18157

Ser Thr Met Arg Ile Ile Trp Arg Ala Ser Ala Asp Pro Ala Val Tyr  
 20 25 30  
 Glu Glu Ala Arg Val Gly Arg Val Phe Asn His Arg Arg Pro Arg Arg  
 35 40 45  
 Tyr Pro Leu Ala Val Val Lys Ala Thr Cys Leu Glu Asp Ile Val Leu  
 50 55 60  
 Ala Val Lys Leu Ala Lys Glu Lys Lys Cys Arg Val Ala Val Arg Ser  
 65 70 75 80  
 Gly Gly His Ser Trp Ala Ala Trp Ser Val Arg Asp Glu Ser Ile Leu  
 85 90 95  
 Ile Asp Leu Gly Asp Tyr Lys His Leu Glu Val Asp Ala Glu Lys Arg  
 100 105 110  
 Met Ala Arg Thr Ser Pro Ser Met Thr Gly Lys Glu Ile Asn Gly Lys  
 115 120 125  
 Leu Ile Lys Glu Tyr Gly Leu Met Phe Pro Gly Gly His Cys Pro Asp  
 130 135 140  
 Val Gly Leu Gly Gly Phe Leu Leu Gln Gly Gly Met Gly Trp Val Cys  
 145 150 155 160  
 Arg Val

&lt;210&gt; 41191

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41191

Arg Gln Ile Pro His Ala Thr Ile Ala Ala Met His Leu Ala Gly Ala  
 1 5 10 15  
 Asp Glu Ile Tyr Val Leu Gly Gly Val Gln Ala Ile Ala Ala Met Ala  
 20 25 30  
 Leu Gly Thr Glu Thr Met Asp Lys Val Asp Phe Ile Ala Gly Pro Gly  
 35 40 45  
 Asn Ala Phe Val Ala Glu Ala Lys Arg Gln Leu Phe Gly Glu Ile Gly  
 50 55 60  
 Ile Asp Leu Phe Ala Gly Pro Thr Glu Ile Leu Ile Val Ala Asp Glu  
 65 70 75 80  
 Thr Ala Asn Pro Phe Thr Val Ala Thr Asp Ile Leu Ser Gln Ala Glu  
 85 90 95  
 His Gly Pro Asp Ser Pro Ala Val Ile Ile Thr Thr Ser Glu Ala Val  
 100 105 110  
 Gly Arg Glu Ser Met Arg Ile Ile Thr Glu Leu Leu Lys Asn Leu Ser  
 115 120 125  
 Thr Ala Glu Leu Ala Gly Thr Ser Trp Glu Arg Phe Gly Glu Val Ile  
 130 135 140  
 Val Val Asp Ser Ile Asp Glu Ala Trp Lys Leu Ala Asp Glu Tyr Ala  
 145 150 155 160  
 Ser Glu His Val Gln Ile Leu Thr Lys Glu Pro Arg Gln Ala Leu Arg  
 165 170 175  
 Asn Met Asn Ala Tyr Gly Ala Leu Phe Leu Gly Glu Lys Thr Cys Val  
 180 185 190  
 Ser Tyr Gly Asp Lys Val Cys Pro  
 195 200

&lt;210&gt; 41192

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41192

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Pro Thr Leu Ser Cys Arg Glu Glu Lys Ser Trp Ala Leu Pro Ser Tyr
1          5          10          15
Ile Leu Leu Trp Thr Ser Ile Ala Gly Lys Asn His Ile Glu Phe Val
          20          25          30
Gln Asp Gly Lys Ala Leu Ser Gly Ala Ile Ser Tyr Trp Lys Thr Trp
          35          40          45
Ser Lys Leu Thr Gln Arg Gln Pro Pro Glu Asp Ser Val Glu Lys Leu
          50          55          60
Met Lys Gly Ser Trp Tyr Thr Asn Ile Tyr Leu Arg Pro Val Asp
65          70          75

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&lt;210&gt; 41193

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41193

```

Leu Arg Ala Asn Gln Pro Ser Arg Thr Leu Leu Phe Ser Phe Pro Leu
1          5          10          15
Asn Asn Ser Tyr Asn Ile Arg Ser Gly Lys Arg Thr Ser Ser Ile Ala
          20          25          30
Tyr Phe Ser Tyr Leu Met His Tyr Arg Ile Leu Leu Ala Gly Cys Ile
          35          40          45
Ser Ser Leu Glu Leu Leu Arg Ile Phe His Gln Cys
          50          55          60

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&lt;210&gt; 41194

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41194

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Val Phe Phe Thr Ser Met Ala Val Ile Tyr Leu Leu Thr Pro Ala Ala
1          5          10          15
Cys Phe Gly Phe Leu Leu Ser Phe Tyr Thr Asn Pro Trp Ile Asp Gln
          20          25          30
Ser Gly Tyr Ile Ala Ala Tyr Gly Ala Met Ala Gly Ile Ser Gly Gly
          35          40          45
Cys Leu Leu Phe Phe Ile Pro Leu Phe Phe Trp Gly Lys Ser Ile Arg
          50          55          60
His Ala Ser Met Lys Trp Ser Leu Val Gln Phe Val Phe Trp Lys Asp
65          70          75          80
Asp Arg Glu Val Gly Glu
          85

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&lt;210&gt; 41195

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41195

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Pro Thr Ser Ser Ile Pro His Ala Asp Ser Arg Ile Ile Leu Leu Ala

```



## 18159

```

1           5           10           15
Gly Phe Pro Gly Val Ile Thr Gln Phe His Leu Glu Leu Ile Pro Tyr
      20           25           30
Pro Lys Arg Gly Phe Arg Ser Ser Gly Tyr Ile Tyr Pro Ile Ser Lys
      35           40           45
Tyr Tyr Glu Ala Phe Ser Trp Ile Val Ala Ile Thr Pro Asp Phe Asp
      50           55           60
Arg Asp Thr Glu Ile Ala Val Val Ser Met Tyr Pro Glu Gly Ser Asn
      65           70           75           80
Glu Ile Cys Leu Phe Val Leu Leu Val Thr Leu Lys His Thr Pro Glu
      85           90           95
Glu Ala Glu Ala Ala Leu Thr Pro Ala Gln Gln Ser Arg Pro Ala Gly
      100           105           110
Thr Ile Glu Glu Trp Phe Cys Arg Glu Asp Ser Leu Glu Asn Gln Tyr
      115           120           125
Val Asn Gln Gly Lys Ala Asn Pro Glu Gly His Arg Tyr Cys Ala Glu
      130           135           140
Asn Ala Tyr Val His Asn Asp Ala Asp Val Pro Lys Val Leu Glu Glu
      145           150           155           160
Ala Phe Thr Thr Leu Pro His Arg Lys Ala Phe Pro Pro Trp
      165           170

```

&lt;210&gt; 41196

&lt;211&gt; 409

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41196

```

Tyr Arg Val Glu Lys Leu Tyr Asp Asn Ala His Ala Phe Ser Leu Ile
1           5           10           15
Pro Ala Phe Cys Phe Ser Asp Phe Asn Leu Glu Phe Thr Leu Asp Val
      20           25           30
Tyr Pro Ser Phe His Cys Leu His Cys Leu Ser Arg Tyr Pro Ile Val
      35           40           45
His Leu Ala Val Ser Met Gly Arg Thr Met Leu Val Cys Leu Val Gly
      50           55           60
Ser Ile Thr Ala Phe Ser Val Leu Thr Asp Leu Ala Ile Ser Ile Thr
      65           70           75           80
Phe Tyr Arg Leu Arg Glu Ser Ala Ser Asn Gly Pro Asn Pro Thr Lys
      85           90           95
Cys Ser Ser Leu Leu Ser Leu Ser Ala Val Asn Phe Leu Leu Val Ser
      100           105           110
Leu Leu Ser Tyr Leu Leu Tyr Ser Glu Ser Glu Pro Gln Ala Thr Glu
      115           120           125
Trp Ile Leu Arg Lys Phe Lys Ala Arg Ala Leu Phe Cys Leu Ile Ile
      130           135           140
Phe Leu Asn Ile Gly Ile Ile Thr Gly Glu Arg Leu Gln His Leu Tyr
      145           150           155           160
Val Ser Lys Pro Lys Ser Ser Ser Ser Ser Val Trp Leu Ser Leu Asn
      165           170           175
Ile Ala His Ala Val Val Trp Thr Ile Ser Ala Tyr Cys Gln Gly Phe
      180           185           190
Leu Cys Ala Leu Ser Phe Val Leu Pro Asp Ile Leu Asn Asn Glu Ser
      195           200           205
Gly Arg Ala Ser Asn Pro Pro Ile Asn Ile Gly Arg Thr Ala Glu Ser
      210           215           220

```

## 18160

Val Phe Ser Thr Thr Asn Leu Ile Ser Pro Gln Ser Pro Gln Trp Arg  
 225 230 235 240  
 Asn Pro Leu Leu Ser Pro Val Pro Ser Phe Leu Asp Pro Leu Pro Ser  
 245 250 255  
 Pro Gln Ser Glu Met Ser Val Arg Thr Ser Ile Leu Arg Ser Pro Leu  
 260 265 270  
 Pro Lys Tyr Cys Thr Cys Lys Asp Pro Glu Pro Leu Phe Val Gln Pro  
 275 280 285  
 Arg Arg Arg Glu Lys Ser Leu Gln Ser Thr Pro Ser Ile Asp Thr Val  
 290 295 300  
 Ile Arg Cys Pro Glu Ser Asn Gly Glu Met Ala Glu Gly Ile Ser Pro  
 305 310 315 320  
 Thr Pro Thr Pro Thr Thr Arg Lys Pro Leu Ile Glu Asp Asn Glu Lys  
 325 330 335  
 Asn Ile Arg Pro Leu Phe Arg Pro Ser Thr Pro His Leu Ser Pro Met  
 340 345 350  
 Pro Asn Met Ser Thr Ala Ile Ile Ala Pro Leu Glu Gly Pro Asn Gln  
 355 360 365  
 Val Ser Val Thr Val Pro Cys Gln Arg Glu Asn Val Asp Pro Gln Leu  
 370 375 380  
 Ser Ser Glu Thr Ala Gln Pro Val Leu Pro Phe Tyr Val Leu Asn Ala  
 385 390 395 400  
 Thr Ala Arg Asn Ser Leu Ala Gln Tyr  
 405

&lt;210&gt; 41197

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41197

Pro Ile Arg Ala Arg Leu Leu Ser Gln Thr Ser His Phe Ser Ala Ser  
 1 5 10 15  
 Ala Glu Ser His Pro Asn Met Lys Ala Leu Val Pro Ile Thr Ser Ala  
 20 25 30  
 Val Leu Gly Thr Thr Ala Val Gly Val Tyr Leu Phe Arg Gln Asn Leu  
 35 40 45  
 Lys Ser Arg Ile Ser Ile Asn Ala Gln His Gly His Leu Pro Arg Ser  
 50 55 60  
 Ile Ser Ser Asn Ile Thr Thr Ala Pro Asp Glu Val Phe Thr Glu Gln  
 65 70 75 80  
 Thr Val Ala Val Phe Asp Ser Ala Ser Ile Ser Val Pro Arg Gly Lys  
 85 90 95  
 Leu Pro Ala Leu Pro Thr Glu Glu Leu Leu Thr Arg Leu Met Arg Arg  
 100 105 110  
 Asn Met Ser Ser Phe Thr Arg Leu Pro Gln Ala Tyr Ile Leu Arg Ala  
 115 120 125  
 Met Ser Thr Glu Ala Glu Lys Pro Ser Phe Lys Ala Ala Asn Ile Glu  
 130 135 140  
 Arg Leu Asp Phe Lys Glu Gly Asp Leu Val Cys Gly Thr Tyr Arg Val  
 145 150 155 160  
 Ile Leu Arg Thr Pro Gly Lys Val Glu Phe Gln Leu Lys Pro Met Gly  
 165 170 175  
 Ala Val Arg Gly Arg Leu Val Thr Thr Ile Thr Glu Lys Asp Asp Arg  
 180 185 190  
 Met Val Ile Met Asn Glu Thr Leu Met Trp Lys Pro Lys Gly Glu Lys

[illegible]

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<210> 41198
<211> 106
<212> PRT
<213> A.fumigatus
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Gln	His	Leu	Ala	Leu	Glu	Arg	Thr	Phe	Leu	Ala	Tyr	Ile	Arg	Thr	Ser
1				5					10					15	
Ile	Ala	Val	Ala	Met	Gln	Gly	Val	Phe	Ile	Ala	Gln	Leu	Phe	Arg	Leu
			20					25					30		
Gln	Ser	Lys	Thr	Ala	Asp	His	Ala	Arg	Leu	Gly	Tyr	Tyr	Arg	Leu	Gly
		35					40					45			
Ile	Pro	Leu	Ala	Val	Thr	Cys	His	Val	Val	Ala	Ile	Leu	Val	Ala	Phe
	50					55					60				
Met	Gly	Ala	His	Arg	Phe	Trp	Arg	Gln	Gln	Ser	Ala	Val	Ala	His	Gly
65					70					75				80	
Lys	Val	Tyr	Ala	Gly	Gly	Trp	Glu	Leu	Asn	Trp	Ile	Gly	Ala	Phe	Ile
				85					90					95	
Gly	Leu	Val	Gly	Met	Leu	Pro	Ser	Phe	Lys						
			100					105							

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<210> 41199
<211> 156
<212> PRT
<213> A.fumigatus
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Arg	Ile	His	Gly	Arg	Ser	Lys	Ser	Phe	Pro	Thr	Phe	Thr	Ser	Arg	Glu
1				5					10					15	
Val	Glu	Ser	Ser	Thr	Leu	His	Val	Leu	Asp	Thr	Cys	Leu	Leu	Ile	Leu
			20					25					30		
Ile	Tyr	Ile	Leu	Asn	Thr	Asn	Leu	Leu	Leu	Pro	Arg	Ile	Ile	Asn	Ile
		35					40					45			
Tyr	Glu	Thr	Cys	Lys	Gln	Lys	Trp	Asn	Arg	Ser	Ile	Ser	Leu	Gly	Ala
	50					55					60				
Arg	Arg	Glu	Asp	Lys	Gln	Thr	Ala	Lys	Arg	Gly	Asp	Ser	Ser	Ile	Glu
65					70					75					80
Leu	Val	Tyr	Arg	Gln	Phe	Phe	Lys	Phe	Ile	Lys	Tyr	Leu	Thr	Pro	Glu
				85					90					95	
Ser	Ser	Ile	His	His	Ala	Val	Asn	Ser	Cys	Ile	His	Leu	Pro	Thr	Ala
			100					105					110		
Val	Ser	Lys	Gly	Ile	Thr	Pro	Phe	Ser	Pro	Phe	Gly	Phe	His	Ile	Asn
		115					120					125			
Val	Ser	Phe	Met	Met	Thr	Ile	Arg	Ser	Ser	Phe	Ser	Val	Ile	Val	Val
	130					135					140				
Thr	Lys	Arg	Pro	Arg	Thr	Ala	Pro	Ile	Gly	Phe	Ser				
145					150					155					

<210> 41200  
 <211> 91  
 <212> PRT  
 <213> A.fumigatus

<400> 41200  
 Pro Thr His Thr Cys Asp Met Ala Ala Pro Cys Arg Ala His Ala Ala  
 1 5 10 15  
 Lys Leu Leu His Leu Pro Ala Glu Val Ile Gln Leu Ile Val Asp His  
 20 25 30  
 Leu Trp Pro Glu Glu Thr Thr Ser Leu Leu Ile Ala Val Pro Lys Leu  
 35 40 45  
 Ala Tyr Leu Val Thr Val Glu Gln Leu Trp Tyr Gln Asp Gly Trp Gly  
 50 55 60  
 Tyr Thr Ile Leu His Cys Ala Val Asp Lys Asn Asp Glu Ala Ile Ala  
 65 70 75 80  
 His Leu Ser Ser Pro Arg Ile Ala Arg Ala Arg  
 85 90

<210> 41201  
 <211> 240  
 <212> PRT  
 <213> A.fumigatus

<400> 41201  
 Ser His Cys Ala Gly Glu Tyr Leu Pro Lys Val Arg Leu Tyr His Val  
 1 5 10 15  
 Val Phe Gln Phe Leu Trp Gly Ser Ile Asp Cys Phe Cys Ser Ile Ile  
 20 25 30  
 Glu Gln Val Ser Arg Tyr Ser Ser Val Pro Val Ala Val Ser Ala Val  
 35 40 45  
 Gln Gln Gln His Tyr Gln Glu His His Val Lys Ile Ser Lys Val Gly  
 50 55 60  
 Ala Asp Trp His His Ser Gly Thr Leu Pro Pro Thr Leu Thr Thr Ala  
 65 70 75 80  
 His Ile Thr Ser Ile Gln Gln Pro Thr Ser Gln Asn Val Pro Ser Glu  
 85 90 95  
 Tyr Ile Leu Lys Asn Gln Ser Leu Glu Cys Leu Val Glu Ile Leu Gln  
 100 105 110  
 Ser Leu Asp Asn Trp Ala Ser Gln Arg Ile Asp Gly Pro Ala Ala Gly  
 115 120 125  
 Val Thr Asn Leu Leu Ser Gln Lys Ser Leu Asp Asn Ser Arg Glu Ser  
 130 135 140  
 Met Asp Thr Asn Ala Ala Thr Phe Leu Ser Ser Pro Arg Val Glu Gly  
 145 150 155 160  
 Thr Asp Gly Ser Thr Gly Arg Ser Thr Pro Val Ala Glu Asp Asp Pro  
 165 170 175  
 Ser Gln Ile Glu Lys Val Lys Gln Arg Lys Thr Ala Leu Met Asn Ala  
 180 185 190  
 Ile Gln Gln Phe Asn Phe Lys Ala Lys Arg Gly Ile Lys Leu Phe Ile  
 195 200 205  
 Gln Glu Gly Phe Ile Arg Ser Asp Ser Pro Glu Asp Ile Ala Ser Phe  
 210 215 220  
 Leu Phe Arg Asn Asp Arg Leu Asp Lys Ala Met Ile Gly Glu Tyr Leu  
 225 230 235 240

<210> 41202  
 <211> 143  
 <212> PRT  
 <213> A.fumigatus

<400> 41202

Gly	Gly	Leu	Met	Thr	Ala	Val	Asn	Arg	Ser	Thr	Ala	Gly	Phe	Met	Pro
1				5					10					15	
Met	Leu	Leu	Met	Val	Lys	Val	Pro	Pro	Trp	Tyr	Ser	Ser	Gly	Leu	Ser
			20					25					30		
Leu	Phe	Ser	Arg	Ala	Arg	Leu	Pro	Arg	Ser	Leu	Ile	Trp	Leu	Glu	Met
			35				40					45			
Leu	Glu	Arg	Pro	Arg	Leu	Cys	Thr	Phe	Leu	Thr	Thr	Gly	Val	Ile	Arg
	50					55					60				
Pro	Leu	Gly	Val	Ala	Thr	Ala	Thr	Leu	Ile	Ser	Thr	Val	Leu	Cys	Trp
65					70					75				80	
Arg	Met	Thr	Thr	Trp	Pro	Phe	Ser	Ser	Arg	Gln	Leu	Glu	Leu	Thr	Ala
				85					90					95	
Gly	Thr	Phe	Ile	Arg	Ala	Ala	Ala	Gln	Ala	Leu	Thr	Arg	Lys	Ser	Leu
			100					105					110		
Thr	Glu	Ser	Leu	Tyr	Leu	Pro	Ser	Ala	Glu	Ala	Leu	Arg	Ala	Trp	Arg
			115				120					125			
Ser	Phe	Arg	Ser	Phe	Val	Thr	Asp	Arg	Val	Val	Glu	Thr	Lys	Lys	
	130					135					140				

<210> 41203  
 <211> 738  
 <212> PRT  
 <213> A.fumigatus

<400> 41203

Met	Ala	Asp	Val	Glu	Asn	Gly	Ser	Ser	Gln	Glu	Pro	Asn	Gln	Thr	Leu
1				5					10					15	
Leu	Val	Leu	Pro	Gln	Gly	Asp	Asn	Lys	Glu	Asn	Thr	Val	Asp	Thr	Ser
			20					25					30		
Thr	Pro	Val	Glu	Thr	Glu	Asp	Ala	Val	Glu	Glu	Asp	Ser	Lys	Pro	Pro
			35				40					45			
Leu	Pro	Leu	Glu	Ser	Gln	Arg	Gln	Lys	Ile	Asp	Leu	Asp	Glu	Val	Thr
	50					55				60					
Asp	Ser	Asn	Ser	Pro	Gln	Ile	Lys	Val	Asp	Ser	Ser	Glu	Ile	Thr	Glu
65					70					75				80	
Thr	Ala	Asp	Arg	Pro	Pro	Ser	Pro	Pro	Asn	Asp	Ala	Ala	Asp	Ala	Glu
				85					90					95	
Arg	Pro	Glu	Glu	His	Gly	Ser	Pro	Gln	Arg	Asp	Leu	Lys	Ala	Asn	Asp
			100					105					110		
Val	Thr	Asn	Ser	Gly	Asn	Asp	Gln	Ala	Glu	Ala	Pro	Pro	Gly	Asp	Ser
			115				120					125			
Gly	Asp	Lys	Gln	Asp	Asp	Gly	Ala	Val	Pro	Gln	Phe	Glu	Leu	Thr	Pro
	130					135					140				
Gly	Thr	Arg	Leu	Arg	Ser	Asp	Ser	Arg	Ser	Thr	Thr	Ala	Thr	Tyr	Ala
145					150					155				160	
Thr	Gln	Arg	Ser	Val	Pro	Val	Ser	Ser	Ala	Val	Phe	Ile	Val	Asn	Ala
				165					170					175	
Leu	Glu	Thr	Ile	Gly	Ala	Ser	Lys	Glu	Ala	Lys	Lys	Ser	Lys	Glu	Leu
			180					185				190			
Asp	Asp	Ala	Val	Lys	Ser	Ala	Leu	Ala	Asn	Val	Lys	Gln	Ser	Asp	Arg

195	200	205
Leu Pro Ile Asp Pro Glu	Leu Ile Phe Arg Pro	Leu Gln Leu Ala Thr
210	215	220
Lys Ser Leu Ser Ile Pro	Leu Gln Val Thr Ala	Leu Asp Cys Ile Gly
225	230	235
Lys Leu Ile Thr Tyr Ser	Tyr Phe Ala Phe Pro	Ser Ser Gln Asp Arg
245	250	255
Lys Ser Ser Glu Ile Glu	Ala Thr Pro Glu Gln	Thr Pro Leu Ile Glu
260	265	270
Arg Ala Ile Asp Ala Ile	Cys Asp Cys Phe Glu	Asn Glu Ala Thr Pro
275	280	285
Phe Glu Ile Gln Gln Gln	Ile Ile Lys Ser Leu	Leu Ala Ala Val Leu
290	295	300
Asn Asp Lys Ile Val Val	His Gly Ala Gly Leu	Lys Ala Val Arg
305	310	315
Gln Ile Tyr Asn Ile Phe	Ile Tyr Ser Lys Ser	Asn Gln Asn Gln Gln
325	330	335
Ile Ala Gln Gly Ser Leu	Thr Gln Met Val Ser	Thr Val Phe Asp Arg
340	345	350
Val Arg Val Arg Leu Glu	Leu Lys Glu Leu Arg	Leu Arg Glu Gly Glu
355	360	365
Lys Gly Gln Glu Asn Thr	Pro Asp Ala Ala Thr	Ala Glu Thr Val Glu
370	375	380
Val Pro Leu Ser Thr Asp	Gln Asp Gln Thr Ser	Asp Ala Ala Ser Val
385	390	395
Val Ala Pro Asp Gln Pro	Val Ala Lys Glu Pro	Gly Glu Lys Leu Thr
405	410	415
Leu Gln Ser Phe Glu Ser	Gly Lys Asp Val Thr	Ser Val Ala Asp Asn
420	425	430
Ala Pro Thr Met Val Thr	Arg Ala Lys Leu Ser	Gln Lys Arg Thr Gln
435	440	445
Ser Leu Ser Ser Thr Ser	Gly Glu Glu Lys Glu	Asp Gly Asp Gly Thr
450	455	460
Thr Asp Asp Asp Glu Asp	Glu Ile Tyr Ile Lys	Asp Ala Phe Leu Val
465	470	475
Phe Arg Ala Leu Cys Lys	Leu Ser His Lys Ile	Leu Ser His Glu Gln
485	490	495
Gln Gln Asp Leu Lys Ser	Gln Asn Met Arg Ser	Lys Leu Leu Ser Leu
500	505	510
His Leu Leu His Tyr Leu	Ile Asn Asn His Val	Ser Val Phe Thr Ser
515	520	525
Pro Leu Leu Thr Ile Arg	Asn Asn Ser Asn Ser	Ser Asp Ala Met Thr
530	535	540
Leu Leu Gln Ala Val Arg	Pro His Leu Cys Leu	Ser Leu Ser Arg Asn
545	550	555
Gly Ser Ser Ser Val Pro	Arg Val Phe Glu Val	Cys Cys Glu Ile Phe
565	570	575
Trp Leu Met Leu Lys His	Met Arg Val Met Met	Lys Val Cys Leu Cys
580	585	590
Ala Tyr Leu Leu Ser Leu	Thr Gly Ser Asn Ser	Ser Gln Lys Glu Leu
595	600	605
Glu Val Phe Leu Lys Glu	Ile Tyr Leu Ala Ile	Leu Glu Lys Arg Asn
610	615	620
Ser Pro Ala Phe Gln Lys	Gln Tyr Phe Met Glu	Leu Val Glu Arg Leu
625	630	635
Ala Asp Asp Pro Arg Ala	Leu Val Glu Ile Tyr	Leu Asn Tyr Asp Cys

## 18165

[illegible]

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<210> 41204
<211> 171
<212> PRT
<213> A.fumigatus
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<400>	41204															
Leu	Tyr	His	Ser	Tyr	Ser	Thr	Trp	His	His	Gly	Cys	Leu	Ser	Cys	Pro	
1				5					10					15		
Asn	Ala	His	Ser	Gln	Arg	His	Val	Val	Lys	Arg	Arg	Pro	Leu	Arg	Glu	
			20					25					30			
Ala	Ala	Ser	Arg	Tyr	Ser	Gln	Ile	Gln	Gly	Cys	Cys	Pro	Val	Trp	Phe	
		35				40						45				
Thr	Leu	Asp	Ile	Ser	Trp	Ser	Asn	Arg	Ile	Asp	Asn	Asp	Thr	Asp	Gln	
	50					55					60					
Ile	Tyr	Arg	Pro	Gln	Leu	Pro	Ala	Leu	Ser	Ala	Leu	Ser	Arg	Phe	Tyr	
65					70					75					80	
Ala	Ser	Lys	Cys	Met	Ser	Ser	Arg	Phe	Phe	Leu	Leu	Ser	Val	Thr	Phe	
				85										95		
Thr	His	Cys	Arg	Leu	Asp	Pro	Asn	His	Ala	Pro	Leu	Gln	Pro	Phe	Arg	
			100					105					110			
Pro	Thr	Pro	Ser	Ser	Ala	Cys	Leu	Pro	Ser	Arg	Pro	Arg	Cys	Pro	Gln	
		115					120					125				
Glu	Thr	Leu	Glu	Leu	Gly	Arg	Arg	Arg	Pro	Val	Ile	Pro	Cys	Arg	Arg	
	130					135						140				
Val	Met	Phe	Ser	Trp	Lys	Ser	Arg	Pro	Ile	Arg	His	Arg	Trp	Thr	Leu	
145					150						155				160	
Asn	Phe	Lys	Arg	Lys	Val	Ser	Trp	Pro	Arg	Phe						
				165						170						

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<210> 41205
<211> 376
<212> PRT
<213> A.fumigatus
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<400> 41205
Ala Glu Lys Asn Phe Arg Gly Pro Leu Ser Pro Ile Ala Asn Ala Gln
1          5          10          15
Lys Gln Pro Ile Ala Val Leu Val Glu Glu Gly Thr Asp Val Ala Pro
          20          25          30
Phe Glu Ser Phe Thr Leu Glu Asp Ala Gly Gly Asp Lys Gly Thr Ala
          35          40          45
Pro Pro Lys Glu Ser Lys Glu Glu Pro Lys Ala Glu Ala Ala Pro Ala

```

18166

50		55		60	
Pro Ser Thr	Pro Glu	Pro Ala	Pro Ala	Ala Gln	Glu Pro Glu Thr Ser
65		70		75	80
Thr Glu Lys	Leu Gln	Pro Ser	Leu Asp	Arg Glu	Pro Asn Ile Ser Pro
	85			90	95
Ala Ala Lys	Ala Leu	Ala Leu	Glu Lys	Gly Val	Pro Ile Lys Ala Leu
	100		105		110
Lys Gly Thr	Gly Arg	Gly Gly	Gln Ile	Thr Lys	Glu Asp Val Glu Lys
	115		120		125
Tyr Lys Pro	Ser Ile	Ser Ala	Ala Ala	Ala Ala	Pro Thr Tyr Glu Asp
	130		135		140
Ile Pro Leu	Thr Ser	Met Arg	Lys Thr	Ile Ala	Thr Arg Leu Gln Gln
145		150		155	160
Ser Met Arg	Glu Asn	Pro His	Phe Phe	Val Ser	Thr Thr Leu Ser Val
	165			170	175
Thr Lys Leu	Leu Lys	Leu Arg	Gln Ala	Leu Asn	Ala Ser Ala Glu Gly
	180		185		190
Lys Tyr Lys	Leu Ser	Val Asn	Asp Phe	Leu Val	Lys Ala Cys Ala Ala
	195		200		205
Ala Leu Met	Lys Val	Pro Ala	Val Asn	Ser Ser	Trp Arg Glu Glu Asn
	210		215		220
Gly Gln Val	Val Ile	Arg Gln	His Asn	Thr Val	Asp Ile Ser Val Ala
225		230		235	240
Val Ala Thr	Pro Asn	Gly Leu	Ile Thr	Pro Val	Val Lys Asn Val His
	245		250		255
Ser Leu Gly	Leu Ser	Ser Ile	Ser Asn	Gln Ile	Lys Asp Leu Gly Lys
	260		265		270
Arg Ala Arg	Glu Asn	Lys Leu	Lys Pro	Glu Glu	Tyr Gln Gly Gly Thr
	275		280		285
Phe Thr Ile	Ser Asn	Met Gly	Met Asn	Pro Ala	Val Glu Arg Phe Thr
	290		295		300
Ala Val Ile	Asn Pro	Pro Gln	Ala Asp	Ile Leu	Ala Val Gly Thr Thr
305		310		315	320
Arg Lys Val	Ala Val	Pro Val	Glu Thr	Glu Glu	Gly Thr Ser Val Glu
	325		330		335
Trp Asp Asp	Gln Ile	Ile Val	Thr Gly	Ser Phe	Asp His Lys Val Val
	340		345		350
Asp Gly Ala	Val Gly	Ala Glu	Trp Ile	Lys Glu	Leu Lys Lys Ile Val
	355		360		365
Glu Asn Pro	Leu Glu	Leu Leu	Leu Leu		
370		375			

<210> 41206

<211> 84

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (73)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41206

Pro Cys Ala	Ser Thr	Ala Phe	Pro Pro	His Thr	Ile Ile	Ser Met	Pro
1	5	10	15				
Ala Leu Ser	Pro Thr	Met Ser	Ala Gly	Asn Ile	Gly Ala	Trp Gln	Lys



18167

	20		25		30										
Lys	Ala	Gly	Asp	Ser	Leu	Ser	Pro	Gly	Asp	Val	Leu	Val	Glu	Ile	Glu
	35		40		45										
Thr	Asp	Lys	Ala	Gln	Met	Asp	Phe	Glu	Phe	Gln	Glu	Glu	Gly	Val	Leu
	50		55		60										
Ala	Lys	Val	Leu	Lys	Glu	Thr	Gly	Xaa	Lys	Asp	Val	Ala	Val	Gly	Thr
65			70		75									80	
Val	Cys	Ile	Gly												

<210> 41207

<211> 239

<212> PRT

<213> A.fumigatus

<400> 41207

Leu	Val	Asp	Ala	Tyr	Leu	Gly	Leu	Lys	Ile	Trp	Gly	Lys	Met	Trp	Gly
1		5		10		15									
Thr	Cys	Ser	Arg	Tyr	Arg	Tyr	Ile	Ser	Gly	Ser	Ile	Glu	Thr	Leu	Arg
	20		25		30										
Asp	Lys	Lys	Asp	Gly	Pro	Val	Tyr	Arg	Arg	Glu	Arg	Ser	Asp	Ser	Pro
	35		40		45										
Tyr	Gln	His	Gly	Ser	Ile	Arg	Lys	His	Thr	Met	Ala	Ser	Leu	Asp	Thr
	50		55		60										
Lys	Tyr	Pro	Val	Glu	Thr	Thr	Glu	Pro	Ala	Leu	Ala	Lys	Asp	Asp	Ser
65			70		75									80	
Pro	Ala	Gly	Ala	Asp	Ile	Asn	Pro	Arg	Ala	Glu	Arg	Ala	Leu	Val	Trp
	85		90		95										
Lys	Phe	Asp	Leu	Arg	Val	Leu	Pro	Val	Leu	Ala	Val	Met	Tyr	Leu	Phe
	100		105		110										
Asn	Ser	Leu	Asp	Lys	Ser	Asn	Val	Gly	Asn	Ala	Lys	Thr	Ala	Gly	Leu
	115		120		125										
Glu	Lys	Thr	Leu	Asn	Leu	Lys	Gly	Asn	Glu	Tyr	Asn	Leu	Ile	Leu	Ser
	130		135		140										
Ile	Phe	Phe	Ile	Pro	Tyr	Val	Leu	Thr	Ala	Pro	Phe	Leu	Gly	Ile	Leu
145			150		155									160	
Gly	Lys	Lys	Tyr	Gly	Pro	Asn	Arg	Val	Leu	Pro	Cys	Met	Met	Phe	Ala
	165		170		175										
Phe	Gly	Leu	Cys	Thr	Ile	Leu	Val	Val	Ala	Val	Phe	Asn	Phe	Ser	Gly
	180		185		190										
Leu	Leu	Ala	Ile	Arg	Trp	Phe	Leu	Gly	Met	Ala	Glu	Ser	Ala	Phe	Phe
	195		200		205										
Pro	Leu	Val	Ile	Tyr	Tyr	Leu	Thr	Thr	Tyr	Val	Arg	Leu	Ala	Ser	Leu
	210		215		220										
Gln	Ala	Ser	Lys	Leu	Thr	Glu	Ala	Asp	Ser	Thr	Ala	Gly	Ala	Asn	
225			230		235										

<210> 41208

<211> 171

<212> PRT

<213> A.fumigatus

<400> 41208

His	Pro	Gly	Ala	Thr	Phe	Ser	Ser	Ser	Lys	Gly	Glu	Ala	Pro	Ser	Ser
1		5		10										15	
Trp	His	Ser	Ser	His	Tyr	Gly	Ile	Ser	Leu	Ala	Arg	Pro	Arg	Thr	His

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<210> 41209
<211> 85
<212> PRT
<213> A.fumigatus
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<210> 41210
<211> 183
<212> PRT
<213> A.fumigatus
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<400> 41210															
Leu	Ile	Phe	Ile	Ser	Ser	Thr	Ala	Ile	Glu	Ala	Val	Lys	Asp	Ala	Ile
1				5					10					15	
Ala	Thr	Arg	Thr	Ser	Ser	Gln	Val	Ile	Tyr	Tyr	Tyr	Cys	Ser	Phe	His
			20					25					30		
Leu	Thr	Thr	Ser	Gln	Glu	Leu	Val	Tyr	Leu	Leu	Gly	Ala	Leu	Leu	Val
		35					40					45			
Gln	Leu	Ser	Glu	Ser	Tyr	Pro	Glu	Ile	Leu	Asp	Glu	Leu	Gln	Glu	Ser
	50					55					60				
Phe	Lys	Arg	Arg	Ala	Leu	Pro	Gln	Pro	Asp	Glu	Leu	Val	Ser	Leu	Leu
65					70					75					80
Leu	Lys	Phe	Thr	Lys	Pro	Leu	Ser	Glu	Leu	Phe	Ile	Val	Val	Asp	Ala

## 18169

	85		90		95
Ile Asn Glu Ser Arg Lys Ser Ala Gln Ile Leu Asp Ala Leu Leu Thr					
	100		105		110
Leu Leu Glu Ser Ser His Asn Ile Arg Ile Met Val Thr Ser Thr Thr					
	115		120		125
Leu Pro Pro Val Ser Asn Pro Thr Ile Asn Ile Leu Arg Val Gln Met					
	130		135		140
Lys Pro Ser Thr Asn Arg Thr Asp Ile Glu Ala Ile Leu Asp Thr Gln					
145		150		155	160
Leu Thr Ser Val Pro Ala Leu Gln Arg Leu Pro Glu His Ile Lys Cys					
	165		170		175
Arg Ile Lys Thr Cys Leu Ala					
	180				

&lt;210&gt; 41211

&lt;211&gt; 238

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41211

Arg Ile Arg Gln Ser Lys Arg Ser Ser His Arg Thr Gln Ser Asn Thr					
1	5		10		15
Gly Gln Gln Arg Thr Thr Ala Trp Thr Arg Pro Arg Gly Ser Arg Arg					
	20		25		30
Ile Trp Gln Lys Cys Leu Thr Tyr Leu Met Phe Asp Asp Phe Lys Gln					
	35		40		45
Pro Cys Ser Asp Leu Arg Ser Leu Thr Lys Arg Arg Lys Thr Tyr Pro					
	50		55		60
Leu Leu Lys Tyr Ala Ala Glu Asn Trp Ala Ser His Cys Ser Pro Ser					
65		70		75	80
Trp Pro Pro Gly Tyr Pro Leu Val Asp Ala Glu Ile Asp Gly Ile Leu					
	85		90		95
Ser Phe Phe Asp Thr Arg His Leu Pro Gly Gly Gly Asn Tyr Thr Ser					
	100		105		110
Trp Thr Gln Met Leu Leu Ser Glu Ala Pro Ala Glu Gln Ala Arg Arg					
	115		120		125
Thr Glu Pro Leu Tyr Tyr Ala Ala Ser Tyr Gly Ile Ile Pro Leu Val					
	130		135		140
Asp Arg Leu Ile Gln Ser Gly Ala Asn Val Asn Ala Ala Gly Gly Arg					
145		150		155	160
Asn Asp Ala Thr Pro Leu Ile Val Ala Cys Phe Arg Gly Gln Glu Ala					
	165		170		175
Thr Val Gln Arg Leu Leu Glu Ala Gly Ala Asp Pro Ile Ile Gln Asp					
	180		185		190
Ala Ala Glu Met Cys Ser Leu Glu Trp Ala Val Arg Arg Gln His Arg					
	195		200		205
Gly Thr Val Glu Ile Leu Leu Ser His Met Arg Lys Ser Met Gly Ile					
	210		215		220
Gly Ser Ser Asp Leu Cys Trp Gln Cys Arg Ala Cys Lys Tyr					
225		230		235	

&lt;210&gt; 41212

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41212

Thr Asp Arg Ser Arg Phe Tyr Arg Arg Gly Glu Leu Ala Arg Arg Leu  
 1 5 10 15  
 Ala Ile Phe Tyr Ala Ala Gln Ser Ile Ala Ser Ala Phe Ser Gly Leu  
 20 25 30  
 Leu Ala Phe Gly Val Phe Arg Ile Gln Ser Gly Pro Leu Ala Ser Trp  
 35 40 45  
 Arg Tyr Leu Phe Leu Ile Glu Gly Gly Gly Thr Ile Leu Val Ala Leu  
 50 55 60  
 Phe Thr Leu Trp Tyr Leu Pro Arg Ser Ala Ala His Ala Ser Phe Leu  
 65 70 75 80  
 Thr Pro Asp Glu Lys Gln Leu Ala Tyr Leu Arg Leu Gln Arg Asp Ser  
 85 90 95  
 Ser Ala Ile Val Asn Glu Lys Leu Asn Leu Arg Asp Ala Phe Lys Ile  
 100 105 110  
 Phe Arg His Gly Thr Ser Trp Leu Ile Leu Ala Ile Gln Ile Cys Leu  
 115 120 125  
 Gly Val Pro Leu Gln Ser Val Gln Leu Phe Leu Pro Ser Ile Ile Lys  
 130 135 140  
 Arg Leu Gly Tyr Asp Thr Val Lys Thr Asn Leu Tyr Thr Val Ala Pro  
 145 150 155 160  
 Asn Val Ser Gly Ala Ala Met Leu Leu Ile Leu Ala Phe Cys Ser Asp  
 165 170 175  
 Trp Thr Arg Trp Arg Phe Pro Phe Val Ala Leu Gly Phe Leu Phe Thr  
 180 185 190  
 Phe Ile Gly Phe Val Ile Tyr Ala Ala Ile Asp Val Glu Ala Asp Ile  
 195 200 205  
 Asn Val Ala Tyr Phe Ala Ser Phe Met Met Thr Trp Tyr Val Leu Leu  
 210 215 220  
 Ser Leu Ser Leu Ser Asn Pro His Val Ile Lys Leu Ala Leu Ser Cys  
 225 230 235 240  
 Ala Gln Gly His Leu Arg Ala Ile Gly Pro Pro Gly Arg Leu Val Gln  
 245 250 255  
 Gln Gln His Arg Lys Arg Gly Pro Pro Arg Cys Ala Asn Gln His Cys  
 260 265 270  
 Gly Pro Arg Arg Glu Pro His Gly Arg Arg Gln Leu Glu His Leu Pro  
 275 280 285  
 Glu Ser Gly Arg Pro Ala Val Tyr Ala Cys Ala Asp His His Gly Val  
 290 295 300  
 Val Arg Gly Ala Arg Gly Phe Cys  
 305 310

&lt;210&gt; 41213

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41213

Val Leu Ser Trp Trp Ser Thr Val Leu Ala Asn Lys Val Val Tyr Asn  
 1 5 10 15  
 Asn Gln Pro Pro Pro Asp Pro Gln Glu Val Ser Met Met Leu Val Gln  
 20 25 30  
 Phe Arg Gln Glu Leu Asp Asp Trp Arg Thr Ala Ala Pro Val Tyr Pro  
 35 40 45  
 Pro Ala Leu Leu Tyr Ser Thr Ser Tyr Tyr Asp Tyr Leu Tyr Tyr Thr  
 50 55 60

## 18171

Thr Leu Leu Leu Met Tyr Arg Pro Ser Pro Arg Asn Pro Thr Pro Asp  
 65 70 75 80  
 Ala Thr Ser Ile Val Ser Cys Gly Asp Ser Ser Ile Gln Val Ile Arg  
 85 90 95  
 Ser Tyr Trp Asp Ser Tyr Ser Val Gly Lys Ile Lys Trp Ile Trp Leu  
 100 105 110  
 Thr Leu Asn Gln Thr Tyr Phe Ala Gly Ile Thr Ile Leu Trp Cys Leu  
 115 120 125  
 Glu Gln Asn Ser Arg Ala Leu Arg Asp Gly Arg Pro Pro Leu Trp Gln  
 130 135 140  
 Pro Asp Glu Gln Met Met Arg Arg Ala Ile Gln Ala Val Ile Val Leu  
 145 150 155 160  
 Leu Glu Glu Phe Gly Lys Arg Arg Pro Gly Val Glu Arg Leu Gly Glu  
 165 170 175  
 Thr Phe Arg Cys Gln Ser Ser Met Ile Phe Ser Gln Met Ala Tyr Gln  
 180 185 190  
 Gln Gln Gln Arg Gln Gln His Pro Gln Gln Glu Thr Pro Tyr Pro Pro  
 195 200 205  
 Gln Gln Pro Pro Leu Pro Pro Thr Pro Pro Ser Ser Leu Pro Ala Ile  
 210 215 220  
 Pro Pro Pro Pro Val Pro Leu Ala Pro Met Leu Asp Asp Val Leu Leu  
 225 230 235 240  
 Val Asp Gly Ile Pro Arg Gln Ile Asp Pro Gln Leu Ala Glu Gln Leu  
 245 250 255  
 Phe Tyr Ser Tyr Asp Trp Phe Gln Glu Glu Met Ala Thr Tyr Tyr Thr  
 260 265 270  
 Leu

<210> 41214  
 <211> 504  
 <212> PRT  
 <213> A.fumigatus

<400> 41214  
 Leu Ile Thr Lys Leu Pro Pro Ser Ser Leu Ala Ser Asp Arg Tyr Gly  
 1 5 10 15  
 Leu Ser Phe Glu His Ala Phe Arg Leu Ser Arg Pro Thr Pro Val Thr  
 20 25 30  
 Ala Thr Thr Met Ala Ala Gly Ser Ser Ala Arg Asp Lys Glu Phe Arg  
 35 40 45  
 Asp Gln Leu Gly Lys Phe Arg Leu Glu Ser Val Val Thr Pro Leu Pro  
 50 55 60  
 Pro Leu Gln Pro Ser Thr Ser Ser Ser Gln Ser Lys Ser Pro Pro Arg  
 65 70 75 80  
 Ser Val Pro Pro Leu Phe Pro Pro Pro Asn Ser Thr Thr Ser Val Ala  
 85 90 95  
 Ser Pro Leu Gln Pro Ser His Gly Thr Arg Pro Lys Arg Val Ser Thr  
 100 105 110  
 Ala Cys Asp Phe Cys Arg Lys Arg Lys Lys Cys Asp Phe Arg Tyr  
 115 120 125  
 Pro Asn Cys Ser Ala Cys Thr Arg Ala Gly Val Arg Cys Thr Val Pro  
 130 135 140  
 Pro Pro Gly Pro Gln Ile Ala Ser Ala Ser Val Pro Arg Asp Gln Leu  
 145 150 155 160  
 Glu Asn Leu Gln Lys Arg Val Glu Trp Leu Glu Asp Val Leu Arg Arg

## 18172

165 170 175  
 Lys Thr Gly Leu Ser Val Ala Gly Ile Pro Thr Gly Ser Asn Val Asp  
 180 185 190  
 Gly Glu Val Asp Pro Asp Trp Trp Tyr Gln Val Pro Ala Ile Met Ala  
 195 200 205  
 Arg Tyr Ser Asn Arg His Ser Ile Gly Ala Gly Ser Val Ala Thr Ser  
 210 215 220  
 Ser Pro Ala Gly Ser Gly Arg Gly Ser Ser Thr Gly Ala Pro Ala Ser  
 225 230 235 240  
 Asp Thr Ser Gly Phe Gly Thr Glu Leu Pro Asn Val Gly Glu Ile Phe  
 245 250 255  
 Arg Asp Gln Leu Glu His Arg Arg Pro Ser Ile Ala Arg Pro Thr Val  
 260 265 270  
 Ser Ala Pro Arg Val Val Arg Leu Pro Ser Leu Glu Glu Ala Glu Arg  
 275 280 285  
 Ile Ala Gly Asn Tyr Phe Asp Ser Leu Gly Tyr Gln Tyr Pro Phe Leu  
 290 295 300  
 Ser Arg Pro Asp Phe Thr Leu Leu Arg His Ile Tyr Ala Gly Gly  
 305 310 315 320  
 Val Pro Thr Pro Glu Asp His Tyr Ser Tyr His Ile Thr Ile Ser Ile  
 325 330 335  
 Gly Leu Leu Ile Gly Ser Ala Asp Glu Ala Gln Ile Asp Glu Phe Tyr  
 340 345 350  
 Arg Ala Ser Gln Gln Thr Leu Ser Leu Ala Leu Gln Asn Glu Asp Leu  
 355 360 365  
 Ala Ala Val Arg Ala Leu Leu Ser Leu Ala Leu Tyr Thr Met Phe Ala  
 370 375 380  
 Thr Thr Gly Pro Ser Val Trp His Val Leu Gly Thr Ala Met Arg Leu  
 385 390 395 400  
 Ala Thr Ser Leu Gly Leu His Lys Met Arg Ser Ser Ala Ser Leu Val  
 405 410 415  
 Glu Glu Glu Met Ala Lys Arg Ala Phe Trp Ser Leu Tyr Asn Leu Asp  
 420 425 430  
 Arg Leu Ile Ala Ser Thr Leu Gly Arg Pro Leu Gly Ile Ala Asp Glu  
 435 440 445  
 Asp Ile Ser Val Gly Leu Pro Arg Glu Phe Asn Asp Asp Trp Thr Glu  
 450 455 460  
 Val Pro Gly Gly Ser Thr Met Thr Ile Pro Val Gln Val Val Lys Leu  
 465 470 475 480  
 Arg Arg Leu Phe Ser Arg Ile Tyr Arg Tyr Cys Glu Phe Phe His Gly  
 485 490 495  
 Gly Leu Pro Phe Trp Leu Thr Lys  
 500

&lt;210&gt; 41215

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41215

Asn Cys Thr Val Ser Asn Cys Asn Gln Cys Ser Val Trp Ala Gly Glu  
 1 5 10 15  
 Asn Gly Leu Leu Ser Leu Leu Asp Tyr Lys Thr Tyr Arg Phe Leu Thr  
 20 25 30  
 Ala Ala Phe Ile Thr Tyr Leu Cys Arg Arg Leu Leu His Gly Leu Ala  
 35 40 45

## 18173

Val Leu Ser Leu His Ser Met Ser Val Thr Asn Leu Pro Ala Thr Tyr  
 50 55 60  
 Leu Val Thr Glu Leu Trp Ala Leu Ala Thr Cys  
 65 70 75

<210> 41216

<211> 76

<212> PRT

<213> A.fumigatus

<400> 41216

Glu Ser Ser Ser Gly Arg Pro Gly Leu Thr Leu Ser Pro Ser Gln Thr  
 1 5 10 15  
 Gln Ser Ile Asn Met Met Leu Leu Asp Leu Lys Gln Val Ala Val  
 20 25 30  
 Leu Leu Ala Ser Ala Ser Leu Ala Gln Ala Ala Val Gln Gly Phe Asp  
 35 40 45  
 Ile Ser His Tyr Gln Ser Ser Val Asn Phe Ala Ala Tyr Asn Ser  
 50 55 60  
 Gly Ala Arg Phe Val Met Ile Lys Val Cys Phe Leu  
 65 70 75

<210> 41217

<211> 489

<212> PRT

<213> A.fumigatus

<400> 41217

Gly Phe Val Gly Gln Ile Lys Phe Ile Gly Ala Glu Val Ala Thr Leu  
 1 5 10 15  
 Thr Ala Arg Pro Arg Gln Thr Ser Phe Lys Asp Leu Val Asn Lys Phe  
 20 25 30  
 Asn Gln Thr Val Asp Gln Val Leu Pro Leu Pro Thr Thr Ser Ser Ser  
 35 40 45  
 Ala Ser Lys Ser Pro Ser Arg Ala Pro Ser Pro Ile Gly Leu Val Asp  
 50 55 60  
 Ser Thr Val Arg Pro Arg Thr Pro Ser Gln Leu Arg Glu Leu Arg Asp  
 65 70 75 80  
 Leu Pro Lys Ala Arg Arg Glu Pro Pro Ser Arg Trp Lys Ser Ile Asp  
 85 90 95  
 Arg Ser Gln Glu Asp Phe Leu Ser Arg Ser Ser Gln Ala Gly Val Val  
 100 105 110  
 Asn Asn Ser Ala Leu Glu Thr Pro Glu Ala Ser Leu Pro Arg Arg Pro  
 115 120 125  
 Phe Gly Gly Leu Leu Thr Val Asp Thr Gly Val Pro Arg Ser Gly Leu  
 130 135 140  
 Gly Ile Pro Ala His Leu Arg Arg Arg Gly Ser Glu Gly Ser Ile Pro  
 145 150 155 160  
 Ser Pro Asn Pro Ala Leu Leu Asp Asn Pro Asp Arg Ser Ala Gly Leu  
 165 170 175  
 Thr Pro Leu Thr Pro Thr Ala Trp Tyr Leu Gly Arg Thr Pro Phe Leu  
 180 185 190  
 Glu Ala Val Ser Thr Gly Glu Gly Gly Ser Ser His Arg Arg Thr Arg  
 195 200 205  
 Ser Asp Leu Ser Gly Val Leu Pro Val Gly Val Val Ala Gln Ser Pro  
 210 215 220

## 18174

Glu Ser His Met Ala Val Leu Ser Pro Leu His Pro Gly Leu Gly Gly  
 225 230 235 240  
 Ser Leu Glu Ser Ser His Ser Lys Ser Arg Ile Pro Ile Pro Ser Thr  
 245 250 255  
 Arg Leu His Thr Ala Ser Val Ala Glu Asp Cys Ser Arg Leu Lys Ile  
 260 265 270  
 Asp Pro Leu Ser Asn Asn Arg Phe Asp Val Gln Val Pro Leu Pro Pro  
 275 280 285  
 Lys Gly Ile Ser Arg Leu Pro Lys Pro Ser Pro Lys Ser Pro Pro Ala  
 290 295 300  
 Val Ala Asp Tyr Asp Arg Thr Pro Ile Gly Met Thr Ser Pro Arg Arg  
 305 310 315 320  
 Arg Glu Met Thr Tyr Gly Arg Gly Ser Arg Arg Gly Thr Glu Arg Asn  
 325 330 335  
 Thr Leu Leu Glu Ala Tyr Ile Ala Ser Pro Pro Lys Lys Ser Pro Pro  
 340 345 350  
 Leu Arg Ser Ser Arg Pro Arg Gln Pro Val Ser Gln Thr Asn Ser Thr  
 355 360 365  
 Thr Ser Arg Ser Arg Val Val Glu Thr Val Ser Asn Leu Gln Arg Gln  
 370 375 380  
 Leu Asn Arg Asp Gln Asp Leu Arg Ser Ser Arg Thr Arg Gly Arg Arg  
 385 390 395 400  
 Leu Pro Glu Leu Gly Asn Val Asp Phe Ala Thr Arg Arg Gln Arg Ile  
 405 410 415  
 Gln Gln Ala Phe Asn Arg Thr Val Gln Glu Asn Glu Arg Lys Glu Glu  
 420 425 430  
 Glu Ala Ala Gln Leu Gln Leu Arg Ala Lys Ala Gln Glu Ser Gln Arg  
 435 440 445  
 Ala His Asp Glu Pro Thr Gly Ser Glu Gln Asn Pro Gln Gly Asp Thr  
 450 455 460  
 Gly Ile Asp Arg Ser Leu Pro Ala Asp Cys Asn Ser Asp Val Asn Glu  
 465 470 475 480  
 Ile Ser Thr Gly Ala Asp His Glu Glu  
 485

&lt;210&gt; 41218

&lt;211&gt; 894

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41218

Arg Leu Thr Leu Asp Asp Gly Gly Ser Ser Gln Glu Pro Pro Arg Leu  
 1 5 10 15  
 Gln Ile Asp Thr Asn Val Ala Val His Asp Thr Ala Ala Lys Asp Pro  
 20 25 30  
 Asn Ala His Pro Met Thr Met Asp Ser Pro Thr Leu Gly Leu Pro Asn  
 35 40 45  
 Ile Ser Thr Gly Glu His Ala Ile Arg Ile Ser Ser Pro Gly Ala Ala  
 50 55 60  
 Asp Gly His Thr Ala Cys Ala Glu Thr Pro Val Ser Val Glu Thr Asn  
 65 70 75 80  
 Ile Thr Ala Leu Asp Pro Glu Pro Gln Ala Ser Leu Ser Arg Gln Ser  
 85 90 95  
 Leu His Ala Ser His Arg Thr Leu Leu Ser Gln Ile Met Gln Ile Arg  
 100 105 110  
 Glu Ser Ser Pro Asp Thr Ser Ser Cys Asp Glu Ala Asp Tyr Ser Phe





## 18176

565 570 575  
 Ile Leu Phe Gly Asn Ser Asp Gln Ile Val Gln Phe Ser Met Ser Phe  
 580 585 590  
 Gln Asp Ala Leu Lys Glu Ala Ala Arg Ser Val Tyr Val Met Pro Lys  
 595 600 605  
 Ser Gln Arg Trp Ser Ser Thr Arg Ser Ala Arg Asn Asn His Thr Asn  
 610 615 620  
 Ala Ser Arg Thr Asp Ser Glu Ala Ala Asn Gly Ala Asp Glu Val Ser  
 625 630 635 640  
 Asp Ala Glu Lys Asp Arg Leu Thr Phe Ile Gly Gln Val Phe Leu Ala  
 645 650 655  
 His Ile Ala Pro Met Glu Lys Val Tyr Ala Asp Tyr Leu Lys Asn His  
 660 665 670  
 Asp Ala Ala Asn Lys Lys Leu Gln Val Leu Gln Arg Asn Pro Lys Val  
 675 680 685  
 Ala Ile Trp Leu Lys Glu Cys Arg Glu Trp Ala Ser Asp Leu Thr Thr  
 690 695 700  
 Ala Trp Asp Leu Asp Ser Leu Leu Glu Lys Pro Val Gln Arg Ile Leu  
 705 710 715 720  
 Lys Tyr Pro Leu Leu Leu Ser Glu Ile Val Asp Ser Thr Pro Ser Asp  
 725 730 735  
 His Pro Asp Arg Pro Tyr Leu Ile Asn Ala Leu Glu Glu Val Thr Asn  
 740 745 750  
 Ile Ser Val Arg Ile Asn Glu Met Lys Lys Arg Ala Glu Leu Val Gly  
 755 760 765  
 Gln Val Val Gly Arg Lys Arg Lys Glu Ser Asp Val Arg Thr Gly Leu  
 770 775 780  
 Ser Lys Ala Phe Gly Arg Arg Thr Glu Lys Leu Arg Gln Gln Val Gly  
 785 790 795 800  
 Leu Ser Asp Ile Phe Glu Asp Lys Gln Tyr Asp Ala Leu Ser Gln Arg  
 805 810 815  
 Phe Gly Asp Ser Phe Phe Gln Leu Gln Val Val Met Arg Asp Ala Glu  
 820 825 830  
 Met Tyr Thr Arg Glu Val Gln Ser Leu Asp Arg Phe Ser Glu Phe  
 835 840 845  
 Val Thr Ala Ile Glu Gly Phe Val Asp Val Ala Gln Ser Gly Tyr Leu  
 850 855 860  
 Asp Val Glu Ser Arg Trp Arg Glu Leu Lys Met Ala Val Arg Glu Ile  
 865 870 875 880  
 Met Ala Thr Ala Leu Pro Glu His Val Ser Gly Ala Asp Pro  
 885 890

&lt;210&gt; 41219

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41219

Leu Ala Arg Arg Leu Phe Leu Ser Gly Arg Ser Lys Ser Gly Lys Cys  
 1 5 10 15  
 Cys Asp Gly Cys Arg Arg Thr Asp Glu Ser Arg Tyr Leu Glu Arg Glu  
 20 25 30  
 Phe Leu Val Gln Tyr Lys Thr Ser Asn Ile Val Leu Leu Arg Pro Ser  
 35 40 45  
 Met Ser Phe Met Leu Leu Gln Thr Pro Asn Pro Leu Ser Leu Arg Glu  
 50 55 60

## 18177

Ala Leu Pro Asp Phe Ser Arg Thr Thr His Val Phe Leu Pro Ile Asn  
65 70 75 80  
Asp Cys Arg Asn Val Thr Glu Ala Glu Gly Gly Ser His Trp Ser Leu  
85 90 95  
Leu Leu Ile Ser Ile Val Asp Gly Val Ala Phe His Tyr Asp Ser Leu  
100 105 110  
Pro Pro Gly Asn Tyr Trp Glu Ala Arg Ala Val Thr Gln Lys Phe Gly  
115 120 125  
Thr Leu Leu Asn Arg Pro Ile Arg Phe Ile His Leu Glu Asp Ser Pro  
130 135 140  
Val Gln Glu Asn Gly Ser Asp Cys Gly Val Phe Val Cys Leu Ser Met  
145 150 155 160  
Arg His Leu Leu Leu Lys Arg Leu Leu Thr Ala Asn Ala Asn Glu Lys  
165 170 175  
Val Ser Met Ser Leu Gly Gly Arg Lys Val Asp Ala Arg Ala Gly Arg  
180 185 190  
Lys Glu Ile Ala Lys Ile Ile Glu Gly Phe Arg Lys Glu Gly Glu Arg  
195 200 205  
Arg Arg Ser  
210

&lt;210&gt; 41220

&lt;211&gt; 402

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41220

Ala Leu Arg Leu Met Gln Asp Ala Gln Leu Ala Val Val Arg Lys Ser  
1 5 10 15  
Val Ile Asp Pro Met Val Thr Leu Leu Lys Leu Tyr Asp Gly Pro Gln  
20 25 30  
Arg Val Met Lys Lys Arg Asp Lys Arg Leu Met Asp His Ala Arg Phe  
35 40 45  
Lys Ser Ile Lys Asp Arg Gly Asp Lys Pro Asp Lys Lys Thr Thr Glu  
50 55 60  
Gln Ser Glu Gln Phe Val Ala Leu Asn Glu Thr Leu Lys Asp Glu Leu  
65 70 75 80  
Pro Lys Leu Tyr Ser Leu Thr Ala Lys Leu Met Glu Ala Cys Leu Lys  
85 90 95  
Asn Phe Val His Ile Gln Thr Thr Trp Phe Asn Ile Leu Gln Arg Arg  
100 105 110  
Leu Ala Asp Leu Ile Asp Pro Phe Pro Asp Asp Ile Gln Gln Ile Ile  
115 120 125  
Gly Asp Trp Ser Ala Asn Phe Thr Leu Ala Glu Ala Gln Val Leu Ser  
130 135 140  
Leu Gly Met Cys Asn Gly Ser Leu Leu Ala Asp Thr Ile Asn Leu Val  
145 150 155 160  
Asn Phe Asn Thr Pro Ser Thr Gly Pro Thr Ile Ser Ser Pro Arg Arg  
165 170 175  
Pro Ser Thr Val Asn Ser Thr Ser Thr Arg Val Gly Ser Asn Met Gly  
180 185 190  
Glu Ser Pro Lys Val Ser His Asp Phe Gly Asn Gly Gly Asn Ile Phe  
195 200 205  
Gln Ser Pro Ser Leu Asp Ala Gln Ser Leu Arg Ser Tyr Gly Arg His  
210 215 220  
Arg Ala Asp Ser Ala Ile Ser Gly Arg Ala Ala Pro Glu Ser Ser Glu

## 18178

225                      230                      235                      240  
 Leu Pro Arg Ser Gln Ile Leu Gln Gln Ile Thr Asn Ser Ser Ser Ala  
                          245                      250                      255  
 Ser Ala Gly Pro Gln Pro Lys Ser Glu Ser Phe Pro Ser Leu Pro Arg  
                          260                      265                      270  
 Leu Ser Leu Asp Ser Pro Phe Leu Val Asp Val Ile Ala Thr Ser Ser  
                          275                      280                      285  
 Asn Asn Asp Glu Val Ser Glu Asn Pro Pro Thr Ser Pro Gly Gly Arg  
                          290                      295                      300  
 Tyr Ser Gly Phe Phe Ser Ser Ala Met Pro Met Ser Asp Asn Pro Gln  
 305    310                      315                      320  
 Asp Asp Ala Pro Val Glu Asp Thr Thr Pro Lys Lys Pro Thr Val Leu  
    325                      330                      335  
 Phe Leu Ala Ala Ser Ile Tyr Glu Phe Asn Ile Asp Arg Ala Arg Arg  
    340                      345                      350  
 Glu Ala Gly Tyr Pro Tyr Leu Thr Tyr Val Ala Gly Glu Ile Phe Asp  
    355                      360                      365  
 Val Ile Ala Glu Lys Gly Glu Leu Trp Leu Ala Ile Asn Gln Asp Asp  
    370                      375                      380  
 Pro Thr His Gln Val Gly Trp Met Trp Asn Lys His Phe Ala Lys Leu  
 385    390                      395                      400  
 Ser Ser

<210> 41221  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 41221  
 Lys Thr Cys Trp Asp Glu Glu Ala Gln Tyr Leu Thr Ser Tyr Thr Glu  
 1    5    10    15  
 Arg Glu Ile Pro Ser Pro Asp Ile Trp Ile His Gln Phe Ser Asp Ser  
    20    25    30  
 His His Asn Thr Cys Leu Thr Tyr Ser Ser Gln Lys Glu Ile Ile Cys  
    35    40    45  
 Glu Gln Val Ser Tyr Arg Met His Ser Thr Ala Thr Met Gln Pro Thr  
    50    55    60  
 Leu Ser Val Ser Gln Ser Phe Leu Arg Val Cys Met Ser Ser Leu Val  
 65    70    75    80  
 Thr Ala Ile Tyr Gln Val Ile Gln Ser Arg  
    85    90

<210> 41222  
 <211> 135  
 <212> PRT  
 <213> A.fumigatus

<400> 41222  
 Ser Phe Thr Met Ala Thr Thr Ser Asn Met Phe Met Tyr Ser Leu Thr  
 1    5    10    15  
 Ile Gln Pro Pro Thr Ala Ile Thr Gln Ala Ile Leu Gly Gln Phe Ala  
    20    25    30  
 Gly Thr Lys Glu Gln Gln Ile Val Thr Ala Ser Gly Ser Lys Leu Thr  
    35    40    45  
 Ile His Arg Pro Asp Pro Thr Gln Gly Lys Ile Thr Pro Ile Tyr Ser

## 18179

50                      55                      60  
 Gln Asp Val Phe Gly Ile Ile Arg Thr Leu Ala Ala Phe Arg Leu Ala  
 65                      70                      75                      80  
 Gly Ser Ser Lys Gly Met Phe Asp Ile Leu Pro Pro Arg Pro Tyr Arg  
                     85                      90                      95  
 Arg Thr Asn Leu Val Ile Arg Gln Ala Ser Arg Ala Ala Arg Ser Leu  
                     100                      105                      110  
 Ser Ala Glu Pro Thr Leu Leu Glu Ala Gly Arg Ala Pro Val Gly Val  
                     115                      120                      125  
 Ala Asp Thr Gly Cys Cys Leu  
                     130                      135

&lt;210&gt; 41223

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41223

Ile Ala Cys Gly Gly Val Lys Thr Val Asn Arg Gly His Gly Tyr Thr  
 1                      5                      10                      15  
 Gly Asn Ala Asp Ser Asp Gln Asn Ser Ala Leu Met Lys Ala Phe Trp  
                     20                      25                      30  
 His Asp Ile Ser Ile Ile Leu Glu Gln Tyr Thr Ser Arg Phe Val Ala  
                     35                      40                      45  
 Ile Leu Thr Ser Thr Asn Gly Lys Gln Arg Lys Ser Arg  
                     50                      55                      60

&lt;210&gt; 41224

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41224

His Trp Met Leu Phe Val Asn Cys Ala Glu Arg Ile Leu Leu Leu Asp  
 1                      5                      10                      15  
 Tyr Ile Ile Ile Gly Ser Asp Ser Gly Arg Ile Thr Ile Ile Glu Tyr  
                     20                      25                      30  
 Val Pro Ser Gln Asn Arg Phe Asn Arg Ile His Leu Glu Thr Phe Gly  
                     35                      40                      45  
 Lys Ser Gly Val Arg Arg Val Val Pro Gly Gln Tyr Leu Ala Val Asp  
                     50                      55                      60  
 Pro Lys Gly Arg Ala Cys Leu Ile Ala Ser Val Glu Lys Asn Lys Leu  
 65                      70                      75                      80  
 Val Tyr Val Leu Asn Arg Asn Ser Gln Ala Glu Leu Thr Ile Ser Ser  
                     85                      90                      95  
 Pro Leu Glu Ala His Lys Pro Gln Thr Val Val Phe Ala Met Thr Ala  
                     100                      105                      110  
 Leu Asp Val Gly Tyr Glu Asn Pro Ile Phe Ala Ala Leu Glu Val Asp  
                     115                      120                      125  
 Tyr Ser Glu Ala Asp Gln Asp Pro Thr Gly Arg Ala Tyr Glu Glu Ser  
                     130                      135                      140  
 Glu Lys Leu Leu Val Tyr Tyr Glu Leu Asp Leu Gly Leu Asn His Val  
 145                      150                      155                      160  
 Val Arg Lys Trp Ala His Pro Val Phe Thr Pro Glu Gly Trp Thr Asp  
                     165                      170                      175  
 Pro Arg Tyr

<210> 41225  
 <211> 213  
 <212> PRT  
 <213> A.fumigatus

<400> 41225  
 Phe Leu Ser Val Ala His Gln Leu Tyr Pro Leu Ile Leu Ile Pro Ala  
 1 5 10 15  
 His Thr Leu Arg Ile Met Ala Asp Asp Thr Ala Thr Thr Glu Asp Ser  
 20 25 30  
 Pro Ile Thr Phe Thr Ile Lys Ser Ser Asn Asp Ala Lys Phe Thr Leu  
 35 40 45  
 Thr Leu Pro Leu Ser Thr Gln Val Ser Glu Leu Lys Gln Lys Leu Ser  
 50 55 60  
 Ser Ser Glu Tyr Ala Asp Thr Pro Ala Glu Arg Gln Arg Leu Ile Tyr  
 65 70 75 80  
 Ser Gly Arg Val Leu Lys Asp Asn Glu Thr Leu Ala Thr Tyr Lys Ile  
 85 90 95  
 Lys Asp Gly His Thr Val His Leu Val Lys Ser Ala Ala Ser Asn Gln  
 100 105 110  
 Arg Gln Gly Gly Ala Thr Gln Ser Thr Ala Thr Ser Ala Ala Thr Gly  
 115 120 125  
 Thr Ser Ala Ala Pro Ala Ala Gly Ala Val Pro Thr Asn Leu Ala Ala  
 130 135 140  
 Gly Thr Gly Asn Asn Pro Leu Ala Gly Leu Thr Gly Ala Arg Tyr Ala  
 145 150 155 160  
 Gly Phe Ala Gln Leu Pro Gly Ala Gly Met Phe Gly Pro Asp Gly Gly  
 165 170 175  
 Val Ser Val Cys Tyr Cys Arg Leu Arg Ser Phe Ala Trp Phe Phe Asp  
 180 185 190  
 Arg Gln Leu Thr Asp Ala Leu Asp Gly Thr Ser Ser Arg Arg Arg Lys  
 195 200 205  
 His Ala Gln His Ala  
 210

<210> 41226  
 <211> 317  
 <212> PRT  
 <213> A.fumigatus

<400> 41226  
 Met Gly Pro Pro Pro Asp Ala Glu Ser Met Leu Asn Met Leu Glu Asn  
 1 5 10 15  
 Pro Gln Phe Gln Ser Thr Ile Asn Glu Ala Leu Gln Asn Pro Ala Met  
 20 25 30  
 Ile Asp Met Met Ile Gln Gln Asn Pro Met Leu Arg Asp Met Gly Pro  
 35 40 45  
 Gly Val Arg Gln Met Met Gln Ser Pro Glu Phe Arg Arg Met Leu Thr  
 50 55 60  
 Asp Pro Ser Ser Ile Arg His Met Leu Gln Met Gln Arg Ala Phe Gly  
 65 70 75 80  
 Ala Gly Gly Leu Gly Gly Gly Ser Ala Phe Pro Ala Pro Gly Val Thr  
 85 90 95  
 Asn Thr Thr Pro Glu Glu Asn Arg Asn Asn Gln Asn Ser Asn Asn Ala

	100		105		110										
Asn	Ala	Ala	Ala	Gly	Ala	Pro	Pro	Phe	Asn	Pro	Phe	Ala	Pro	Pro	
	115					120					125				
Ala	Leu	Gly	Ala	Gly	Asn	Pro	Phe	Ala	Val	Leu	Phe	Gly	Gly	Ala	Pro
	130					135					140				
Pro	Ala	Phe	Gly	Ala	Asn	Pro	Ser	Ser	Thr	Ser	Thr	Ala	Ala	Gly	Gly
145					150					155					160
Asp	Gln	Ser	Gln	Gly	Thr	Gln	Gly	Ala	Thr	Gly	Ser	Ala	Ala	Ala	Gly
				165					170						175
Ser	Thr	Thr	Thr	Gly	Glu	Gly	Gln	Asn	Gln	Gln	Asn	Phe	Gln	Asn	Pro
				180				185					190		
Phe	Ser	Phe	Leu	Met	Asn	Pro	Ala	Met	Phe	Gly	Ala	Thr	Gly	Ser	Gln
	195					200					205				
Gly	Gly	Gln	Ala	Gly	Phe	Asn	Pro	Phe	Asn	Pro	Gln	Gln	Asn	Pro	Phe
	210					215					220				
Leu	Arg	Asp	Pro	Ala	Leu	Ser	Gln	Met	Met	Gln	Ala	Met	Gly	Ala	
225					230					235					240
Gln	Gly	Gly	Ala	Ala	Gly	Ala	Gly	Ala	Asn	Pro	Leu	Ala	Ala	Leu	Leu
				245					250						255
Gly	Gly	Ala	Gly	Leu	Gly	Ser	Pro	Pro	Pro	Gln	Asp	Asn	Arg	Pro	Pro
			260						265				270		
Glu	Glu	Arg	Tyr	Ala	Asp	Gln	Leu	Arg	Gln	Leu	Asn	Asp	Met	Gly	Phe
	275						280					285			
Phe	Glu	Phe	Glu	Arg	Asn	Val	Glu	Ala	Leu	Arg	Arg	Ser	Gly	Gly	Ser
	290					295					300				
Val	Gln	Gly	Ala	Ile	Glu	Tyr	Leu	Leu	Ser	His	Pro	Ser			
305					310					315					

&lt;210&gt; 41227

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41227

Ala	Tyr	Val	Pro	Ser	Tyr	Phe	Val	Gly	Tyr	Ser	Val	Thr	Arg	Tyr	Asn
1				5					10					15	
Asp	Asp	Glu	Pro	Ile	Pro	Leu	Leu	Val	Asn	Lys	Ile	Phe	Ser	Asp	His
			20					25					30		
Thr	Gln	Leu	Gln	Tyr	Ala	Tyr	Phe	Asp	Leu	Pro	Phe	Val	Cys	Pro	Pro
	35					40						45			
Ser	Gly	Lys	Ser	His	Gly	Gly	Ser	Pro	Phe	Gly	Ser	Gly	Lys	Ser	Val
	50					55					60				
Ser	Leu	Asn	Leu	Gly	Glu	Ile	Leu	Arg	Gly	Asp	Arg	Ile	Met	Thr	Ser
65					70					75				80	
Asp	Phe	Glu	Leu	His	Met	Gly	Arg	Asn	Val	Glu	Cys	Gln	Lys	Leu	Cys
			85					90						95	
Thr	Val	Glu	Val	Gly	Arg	Lys	Asp	Val	Lys	Trp	Gly	Arg	Gln	Leu	Ile
			100					105					110		
Arg	Glu	Gly	Tyr	Val	Ala	Glu	Trp	Ile	Ala	Asp	Asn	Leu	Pro	Gly	Ala
	115					120						125			
Thr	Ser	Phe	Val	Thr	Val	Asp	Arg	Ser	Arg	Lys	Tyr	Tyr	Ala	Thr	Gly
	130					135					140				
Phe	Lys	Ile	Gly	Asp	Leu	Asp	Phe	Ser	Pro	Gly	Thr	Gly	Lys	Pro	Arg
145					150					155				160	
Tyr	Phe	Ile	Asn	Asn	His	Phe	Ile	Ile	Val	Ile	Arg	Trp	Arg	Ser	Ala
				165					170					175	

## 18182

Pro Glu Gly Gly Lys Val Val Val Gly Phe Glu Ile Tyr Pro Lys Ser  
 180 185 190  
 Ile Lys Ala Ser Asp Tyr Glu Glu Asp Gly Cys Pro Lys Gln Val His  
 195 200 205  
 Gly Asn His Glu Gly Leu Glu Leu Tyr Ile Pro Pro Asn Leu Ser Arg  
 210 215 220  
 Leu Lys Glu Met Tyr Pro Glu Ser Ser Tyr Leu Pro Lys Glu Asp Asp  
 225 230 235 240  
 Glu Ile Asp Asp Gly Ala Lys Leu Lys Ile Pro Tyr Ser Tyr Ser Val  
 245 250 255  
 Tyr Phe Lys Glu Glu Pro Gly Ile Glu Trp Ser Asn Arg Trp Asp Leu  
 260 265 270  
 Tyr Phe Ser Asn Gln Gly Glu Ser Ser Met Thr His Trp Leu Ala Val  
 275 280 285  
 Leu Asn Ser Leu Ile Ile Ser Gly Ala Leu Gly Val Ala Val Tyr Val  
 290 295 300  
 Ile Trp Asp Arg Thr Val Gln Gly Asp Ile Lys Gly Arg Gly Asp Gly  
 305 310 315 320  
 Ala Met Glu Asp Gly Lys Ile Lys Leu Arg Ser Lys Ser Thr Glu Lys  
 325 330 335  
 Lys Gly Glu Gly Leu Leu Asp Gln Gly Ile Asp Val Glu Arg Asp Ala  
 340 345 350  
 Asp Gly Ser Ser Asp Asp Glu Thr Leu Glu Asp Leu Ser Gly Trp Lys  
 355 360 365  
 Leu Leu His Gly Asp Val Phe Pro Gly Ala  
 370 375

&lt;210&gt; 41228

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41228

Asn Tyr His Trp Trp Trp Gln Ser Phe Leu Thr Gly Gly Ser Ser Ala  
 1 5 10 15  
 Phe Trp Val Phe Ala Tyr Cys Ile Trp Tyr Tyr Phe Phe His Leu His  
 20 25 30  
 Ile Thr Gly Phe Val Ser Ser Leu Leu Phe Phe Ser Tyr Ser Phe Leu  
 35 40 45  
 Ala Cys Ala Val Tyr Gly Leu Leu Thr Gly Thr Val Gly Phe Leu Thr  
 50 55 60  
 Ala Tyr Ala Phe Ile Arg Arg Ile Tyr Arg Tyr Asp Gly Pro Ser Ser  
 65 70 75 80  
 Ile Leu Glu Gln Ala Asp Arg Asp Thr Ala Arg Leu Arg Ser Ile Asp  
 85 90 95  
 Ser Thr Tyr Ser Leu Gln Ser Ile Cys Arg His Phe Leu Ala Glu Ile  
 100 105 110  
 Ser Leu

&lt;210&gt; 41229

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41229



## 18183

Ala Asp Gly Ser Ser Phe Met Glu Thr Phe Ser Arg Val Pro Glu Tyr  
 1 5 10 15  
 Ser Gly Leu Leu Ala Pro Leu Val Gly Ser Gly Met Gln Leu Phe Phe  
 20 25 30  
 Met Val Ser Gly Leu Leu Ile Leu Ser Cys Leu Gly Val Leu Asn Pro  
 35 40 45  
 Ser Phe Arg Gly Gly Phe Val Ser Val Gly Met Gly Leu Phe Val Phe  
 50 55 60  
 Ala Gly Leu Phe Ser Gly Tyr Phe Ser Gly Arg Leu Tyr Lys Thr Phe  
 65 70 75 80  
 Gly Gly Val His Trp Arg Lys Asn Thr Leu Ile Val Ser  
 85 90

&lt;210&gt; 41230

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41230

Thr Ala Leu Phe Phe Pro Gly Leu Ile Phe Cys Leu Ile Phe Ile Leu  
 1 5 10 15  
 Asn Leu Phe Val Trp Ala Gln Ala Ser Ser Thr Ala Ile Pro Phe Gly  
 20 25 30  
 Thr Leu Ile Gly Met Leu Ala Leu Trp Leu Leu Ile Gln Val Pro Leu  
 35 40 45  
 Val Tyr Leu Gly Ser Trp Tyr Gly Phe Val Arg Ala Lys Pro Trp Glu  
 50 55 60  
 His Pro Thr Lys Thr Asn Ser Ile Ala Arg Gln Ile Pro Pro Gln Pro  
 65 70 75 80  
 Trp Tyr Leu His Ser Phe Gln Gly Ala Ala Ile Thr Gly Leu Pro Pro  
 85 90 95  
 Phe Ala Val Leu Phe Ile Glu Leu Leu Phe Val Phe Lys Asn Leu Trp  
 100 105 110  
 Gln Asp Lys Ser Gly Tyr Tyr Tyr Val Phe Gly Phe Leu Ser Thr Val  
 115 120 125  
 Ser Thr Ile Val Ile Ile Thr Val Ser Glu Val Thr Ile Ile Ala Thr  
 130 135 140  
 His Ser Gln Leu Cys Ala Glu Val Lys Cys Pro Pro Leu Leu Cys Val  
 145 150 155 160  
 Phe Met Lys Thr Asn Gln Ser Arg Ile Ile Thr Gly Gly Gly Arg Ala  
 165 170 175  
 Ser

&lt;210&gt; 41231

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41231

Ala Phe Gly Leu Ile Ile Arg Thr Leu Asn Asn Glu Pro Leu Asp Ala  
 1 5 10 15  
 Pro Ser Thr Ala Gln Ser Lys Thr Tyr Pro Leu Arg Leu Leu Ile Pro  
 20 25 30  
 His Leu Leu Ile Gly Ser Ile Ile Gly Lys Gly Gly Ser Arg Ile Arg  
 35 40 45

## 18184

Glu Ile Gln Glu Ala Ser Gly Ala Arg Leu Asn Ala Ser Asp Ser Cys  
 50 55 60  
 Leu Pro Leu Ser Ser Glu Arg Ser Leu Val Ile Leu Gly Val Ala Asp  
 65 70 75 80  
 Ser Val His Ile Ala Thr Tyr Tyr Val Ala Val Thr Leu Val Glu Gln  
 85 90 95  
 Leu Thr Glu Arg Phe Gly Gly Pro Ala Ala Ser Ala Tyr Ala Thr Arg  
 100 105 110  
 Ser Gly Gly Pro Ala Gly Ala Val Pro Gly Gly Met Gln Val Val Pro  
 115 120 125  
 Tyr Val Pro Gln Pro Ala Gly Gly Gln Tyr Gly His Pro Glu His Phe  
 130 135 140  
 Lys Arg His His Pro His Pro Asn Arg Ala Ala Ala Gly Ala Tyr Gly  
 145 150 155 160  
 Val Pro Tyr Leu His Gly Gln Pro Ala Pro Ala Pro Val Ala Gln Pro  
 165 170 175  
 Ala Leu His Tyr Gly Ala Ala Pro His Ala Pro Tyr Ala Gly Ala Gly  
 180 185 190  
 Pro His Gln Pro Ala Pro Tyr Gly Ala Pro Gln Pro Ala Gln Ala Arg  
 195 200 205  
 Gly Ala Pro Thr Pro Ala Thr Pro Val Gly Gly Val Met Pro Gly Gln  
 210 215 220  
 Pro Leu Thr Gln Gln Ile Tyr Ile Pro Asn Asp Met Val Gly Ala Ile  
 225 230 235 240  
 Ile Gly Lys Gly Gly Ala Lys Ile Asn Glu Ile Arg His Leu Ser Gly  
 245 250 255  
 Ser Val Ile Lys Ile Asn Glu Pro Gln Glu Asn Ser Asn Glu Arg Leu  
 260 265 270  
 Val Thr Ile Thr Gly Thr Gln Glu Cys Asn Gln Met Ala Leu Tyr Met  
 275 280 285  
 Leu Tyr Ser Arg Leu Gly  
 290

&lt;210&gt; 41232

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41232

Val Lys Pro Asp Cys Thr Phe Asp Lys Met Ser Ala Ser Pro Ser Ala  
 1 5 10 15  
 Leu Gln Ser Thr Lys Arg Pro Leu Glu Asp Pro Ser Ser Pro Ser Gly  
 20 25 30  
 Pro Asn Asp Gln Pro Glu Ala Lys Arg Pro Ala Leu Asp Lys Val Val  
 35 40 45  
 Lys Gly Asp Glu Ser Glu Thr Tyr Thr Asp Ala Lys Ala Glu Pro Ser  
 50 55 60  
 Ala Ala Pro Ser Ala Thr Ala Asp Gly Gln Gly Asp Thr Ala Val Pro  
 65 70 75 80  
 Asp Ala Pro Asn Gly Lys Gly Ala Ser Thr Glu Thr Gln Pro Ile Gln  
 85 90 95  
 Ser Thr Ala Ser His Gly Glu Arg Ala Thr Ser Gln Pro Glu Gln Gln  
 100 105 110  
 Arg Pro Gln Asp Glu Ser Ser Trp Ile His Ile Arg Ala Val Ile Ser  
 115 120 125  
 Ser Gln Glu Ala Ala Thr Val Ile Gly Lys Gly Gly Glu Asn Val Ser

## 18185

130                      135                      140  
 Gln Ile Arg Arg Leu Ser Gly Ala Lys Cys Thr Val Ser Asp Tyr Ser  
 145                      150                      155                      160  
 Arg Gly Ala Val Glu Arg Ile Leu Thr Val Ser Gly Pro Gln Asp Ala  
                     165                      170                      175  
 Val Ala Lys Val Gly Phe Leu Ile Tyr Pro Ser Leu Phe Glu Arg Leu  
                     180                      185                      190  
 Leu Ile Gln Ser Arg Arg Leu Val  
                     195                      200

&lt;210&gt; 41233

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41233

Ala Val Lys Ile Gly Arg Phe Leu Asn Asp Ser Cys Gln Lys Ile Ser  
 1                      5                      10                      15  
 Leu Glu Asp Ser His Ala Lys Cys Gln Ala Asp Leu Leu Ala Pro Tyr  
                     20                      25                      30  
 Leu Glu Pro Asn Ser Lys Val Leu Ser Phe Tyr Thr Thr Leu Asn Pro  
                     35                      40                      45  
 Ser Pro Ser Glu Thr Glu Thr Phe Thr Thr Asn Gln Val Thr Glu Leu  
                     50                      55                      60  
 Ala Thr Leu Thr Phe Pro Ser Ser Leu Asn Pro Glu Glu His Lys Lys  
 65                      70                      75                      80  
 Leu Asn Ser Asp Leu Ile Asn Leu Arg Val Ala Leu Thr Glu Lys Leu  
                     85                      90                      95  
 Asp Glu Lys Ser Arg Ser Lys Ser Trp Ser Met Ala Gln Val His Arg  
                     100                      105                      110  
 Pro Gly Thr Phe Gln His Pro Lys Ser Pro Ser Gly Glu Ala Phe Val  
                     115                      120                      125  
 Tyr Leu Leu Val Val Gly Trp Glu Ser Val Asp Ala His Met Ala Ala  
                     130                      135                      140  
 Arg Glu Thr Lys Glu Phe Glu Glu Ser Ile Lys Pro Ile Arg Glu Lys  
 145                      150                      155                      160  
 Met Leu Pro Ala Leu Glu Gly Leu Gly Met Lys His Val Ser Phe Lys  
                     165                      170                      175  
 Lys Ile

&lt;210&gt; 41234

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41234

Ser Gln Ala Ile Asp Ser Leu Thr Asp Leu Thr Leu Glu Lys Val Asn  
 1                      5                      10                      15  
 Asn Thr Thr Met Asp Ile Ser Gln Glu Thr Val Asp Lys Ile Arg Arg  
                     20                      25                      30  
 Phe Ala Gln Lys Arg Gln Lys Ala Glu Glu Phe Tyr Glu Glu His Ser  
                     35                      40                      45  
 Val Asn Pro Ala Asn Phe Asp Ala Tyr Asn Arg Lys Leu Asp Glu Thr  
                     50                      55                      60  
 Leu Ala Glu Leu Gln Ala Gln Val Lys Arg His Glu Asp Glu Leu Arg

Variable	Mean	SD	Median	Mode	Range	Skewness	Kurtosis	Shapiro-Wilk	Normality
Age	35.2	12.5	32.0	30.0	20-55	0.15	2.10	0.98	Normal
Gender	1.2	0.4	1.0	1.0	1-2	0.05	0.05	0.99	Normal
Education	12.5	2.0	12.0	12.0	10-15	0.10	1.80	0.97	Normal
Marital Status	1.5	0.5	1.0	1.0	1-2	0.05	0.05	0.99	Normal
Income	1500	500	1200	1000	500-2500	0.20	2.50	0.95	Normal
Occupation	1.8	0.6	1.5	1.5	1-2	0.05	0.05	0.99	Normal
Health Status	1.2	0.4	1.0	1.0	1-2	0.05	0.05	0.99	Normal
Stress Level	2.5	1.0	2.0	2.0	1-4	0.10	1.80	0.97	Normal
Life Satisfaction	3.5	1.5	3.0	3.0	1-5	0.15	2.10	0.98	Normal
Resilience	4.0	1.0	3.5	3.5	2-5	0.10	1.80	0.97	Normal
Optimism	3.8	1.2	3.5	3.5	2-5	0.15	2.10	0.98	Normal
Emotional Stability	3.2	1.0	3.0	3.0	2-5	0.10	1.80	0.97	Normal
Self-Esteem	3.0	1.0	2.5	2.5	2-5	0.15	2.10	0.98	Normal
Life Satisfaction	3.5	1.5	3.0	3.0	1-5	0.15	2.10	0.98	Normal
Resilience	4.0	1.0	3.5	3.5	2-5	0.10	1.80	0.97	Normal
Optimism	3.8	1.2	3.5	3.5	2-5	0.15	2.10	0.98	Normal
Emotional Stability	3.2	1.0	3.0	3.0	2-5	0.10	1.80	0.97	Normal
Self-Esteem	3.0	1.0	2.5	2.5	2-5	0.15	2.10	0.98	Normal

<210> 41236

<211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 41236

Gly	Ala	Gly	Gly	Ala	Asn	Gly	Gly	Leu	Glu	Leu	Ile	Ile	Ile	Ile	Ile
1				5					10					15	
Ser	Ile	Gly	Ile	Ile	Val	Val	Asn	Asn	Tyr	Gln	Phe	Asp	Val	Ser	Gln
			20					25					30		
Val	Gly	Asp	Tyr	Pro	Ser	Lys	Ser	Thr	Ser	Gln	Glu	Gln	Cys	Ile	Leu
		35					40					45			
Met	Ile	Ile	Ser	Arg	Lys	Leu	Asn	Val	Leu	Thr	Val	Gln	Arg	Lys	Val
	50					55					60				
Met	Asp	Leu	Ser												
65															

<210> 41237

<211> 374

<212> PRT

<213> A.fumigatus

<400> 41237

Met	Leu	Thr	Leu	Leu	Pro	Gln	Val	Asp	His	His	Pro	Ser	Pro	Pro	Ala
1				5					10					15	
Arg	Pro	Ala	Lys	Ala	Gln	Glu	Ser	Ala	Asp	Glu	Ala	Asp	Asp	Ser	Ser
			20					25					30		
Pro	Glu	Asn	Glu	Leu	Ser	Ala	Asn	Gln	Asp	Leu	Val	Asp	Leu	Val	Ile
		35					40					45			
Ser	Cys	Leu	Asn	Val	Ala	Arg	Glu	Glu	Val	Arg	Val	Gly	Arg	Asp	His
	50					55					60				
Ser	Asn	Gln	Lys	Thr	Glu	Asn	Thr	Gln	Ser	Ile	Arg	Ala	Tyr	Ala	Lys
65				70						75					80
Ile	Ala	Gly	Arg	Asn	Trp	Thr	Tyr	Tyr	Val	Lys	Thr	Leu	His	Val	Asn
			85						90					95	
Ile	Gly	Arg	Glu	Pro	Asp	Arg	Glu	Pro	Lys	Leu	Asp	Glu	Gln	Ser	Ser
		100						105					110		
Pro	Val	Thr	Ile	Ala	Ala	Arg	Ala	Leu	Pro	Asp	Val	His	Val	Asp	Leu
		115					120						125		
Gly	Pro	Ser	Lys	Phe	Val	Ser	Arg	Leu	His	Ala	Glu	Ile	Phe	Tyr	Asp
	130					135					140				
Gly	Gly	Glu	Thr	Leu	Ser	Trp	His	Ile	Arg	Val	Asn	Gly	Arg	Asn	Gly
145				150						155					160
Val	Arg	Leu	Asn	Asn	Val	Ile	Leu	Lys	Arg	Gly	Thr	Asp	Ala	Ile	Ile
			165						170					175	
Ser	Cys	Gly	Asp	Ile	Ile	Glu	Ile	Ala	Asn	Thr	Gln	Met	Met	Phe	Val
		180						185					190		
Thr	Pro	Gly	Asp	Lys	Ala	Asn	Ile	His	Pro	Ser	Phe	Val	Ala	Arg	Ala
	195					200						205			
Gln	Arg	Ile	Ala	Asn	Gly	Glu	Glu	Glu	Leu	Leu	Ser	Trp	Asp	Pro	Thr
	210				215						220				
Gln	His	Ser	His	Pro	Gln	Pro	Ser	Gln	Ser	Ser	Ala	Val	Met	Asn	Asp
225				230						235					240
Gln	Thr	Ser	Ala	Thr	Ala	Ser	Ala	Gly	Ala	Ser	Gly	Gln	Pro	Ser	Leu
			245					250						255	
Ala	Pro	Ala	Pro	Gln	Phe	Leu	Lys	Arg	Gln	Val	Thr	Pro	Pro	Pro	Arg
			260					265						270	

## 18188

Ser Pro Asp Thr Val Gly Pro Arg Thr Ala Lys Gln Ser Pro Leu Tyr  
 275 280 285  
 Asn Arg Gly Met Met Met Glu Ser Thr Glu Glu Ile Asp Tyr Ser Lys  
 290 295 300  
 Asp Ser Ala Lys Asp Leu Lys Pro Pro Tyr Ser Tyr Ala Thr Leu Ile  
 305 310 315 320  
 Ala Gln Ala Ile Phe Ser Ser Glu Glu Glu Lys Leu Thr Leu Asn Ser  
 325 330 335  
 Ile Tyr Asn Trp Ile Met Asp Lys Tyr Ala Phe Tyr Arg His Ser Gln  
 340 345 350  
 Ser Gly Trp Gln Val Gly Arg Pro Phe Phe Phe Phe Phe Phe Phe Phe  
 355 360 365  
 Ser Val Ala Gly Arg Asn  
 370

&lt;210&gt; 41238

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41238

Pro Thr Asp Ser Ser Thr Gly Gly Ser Phe Gly Arg Glu Ser Gly Ile  
 1 5 10 15  
 Cys Glu Leu Pro Gly Leu His Ser Tyr Ser Cys Leu Leu Met Lys Lys  
 20 25 30  
 Cys Arg Arg Tyr Tyr Val His Val Pro Pro His Leu Arg Pro Arg Pro  
 35 40 45  
 Leu Leu Leu Val Pro Ala Ala Gln Val Arg Lys Phe Ile Gln Glu Ile  
 50 55 60  
 Asn Arg Glu Leu Glu Ala Thr Leu Ser Ile Pro Glu Glu Arg Glu Met  
 65 70 75 80  
 Gly Leu Leu Leu Asp Phe Asn Leu Asp Gly Val Pro Gln Pro Thr Phe  
 85 90 95  
 Ile Gly Gln Cys Thr Ser Arg Glu Met Lys Asp Glu Leu Glu Ser Thr  
 100 105 110  
 Ile Pro Pro Arg Thr Asn Tyr Glu Pro Pro Ser Glu Met Asp Gly Ser  
 115 120 125  
 Arg Leu Ala Tyr Glu Gln Met Ile Gly His Gly Ile Asp Ala Ser Lys  
 130 135 140  
 Ser Lys Ser Arg Ser Lys Ala Ser Lys Ala Lys Lys Gln Ile Arg Leu  
 145 150 155 160  
 Gln Ala Gly Ile Lys Ser Val Gln Ala Leu Arg Lys Met Arg Cys Tyr  
 165 170 175  
 Leu Gly Leu Gln Pro Cys His Ser Leu Asp Leu Pro Lys Leu Ile Asp  
 180 185 190  
 Glu Arg Ser Trp Glu Glu Lys Gly Asn Asp Asp Cys Arg Met Ala Gln  
 195 200 205  
 Arg Leu Asp Glu Thr Ser Asp Thr Gly Ile Pro Arg Leu Asp Leu Asn  
 210 215 220  
 Asn Pro Thr Met Phe Pro Phe Trp Gln Glu Pro Ile Leu Ile Ser Val  
 225 230 235 240  
 Asp Val Glu Cys Asn Glu Arg Cys Pro Gly Gln Val Thr Glu Val Gly  
 245 250 255  
 Ile Ser Thr Leu Asp Thr Met Glu Leu Val Asp Thr Leu Pro Gly Glu  
 260 265 270  
 Asp Ala Glu Asn Trp Thr Ser Gln Ile Arg Ser Arg His Leu Arg Val

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      275              280              285
Arg Glu Tyr Gly His Ile Val Asn Arg Gln Tyr Val Thr Gly Cys Pro
 290              295              300
Gly Ser Phe Glu Phe Gly Glu Ser Glu Trp Val Ser Lys Gly Lys Leu
305              310              315              320
Ala Asp Val Val Gln Ala Cys Phe Gln Pro Pro Tyr Ser Phe Gly Val
      325              330              335
Glu Asp Met Asp Gly Val Gln Val Gly Ser Gly Pro Glu His Lys His
      340              345              350
Gln Lys Arg Ser Leu Ile Leu Val Gly His Asn Thr Ala Met Asp Val
      355              360              365
Lys Tyr Leu Ala Ser Leu Gly Ile Pro Val Phe Glu Asp Val Thr Ala
      370              375              380
Ala Phe Val Glu Arg Ile Asp Thr Ala Glu Leu Tyr Arg Ala Ile Arg
385              390              395              400
Gly Glu Phe Asn Gln His Ser Leu Ala Ser Ile Leu Gly Glu Leu Gly
      405              410              415
Ile Ile Gly Trp Asn Leu His Asn Ala Gly Asn Asp Ala Arg Tyr Thr
      420              425              430
Leu Glu Ala Leu Val Arg Met Ile Cys Arg Asp Thr Gly Glu Ala Ser
      435              440              445
Ala Ala Ala Ser Met Val Gly
      450              455

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<210> 41239  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

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<400> 41239
Val Asp Asp Ser Phe Met Thr Gly Arg Leu Thr Phe Ser Lys Ile Met
 1              5              10              15
Ser His Ser Lys Leu Ile Ser Gly Ser Leu Ser Gly Ser Ile Tyr Leu
      20              25              30
Ile Ile Ser Gly Phe Arg Asn Ile Ser Leu Val Phe Ala Ala Leu Leu
      35              40              45
Arg Thr Pro Ser Gly Phe Thr Glu Met Asn Thr Phe Gly
      50              55              60

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<210> 41240  
 <211> 786  
 <212> PRT  
 <213> A.fumigatus

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<400> 41240
Arg Arg Leu Cys Ser Ser Ser His Ser Glu Ser Asp Leu Glu Ser Phe
 1              5              10              15
Leu Leu Gln Val Ser Ile Met Ala Thr Ser Asp Leu Val Asp His Ser
      20              25              30
Pro Arg His Pro Thr Lys Ala Ala Gln Leu Ala Ser Ala Ser Asn Val
      35              40              45
Ile Leu Ile Asp Asn Tyr Asp Ser Phe Thr Trp Asn Val Tyr Gln Tyr
      50              55              60
Leu Val Leu Glu Gly Ala Thr Val Ala Val Phe Arg Asn Asp Glu Ile
      65              70              75              80
Thr Leu Glu Glu Leu Ile Ala Lys Lys Pro Thr Gln Leu Val Ile Ser

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85																90				95			
Pro	Gly	Pro	Gly	His	Pro	Glu	Thr	Asp	Ala	Gly	Ile	Ser	Asn	Ala	Ala								
100				105				110															
Ile	Lys	Tyr	Phe	Gly	Gly	Lys	Ile	Pro	Val	Phe	Gly	Val	Cys	Met	Gly								
115				120				125															
Gln	Gln	Cys	Met	Ile	Thr	Ser	Phe	Gly	Gly	Lys	Val	Asp	Val	Phe	Gly								
130				135				140															
Glu	Ile	Leu	His	Gly	Lys	Thr	Ser	Ile	Leu	Lys	His	Asp	Gly	Lys	Gly								
145				150				155															
Val	Tyr	Glu	Gly	Leu	Pro	Pro	Ala	Val	Glu	Val	Thr	Arg	Tyr	His	Ser								
165				170				175															
Leu	Ala	Gly	Thr	His	Ala	Thr	Ile	Pro	Asp	Cys	Leu	Glu	Val	Thr	Ser								
180				185				190															
Thr	Val	Pro	Leu	Asn	Asp	Gly	Ser	Gly	Lys	Asp	Val	Ile	Met	Gly	Ile								
195				200				205															
Arg	His	Lys	Gln	Tyr	Ala	Val	Glu	Gly	Val	Gln	Phe	His	Pro	Glu	Ser								
210				215				220															
Ile	Leu	Thr	Glu	His	Gly	Arg	Thr	Met	Phe	Arg	Asn	Phe	Leu	Lys	Leu								
225				230				235															
Thr	Ala	Gly	Thr	Trp	Glu	Ala	Asn	Gly	Lys	Ser	Ser	Ser	Gly	Ser	Ala								
245				250				255															
Thr	Val	Asn	Gly	Ser	Ala	Pro	Lys	Val	Asp	Lys	Lys	Thr	Ser	Ile	Leu								
260				265				270															
Asn	Lys	Ile	Tyr	Asp	His	Arg	Arg	Ala	Ala	Val	Ala	Val	Gln	Lys	Leu								
275				280				285															
Ile	Pro	Ser	Gln	Arg	Pro	Glu	Asp	Leu	Gln	Ala	Ala	Tyr	Asp	Leu	Asn								
290				295				300															
Leu	Ala	Pro	Pro	Gln	Ile	Ser	Phe	Pro	Cys	Arg	Leu	Arg	Gln	Ser	Pro								
305				310				315															
Tyr	Ser	Leu	Ser	Leu	Met	Ala	Glu	Ile	Lys	Arg	Ala	Ser	Pro	Ser	Lys								
325				330				335															
Gly	Met	Ile	Ala	Glu	Thr	Ala	Cys	Ala	Pro	Ala	Gln	Ala	Arg	Gln	Tyr								
340				345				350															
Ala	Lys	Ala	Gly	Ala	Ser	Val	Ile	Ser	Val	Leu	Thr	Glu	Pro	Glu	Trp								
355				360				365															
Phe	Lys	Gly	Ser	Ile	Asp	Asp	Leu	Arg	Ala	Val	Arg	Gln	Ser	Leu	Glu								
370				375				380															
Gly	Leu	Pro	Asn	Arg	Pro	Ala	Val	Leu	Arg	Lys	Glu	Phe	Ile	Phe	Asp								
385				390				395															
Glu	Tyr	Gln	Ile	Leu	Glu	Ala	Arg	Leu	Ala	Gly	Ala	Asp	Thr	Val	Leu								
405				410				415															
Leu	Ile	Val	Lys	Met	Leu	Ser	Val	Glu	Leu	Leu	Thr	Arg	Leu	Tyr	Asn								
420				425				430															
Tyr	Ser	Arg	Ser	Leu	Gly	Met	Glu	Pro	Leu	Val	Glu	Val	Asn	Thr	Pro								
435				440				445															
Glu	Glu	Met	Lys	Ile	Ala	Val	Glu	Leu	Gly	Ala	Glu	Val	Val	Gly	Val								
450				455				460															
Asn	Asn	Arg	Asp	Leu	Thr	Ser	Phe	Glu	Val	Asp	Leu	Gly	Thr	Thr	Ser								
465				470				475															
Arg	Leu	Met	Asp	Leu	Val	Pro	Glu	Ser	Thr	Ile	Val	Cys	Ala	Leu	Ser								
485				490				495															
Gly	Ile	Ser	Gly	Pro	Lys	Asp	Val	Glu	Ala	Tyr	Lys	Asn	Asp	Gly	Val								
500				505				510															
Lys	Ala	Ile	Leu	Val	Gly	Glu	Ala	Leu	Met	Arg	Ala	Pro	Asn	Thr	Ser								
515				520				525															
Ala	Phe	Val	Ala	Glu	Leu	Leu	Gly	Gly	Asn	Ser	Glu	Asn	Asn	Ser	Lys								



## 18191

530                                      535                                      540  
 Pro Ala Pro Ser Ser Arg Leu Val Lys Ile Cys Gly Thr Arg Ser Glu  
 545                                      550                                      555                                      560  
 Glu Gly Ala Arg Ala Ala Ile Glu Ala Gly Ala Asp Leu Val Gly Ile  
                                     565                                      570                                      575  
 Ile Leu Val Glu Gly Arg Lys Arg Cys Val Ser Asp Asp Val Ala Leu  
                                     580                                      585                                      590  
 Arg Ile Ala Gln Val Val Lys Ser Thr Gln Arg Pro Thr Val Glu Pro  
                                     595                                      600                                      605  
 Asp Ser Thr Ser Pro Ala Asn Thr Phe Ser Ser Asp Phe Phe Asp His  
                                     610                                      615                                      620  
 Ser Thr Arg Val Leu Arg His Pro Thr Arg Ala Leu Leu Val Gly Val  
 625                                      630                                      635                                      640  
 Phe Gln Asn Gln Pro Leu Ala Tyr Ile Leu Asp Lys Gln Gln Lys Leu  
                                     645                                      650                                      655  
 Gly Leu Asp Val Val Gln Leu His Gly Ser Glu Pro Ile Glu Trp Ala  
                                     660                                      665                                      670  
 Ser Leu Ile Pro Val Pro Val Ile Arg Lys Phe Ala Leu Asp Glu Ser  
                                     675                                      680                                      685  
 Gly Ile Ala Arg Arg Ala Tyr His Ser Leu Pro Leu Leu Asp Ser Gly  
                                     690                                      695                                      700  
 Ala Gly Gly Ser Gly Glu Leu Leu Asp Gln Ser His Val Gln Lys Val  
 705                                      710                                      715                                      720  
 Leu Asp Gly Asp Asp Gly Leu Arg Val Ile Leu Ala Gly Gly Leu Asp  
                                     725                                      730                                      735  
 Thr Ser Asn Val Val Asp Thr Ile Arg Lys Leu Gly Asp Ser Gly His  
                                     740                                      745                                      750  
 Lys Val Val Gly Val Asp Val Ser Ser Gly Val Glu Ser Asp Gly Ser  
                                     755                                      760                                      765  
 Gln Asp Pro Ala Lys Ile Arg Ala Phe Val Gln Ala Val Lys Ala Tyr  
                                     770                                      775                                      780  
 Glu Ala  
 785

&lt;210&gt; 41241

&lt;211&gt; 1053

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (821)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41241

Leu Leu Lys Pro Cys Gln Asn Pro Leu Glu Ile Leu Leu Pro Leu Gln  
 1                                      5                                      10                                      15  
 Ala Phe Val Ala Leu Thr Thr Leu Ala Phe Met Lys Leu Pro Leu Ala  
                                     20                                      25                                      30  
 Met Pro Ser Ile Ile Asn Lys Ser Thr Pro Thr Ser Pro Ser Gln Ser  
                                     35                                      40                                      45  
 Pro Tyr Phe Leu Ser Lys Gly Glu Ile Gly Gln Leu Asn Glu Ile Phe  
                                     50                                      55                                      60  
 Val Thr Ala Gly Leu Glu Ser Lys Thr Ala Asn Pro Ala Ala Phe Ser  
 65                                      70                                      75                                      80  
 Trp Gly Leu Leu Leu His Thr Leu Arg Glu Leu Ala Leu Ser Asp Lys

			85					90				95			
Glu	Ile	Arg	Glu	Leu	Glu	Gln	Phe	His	Ser	Ala	Val	Asp	Ser	Phe	Gln
			100					105				110			
Ser	Asn	Thr	Pro	His	Ser	Asn	Ser	Gly	Gln	Ala	Ser	Glu	Leu	Ser	Leu
		115					120					125			
Tyr	Glu	Glu	Leu	Leu	Glu	Cys	Ala	Arg	Ser	Pro	Thr	Cys	Thr	Ala	Glu
	130					135					140				
Asp	Ser	Ile	Ala	Leu	Leu	Thr	Ser	Asp	Ala	Met	Lys	Asp	Thr	Met	Phe
145				150					155						160
Glu	Thr	Ile	Val	Ala	Leu	Ala	Thr	Asn	Val	Gly	Ser	Thr	Ser	Ala	Val
			165					170						175	
Asp	Asp	Ile	Leu	Thr	Glu	Arg	Trp	Thr	Arg	Val	Val	Leu	Leu	Asp	Leu
		180						185				190			
Ile	Arg	Val	Val	Arg	Ile	Tyr	Val	Glu	Tyr	Ser	Pro	Glu	Ile	Val	Gly
	195					200						205			
Ser	Val	Leu	Ala	Ile	Leu	Glu	Gly	Pro	Pro	Thr	Lys	Leu	Leu	Cys	Ser
	210				215						220				
Ser	Gln	Ser	Leu	Ser	Val	Ala	Thr	Asp	Pro	Arg	Trp	Ile	Phe	Met	Asn
225				230						235					240
Asp	Asp	Phe	Leu	Met	Asp	Glu	Leu	Phe	His	Leu	Ala	Arg	Ser	Arg	Phe
			245					250						255	
Pro	Tyr	Glu	Thr	Val	Pro	Phe	Leu	Lys	Leu	Cys	Arg	Ala	Leu	Ile	Ser
		260					265					270			
Lys	Asp	Met	Val	Asn	Glu	Glu	Gly	Ile	Pro	Gln	Ile	Leu	Ser	Glu	Met
	275					280					285				
Glu	Asn	Met	Asp	Thr	Phe	Thr	Gln	Ile	Val	Pro	Leu	Glu	Phe	Gln	Gly
	290					295				300					
Tyr	Lys	Thr	Ile	Arg	Glu	Asp	Glu	Asn	Ala	Asn	Leu	Val	Thr	Leu	Thr
305				310					315						320
Gln	Pro	Leu	Ala	Ile	Phe	Glu	Ser	Ser	Thr	Ala	Arg	Gln	Ile	Met	Asp
			325					330						335	
His	Asp	Pro	Ser	Asn	Ala	Leu	Val	Val	Thr	Ser	Ser	Ser	Ser	His	Val
	340						345							350	
Ser	Ser	Thr	Leu	Gly	Gln	Val	Ile	Ser	Glu	Ala	Lys	Pro	Ala	Val	Ile
	355					360					365				
Met	Trp	Tyr	His	Glu	Tyr	Ser	Cys	Leu	Ser	Tyr	Leu	Gly	Ser	Tyr	Leu
	370				375						380				
Glu	Glu	Trp	Asn	Glu	Asn	Gly	Gly	Phe	Ser	Ser	Gly	Val	Glu	Glu	Asp
385				390					395						400
Asn	Val	Ala	Glu	Ile	Ile	Gly	Leu	Met	Ala	Asp	Leu	Leu	Val	Ala	Ala
			405					410						415	
Trp	Val	Gln	Pro	Thr	Pro	Asn	Glu	Ala	Ser	Ser	Gly	Ala	Lys	Arg	Ile
		420					425					430			
Leu	Glu	Val	Ala	Ser	Asp	Gly	Leu	Ala	Arg	Lys	Ser	Asp	Ile	Ile	Ser
	435					440						445			
Leu	Val	Phe	Asp	Ile	Phe	Glu	Arg	Ile	Leu	His	Asn	Ile	Gly	Pro	Arg
	450				455						460				
Ala	Gly	Leu	Asp	Ser	Lys	Val	Glu	Ser	Val	Ile	Ala	Cys	Leu	Arg	Phe
465				470					475						480
Ile	Arg	Ala	Leu	Thr	Met	Val	Leu	Pro	Gly	Arg	Val	Trp	Pro	Leu	Leu
			485					490						495	
Ala	Arg	Ser	Ser	Leu	Leu	Gly	Ser	Asp	Gly	Lys	Gly	Gly	Val	Met	Thr
		500					505					510			
Ala	Ile	Val	Ser	Ala	Thr	Glu	Val	Thr	Ser	Gly	Asp	Tyr	Pro	Phe	Leu
	515					520					525				
Leu	Glu	Cys	Val	Lys	Leu	Phe	Gln	Asp	Val	Val	Asp	Asp	Ala	Ala	Ser

530		535		540
Arg Ala Met Val	Arg Lys Cys Pro Asn Asn Leu Ser Gly Lys Met Thr			
545	550		555	560
Ala Ala Ser Glu Trp Thr Ser Gly Val Pro Thr His Ile Met Arg Gly				
	565		570	575
Ile Leu Leu Asn Phe Val Arg Thr Met Val Glu Val Phe Asn Ser Asn				
	580		585	590
Ile Asp Trp Arg Phe Asn Ala Pro Glu Gln Arg Leu Glu Ile Asn Thr				
	595		600	605
Thr Leu Ala Lys Thr Phe Glu Arg Met Ile Tyr Tyr Thr Tyr Gly Thr				
	610		615	620
Asn Asp Ala Thr Lys Leu Asp Ser Lys Val Thr Gly Val Phe Ser Ser				
625	630		635	640
Ser Ala Thr Tyr Leu Leu Asp Val Leu Arg Pro Gln Ser Arg Ala Asp				
	645		650	655
Leu Pro Phe Asn Pro Ile Leu Arg Leu Ile Val Asp Gly Leu Gln Thr				
	660		665	670
Pro Ala Thr Leu His Leu Arg Tyr Leu Val Leu Met Glu Lys Gln Val				
	675		680	685
Arg Ser Thr Leu Glu Leu Thr Thr Arg Leu Leu Glu Ala Ala Arg Tyr				
	690		695	700
Leu Glu Gln Pro Thr Ser Leu Leu Glu Asp Gln Leu Phe Lys Ala Ser				
705	710		715	720
Pro Val Leu Val Lys Leu Tyr Ser Leu Leu Asp Ala Tyr Arg Leu Pro				
	725		730	735
Val Ile Leu Leu Phe Glu Ile Leu Ile Ser Gly Ala Ala Leu Asp Ser				
	740		745	750
Ala Asn Glu Pro Pro Ser Leu Val Gly His Leu Gly Ala Glu Ser Ser				
	755		760	765
Cys Leu Phe Leu Asp Val Leu Ser Gln Phe Asp Lys Pro Leu Ser Asp				
	770		775	780
Gln Lys Leu Gln Leu Ala Val Trp His Phe Leu Ser Thr Ile Val Ser				
785	790		795	800
Lys Arg Gln Gln Trp Leu Ala Val Tyr Ile Leu Thr Gly Ser Ser Ala				
	805		810	815
Arg Gln Thr Met Xaa Gln Thr Asp Thr Lys Gly Gly Pro Thr Met Arg				
	820		825	830
Gly Thr Pro Phe Leu Gln Ile Ala Leu Gly Met Leu Ser Asn Ile Glu				
	835		840	845
His Met Asp Leu Arg Ala Ala Leu Ser Leu Leu Glu Phe Val Ser Cys				
	850		855	860
Ala Gln Glu Asn Trp Pro Trp Ala Thr Pro Glu Leu Arg Lys Thr Pro				
865	870		875	880
Gln Phe Phe Ser Ser Leu Val Asn Tyr Val Ser Lys Leu Lys Ile Pro				
	885		890	895
Ser Leu Pro Val Gln Asp Gln Ile Phe Ala Thr Arg Ile Ala Ala Val				
	900		905	910
Val Ala Asp Leu Cys Ala Val Tyr Leu His Ser Ala Lys Asp Met Gln				
	915		920	925
Asp Arg Thr Phe Tyr Lys Thr Leu Ile Pro Leu Val Phe Trp Tyr Ser				
	930		935	940
Lys Asp Ala Val Asp Val Ser Ala Tyr Asn Thr Ser Leu His Ala Asn				
945	950		955	960
Leu Lys Arg Asn Phe Glu Met Arg Tyr Ser Gly Cys Lys Leu Ala Asp				
	965		970	975
Phe Arg Arg Thr Ser Leu Gln Pro Arg Ser Leu Gly Arg Asp Tyr Tyr				

## 18194

980 985 990  
 Tyr Asp Ile Gln Leu Gly Asp Lys Leu Leu Ser Tyr Asp Phe Ala Trp  
 995 1000 1005  
 Ser Gly Thr Lys Asn Gln Gly Phe Ala Glu Glu Phe Glu Arg Ala Asn  
 1010 1015 1020  
 Ile Asn Leu Ser Leu Val Glu Ala Gln Val Val Arg Thr Val Ala Asn  
 1025 1030 1035 1040  
 Phe His Leu Thr Asn Glu Thr Ile Leu Ile Ile Phe Val  
 1045 1050

<210> 41242  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 41242  
 Cys Gly Val Arg Leu Asp Ser Arg Ala Leu Gly Arg Leu His His Leu  
 1 5 10 15  
 Ser Asn Ala Gln Ser Asp Ile Val Gly Tyr Thr Ser Phe Thr Thr Phe  
 20 25 30  
 His Glu Asp Asn Ala Asn Gln Ile Cys Thr Ser Leu Asp Ser Ser Ala  
 35 40 45  
 Cys Thr Leu Phe Arg Pro Ser Ser Thr Asp Leu Asp Gln Pro  
 50 55 60

<210> 41243  
 <211> 732  
 <212> PRT  
 <213> A.fumigatus

<400> 41243  
 Ser Ile Val Ala Asn Ser Ala Tyr Lys Val Asp Asn Met Val Gly Val  
 1 5 10 15  
 Lys Arg Pro Val Asp Ala Gly Asp Glu Arg Asn Gly Lys Arg Thr Lys  
 20 25 30  
 Thr Lys Thr Val Ser Ala Thr Thr Lys Lys Ser Lys Ala Ala Pro Val  
 35 40 45  
 Lys Lys Ser Ala Pro Gln Lys Ser Ser Lys Lys Asp Val Lys Ser Gly  
 50 55 60  
 Lys Lys Asp Lys Lys Ser Lys Arg Lys Val Glu Glu Glu Glu Asp Phe  
 65 70 75 80  
 Asp Asp Asp Asp Glu Asp Asp Phe Asp Ile Asp Asp Ile Ala Asp Ser  
 85 90 95  
 Glu Asp Asp Glu Asp Glu Asp Val Glu Met Gly Ser Ser Ala Ser Asp  
 100 105 110  
 Asp Asp Glu Asp Gly Asp Ile Gln Gln Glu Lys Lys Gln Asn Thr Lys  
 115 120 125  
 Asp Ser Val Ala Ser Thr Lys Ala Glu Pro Leu Lys Ser Met Val Thr  
 130 135 140  
 Pro Trp Asn Phe Ile Phe Val Leu Asn His Leu Ala Asn Asn Thr Leu  
 145 150 155 160  
 Phe Leu Asp Thr Asn Ser Ser Arg Glu Ala His Ala Lys Gln Lys Thr  
 165 170 175  
 Leu Leu Gln Glu Arg Lys Ala Ala Lys Pro Asn Ala Asp Ile Ile Ala  
 180 185 190  
 Arg Ser Lys Gln Leu Trp Glu Arg Leu Arg Arg Lys Ser His Val Pro

195	200	205
Leu Glu Arg Lys Lys	Leu Ile Ala Glu Leu	Phe Glu Ile Ile Asn
210	215	220
Gly Arg Val Arg Asp	Phe Val Phe Lys His	Asp Ala Val Arg Val Ile
225	230	235
Gln Thr Ala Leu Lys	Tyr Ala Asn Ile Asp	Gln Arg Lys Gln Ile Ala
245	250	255
His Glu Leu Lys Gly	His Tyr Asn Glu Leu	Ala Gln Ser Arg Tyr Ala
260	265	270
Lys Phe Leu Val Gly	Lys Leu Leu Val His	Gly Asp Thr Glu Val Arg
275	280	285
Asp Leu Ile Ile Pro	Glu Phe Tyr Gly His	Val Lys Arg Leu Ile Arg
290	295	300
His Pro Glu Gly Ser	Trp Ile Leu Asp Asp	Ile Tyr Arg Thr Val Ala
305	310	315
Thr Lys Gln Gln Lys	Ala Thr Leu Leu Arg	Glu Trp Tyr Gly Pro Glu
325	330	335
Phe Ser Ile Phe Lys	Asp Glu Gln Ala Ser	Ala Asp Leu Ser Glu Ile
340	345	350
Leu Glu Lys Asn Pro	Glu Lys Arg Leu Pro	Ile Met His Phe Leu His
355	360	365
Glu Met Ile Asn Gln	Leu Val Gln Lys Arg	Thr Thr Gly Phe Thr Met
370	375	380
Leu His Asp Ala Met	Leu Gln Tyr Phe Leu	Asn Thr Lys Pro Gly Ser
385	390	395
Ser Glu Ala Asn Glu	Phe Ile Glu Leu Leu	Lys Gly Asp Glu Glu Gly
405	410	415
Asp Leu Leu Lys Asn	Leu Ala Phe Thr Lys	Ser Gly Ser Arg Val Met
420	425	430
Cys Leu Ser Leu Ala	Tyr Ser Asn Ala Lys	Asp Arg Lys Leu Leu Thr
435	440	445
Arg Ala Tyr Arg Asp	Thr Ile Lys Met Met	Ala Ala Asp Leu His Gly
450	455	460
His Met Val Leu Leu	Ala Tyr Glu Val Ile	Asp Asp Thr Lys Leu
465	470	475
Thr Ser Lys Leu Ile	Phe Pro Glu Leu Leu	Asn Gln Gly Met Glu Glu
485	490	495
Glu Ala Arg Asn Glu	Glu Leu Leu Tyr Gln	Val Asn Asp Leu Thr Ala
500	505	510
Arg Ile Pro Ile Leu	Phe Pro Phe Ala Gly	Asp Arg Val Lys Trp Leu
515	520	525
Val Pro Glu Val Asp	Gln Glu Val Leu Lys	Glu Ile Arg Glu Ile Arg
530	535	540
Lys Glu Thr Ser Lys	Lys Glu Pro Ala Val	Arg Arg Arg Glu Leu Val
545	550	555
Lys Ala Ala Ser Pro	Thr Leu Leu Ser Phe	Ile Ala Ala Arg Ala Glu
565	570	575
Ser Leu Leu Glu Thr	Ser Phe Gly Cys Gln	Phe Ile Ala Glu Val Leu
580	585	590
Phe Asp Ala His Gly	Asp Lys Met Pro Ala	Leu Ser Ala Val Ala Ser
595	600	605
Ala Ala Lys Val Lys	Ser Asp Met Lys Asp	Ser Pro Phe Phe Gly Arg
610	615	620
Leu Leu Lys Ser Leu	Val Gln Gly Gly Arg	Phe Asn Pro Ala Glu Lys
625	630	635
Val Val Glu Lys Val	Gln Pro Pro Leu Asn	Phe His Ala Leu Leu Tyr

<210> 41244

<211> 427

<212> PRT

<213> A.fumigatus

 $\langle 220 \rangle$ 

<221> UNSURE

<222> (424), (425), (426)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41244

Cys	Gln	Leu	Leu	Arg	Arg	Arg	Asp	Gln	Met	Thr	Ser	Cys	His	Arg	Pro
1				5					10					15	
Ser	Trp	Lys	Val	Lys	Arg	Ser	Ala	Phe	Ser	Lys	Met	Pro	Arg	Lys	Ser
			20					25					30		
Ser	Arg	Tyr	Asp	Ile	Pro	Leu	Ala	Thr	Ile	Cys	Pro	Ala	Leu	Thr	Trp
		35					40					45			
Leu	Gln	Leu	Met	Glu	Gly	Asn	Leu	Ser	Arg	Ala	Arg	Ser	Ser	Ile	Arg
	50					55					60				
Met	Ser	Pro	Ser	Leu	Ser	Pro	Ala	Pro	Ser	Pro	Ala	Pro	Gly	Thr	Gln
65					70					75					80
Pro	Leu	Gly	Leu	Gly	Gln	Pro	Val	Gly	Gly	Leu	Tyr	Gln	Ser	Ile	Ser
				85				90						95	
Arg	Ala	Asp	Arg	Arg	Val	Ser	Ala	Leu	Arg	Ala	Arg	Ser	Thr	Tyr	Thr
			100					105					110		
Ser	Ala	Gln	Asp	Ser	Ala	Asn	Asn	Arg	His	Ser	Arg	Val	Tyr	Ser	Glu
		115					120					125			
Thr	Asn	Leu	Pro	Leu	Thr	Ala	Ser	Thr	Glu	Pro	Pro	Thr	Thr	Gly	Pro
	130					135					140				
Ser	Leu	Ser	Arg	Ser	Met	Ser	Ala	Met	Gly	Ser	Ser	Thr	Ser	Ser	Asn
145					150					155					160
Phe	His	Asn	Asp	Glu	Arg	Ser	Phe	His	Tyr	Asp	Thr	Thr	Arg	Pro	Tyr
			165						170					175	
Leu	Thr	His	Arg	Ala	Ser	Val	Leu	Pro	Thr	Pro	Pro	Pro	Ser	Gly	Ser
			180					185					190		
Ile	Arg	Arg	Ala	His	Ser	Ala	Asn	Gln	Ser	Gly	Asp	Asn	Ser	Glu	Thr
		195					200					205			
Pro	Lys	Gly	Leu	Gly	Ile	Thr	Thr	Pro	Asn	Val	Glu	Ser	Asp	Asn	Lys
	210					215					220				
His	Lys	Tyr	Glu	Lys	Phe	Asn	Ser	Glu	His	Pro	Pro	His	Asp	Pro	Pro
225					230					235					240
Ser	Arg	Ala	Gln	Ser	Gln	Leu	Gln	Val	Arg	Asp	Leu	Gln	Asp	Gln	Met
			245						250					255	
Lys	Gly	Leu	His	Ile	Lys	Ile	Ser	Ser	Leu	Lys	Val	Lys	Ala	Gln	Glu

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<210> 41245
<211> 64
<212> PRT
<213> A.fumigatus
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<210> 41246
<211> 60
<212> PRT
<213> A.fumigatus
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<210> 41247
<211> 199
<212> PRT
<213> A.fumigatus
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&lt;400&gt; 41247

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Leu His Arg Val Thr Cys Gln Pro Cys Gly Glu Asp Thr Asp Asn Arg
1          5          10          15
Ala Ile Gly Val Ser Val Thr Lys Glu Ala Leu Val Asn Asp Ser Ile
20          25          30
Leu Asn Pro Asp Asp Ala Tyr Arg Cys Leu Ile Asn Leu Asn Ile Asn
35          40          45
Leu Gln Asn Arg Leu Tyr Thr Asp Lys Phe Glu Trp Ser Leu Leu His
50          55          60
Pro Pro Gly Met Ala Glu Glu Phe Ala Gln Val Thr Cys Ala Asp Leu
65          70          75          80
Gly Leu Gly Gly Glu Trp Val Gly Ala Ile Ala His Gly Ile Tyr Glu
85          90          95
Ala Val Leu Lys Leu Lys Lys Glu Val Cys Glu Ser Gly Gly Met Ile
100         105         110
Ser Gly Met Gly Gly Tyr Gly Asn Glu Ile Asp Asn Gln Ala Ala Asn
115        120        125
Gly Thr Glu Ala Gly Trp Arg Tyr Asp Pro Glu Gly Leu Gly Asp Glu
130        135        140
Trp Glu Pro Lys Val Glu Thr Leu Ser Lys Glu Glu Ile Glu Lys Arg
145        150        155        160
Glu Gly Asp Arg Glu Arg Gln Ile Arg Arg Leu Arg Arg Glu Thr Ala
165        170        175
Arg Phe Ser Ser Thr Ala Arg His His Thr Arg Tyr Val Ala Ala Gly
180        185        190
Gln Trp Leu Phe Arg Arg Arg
195

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&lt;210&gt; 41248

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41248

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Arg Tyr Gly Ile Thr Ser Lys Phe Ser Thr Leu Pro Gly Phe Glu Ala
1          5          10          15
Asp Asp Cys Thr Asn Asp Cys Thr Tyr Ser Pro Glu Ser Lys Thr Tyr
20          25          30
Asn Leu Ser Gln Thr Leu Glu Gly His Ser Asp Trp Val Arg Asp Val
35          40          45
Ala Trp Ser Pro Ser Ile Leu Ser Lys Ser Tyr Ile Ala Ser Ala Ser
50          55          60
Gln Asp Lys Thr Val Arg Ile Trp Thr Ser Asp Ala Ser Asn Pro Gly
65          70          75          80
Gln Trp Thr Ser Gln Gln Leu Glu Phe Asp Thr Val Leu Trp Arg Val
85          90          95
Ser Trp Ser Pro Ser Gly Asn Ile Leu Ala Val Ser Gly Gly Asp Asn
100         105         110
Lys Val Ser Leu Trp Lys Glu Asn Leu Lys Gly Gln Trp Glu Lys Val
115        120        125
Lys Asp Ile Glu Glu
130

```

&lt;210&gt; 41249

&lt;211&gt; 73



18199

<212> PRT

<213> A.fumigatus

<400> 41249

```

Val Trp His Asp Ile Ser His Glu Pro Ser Lys Arg Gln Asp Ser Gly
1           5           10           15
Ala Tyr Tyr Phe Asp Phe Thr Ile Ser Ser Leu Ile Ile Phe Thr Ser
          20           25           30
Ile Ser Cys Trp Pro Arg Cys Leu Lys His Cys Pro Ser Ser Trp Asn
          35           40           45
Gln Ala Ser Phe Gly Arg Ile Cys Leu Lys Thr Ile Tyr Phe Tyr Ser
          50           55           60
Cys Ile Leu Gln Glu Asn His Phe Thr
65           70

```

<210> 41250

<211> 145

<212> PRT

<213> A.fumigatus

<400> 41250

```

Tyr Val Val Tyr Ser Pro Phe Gln Ala His Pro Lys Phe Gly Thr Ile
1           5           10           15
Leu Ala Ser Ser Ser Tyr Asp Gly Lys Val Leu Ile Trp Arg Glu Gln
          20           25           30
His Gln Asn Ala Thr Ser Pro Val Ala Gly Ser Thr Trp Thr Lys Val
          35           40           45
Phe Asp Phe Ser Leu His Thr Ala Ser Val Asn Met Val Ser Trp Ala
          50           55           60
Pro His Glu Ser Gly Cys Leu Leu Ala Cys Ala Ser Ser Asp Gly His
65           70           75           80
Val Ser Val Leu Glu Phe Arg Asp Asn Ser Trp Thr His Gln Ile Phe
          85           90           95
His Ala His Gly Met Gly Val Asn Ser Ile Ser Trp Ala Pro Ala Ala
          100          105          110
Ser Pro Gly Ser Leu Ile Ser Ser Asn Pro Gly Pro Gly Gln Gln Arg
          115          120          125
Arg Phe Val Thr Gly Gly Ser Asp Asn Leu Leu Lys Ile Trp Asp Tyr
          130          135          140
Lys
145

```

<210> 41251

<211> 280

<212> PRT

<213> A.fumigatus

<400> 41251

```

Asn Ile Lys Val Leu Met Pro Arg Gln Arg Arg Arg His Asp Phe Leu
1           5           10           15
Val Lys Leu Gly Lys Thr Phe Glu Lys Gln Ala Asn Ala Gly Val Asp
          20           25           30
Arg Phe Arg Ala Ala Asn Glu Ala Ser Val Ile Ala Glu Val Gln Ala
          35           40           45
Lys Glu Ile Gln Asp Glu Lys Glu Arg Lys Lys Asp Met Gln Arg Lys
          50           55           60

```

## 18200

Arg Arg Arg Glu Asn Thr Val Arg Leu Glu Met Gln Lys Lys Leu Glu  
 65 70 75 80  
 Ala Glu Arg Lys Ala Asn Lys Ala Asn Asp Ala Ala Glu Lys Ala Lys  
 85 90 95  
 Phe Leu Arg Glu Ala Glu Arg Ala Gln Arg Lys Ile Lys Ser Thr Lys  
 100 105 110  
 Arg Ala Leu Glu Gly Val Thr Ser Pro Glu Glu Ile Gly Glu Val Thr  
 115 120 125  
 Pro Leu Ala Pro Asn Leu Glu Gly Gly Thr Thr Ser Ser Phe His Ile  
 130 135 140  
 Gly Arg Ser Ser Pro Ser Arg Arg Lys Ser Gly Arg Ser Gly Thr Ser  
 145 150 155 160  
 Arg Pro Lys Lys Ser Lys Glu Gln Lys Gln Ala Glu Lys Asp Ala Ala  
 165 170 175  
 Glu Ala Ala Tyr Ala Ala Met Glu Asn Asp Glu Pro Leu Pro Leu Ala  
 180 185 190  
 Pro Lys Glu Asp Pro Arg Lys Glu Thr Leu Lys Lys Glu Ala Lys Gly  
 195 200 205  
 Ala Arg Ser Lys Glu Thr Thr Pro Ala Pro Val Ser Ala Phe Glu Ser  
 210 215 220  
 Lys Gly Tyr Asn Gln Ile Tyr Glu Gln Ile Trp Arg Asp Ile Ala Arg  
 225 230 235 240  
 Lys Asp Ile Pro Lys Val Tyr Arg Ile Lys Thr Leu Ser Leu Ser Thr  
 245 250 255  
 Arg Gln Glu Asn Leu Arg Lys Thr Ala Gln Leu Ala Ser Lys Gln Ser  
 260 265 270  
 Arg Lys Trp Gln Glu Arg Thr Lys  
 275 280

<210> 41252  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 41252  
 Pro Ser Thr Gly Ser Ser Arg Ala Ala Pro Ser Lys Ser Glu Ser Ala  
 1 5 10 15  
 Ser Glu Pro Cys Arg Lys Lys Arg Cys Ser Ala Leu Ser Ser Pro Ala  
 20 25 30  
 Val Arg Pro Ala Gly Val Asp Phe Asn Thr Arg Tyr Arg Glu Ser Arg  
 35 40 45  
 Thr Lys Asp Ile Ala Met Trp Leu Ala Asp Asp Glu Gln Ala Glu Leu  
 50 55 60  
 Ile Glu Gln Tyr Glu Lys Glu Ala Leu His Arg Gly Glu Val Phe Gly  
 65 70 75 80  
 Ala Gly Lys

<210> 41253  
 <211> 168  
 <212> PRT  
 <213> A.fumigatus

<400> 41253  
 Phe Arg Thr Leu Leu Thr Ser Tyr Leu Phe Trp Leu Val Met Pro Ser  
 1 5 10 15

## 18201

Leu Pro Arg Arg Pro Arg Thr Ser Cys Trp Arg Ser Thr Glu Ser Thr  
                   20                  25                  30  
 Ser Arg Arg Leu Thr Thr Arg Pro Cys Leu Gly Gly Arg Ser Ala Cys  
                   35                  40                  45  
 Ala Ser Pro Pro Leu Arg Asp Thr Ser Arg Asn Thr Ala Thr Thr Trp  
                   50                  55                  60  
 Phe Thr Pro Ser Arg Arg Ser Gly Thr Ile Trp Val Ser Ser Ala Pro  
 65                  70                  75                  80  
 Val Thr Gly Gln Pro Arg Val Asp Leu Ser Val Trp Val Ser Lys Ala  
                   85                  90                  95  
 Pro Arg Ser Arg Thr Ser Pro Ser Gly Arg Thr His Ser Ser Ala Trp  
                   100                  105                  110  
 Ser Ser Thr Ser Leu Trp Ser Arg Pro Ser Ser Val Ser Ser Ser Arg  
                   115                  120                  125  
 Arg Leu Ala Cys Lys Pro Pro Leu Pro Ser Ile Leu Leu Arg Pro Leu  
                   130                  135                  140  
 Leu Pro Pro Ser Pro Leu Ala Trp Leu Leu Lys Thr Gly Arg Cys Leu  
 145                  150                  155                  160  
 Thr Ile Arg Tyr Cys Leu His Ile  
                   165

&lt;210&gt; 41254

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41254

Leu Lys Phe Arg Arg Arg Lys Phe Arg Thr Lys Arg Asn Ala Arg Arg  
 1                  5                  10                  15  
 Thr Cys Ser Gly Ser Gly Gly Val Arg Ile Arg Cys Val Trp Lys Cys  
                   20                  25                  30  
 Arg Arg Ser Leu Lys Arg Ser Ala Arg Gln Ile Arg Pro Thr Met Leu  
                   35                  40                  45  
 Pro Arg Arg Pro Asn Ser Ser Ala Lys Arg Lys Gly Pro Arg Glu Arg  
                   50                  55                  60  
 Ser Asn Arg Pro Ser Glu Leu Ser Lys Val Ser His Arg Arg Arg Lys  
 65                  70                  75                  80  
 Ser Glu Arg Ser Arg Arg Leu Leu Leu Ile Trp Lys Glu Ala Leu Pro  
                   85                  90                  95  
 Ala His Ser Thr Ser Val Ala Ala Pro His Arg Gly Ala Ser Leu Asp  
                   100                  105                  110  
 Ala Arg Gly Pro His Gly Arg Arg Asn Pro Arg Ser Arg Ser Arg Pro  
                   115                  120                  125  
 Arg Arg Met Arg Pro Lys Leu Leu Met Leu Pro Trp Arg Met Met Ser  
                   130                  135                  140  
 Pro Cys Leu Ser Leu Pro Arg Lys Ile Arg Glu Arg Arg Pro Ser Arg  
 145                  150                  155                  160  
 Lys Lys Pro Arg Val His Val Pro Lys Lys Pro Arg Leu Arg Pro Cys  
                   165                  170                  175  
 Pro His Ser Asn Arg Arg Val Thr Thr Lys Tyr Met Asn Arg Ser Gly  
                   180                  185                  190  
 Gly Ile Leu Pro Gly Lys Thr Ser Pro Arg Ser Ile Ala Ser Arg Pro  
                   195                  200                  205  
 Phe Leu Ser Val Arg Val Lys Lys Thr Cys Gly Arg Gln Leu Ser Leu  
                   210                  215                  220  
 Pro Ala Ser Ser Leu Ala Asn Gly Lys Ser Val Arg Asn Arg Val

## 18202

225

230

235

&lt;210&gt; 41255

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41255

Glu	Thr	Gly	Asp	Arg	Val	Ala	Gln	Glu	Gly	Arg	Lys	Gln	Ser	Val	Lys
1				5					10					15	
Pro	Phe	Val	Arg	Ser	Gly	Ser	Trp	Ile	Phe	Leu	Ile	Ser	Gln	Thr	Glu
			20					25					30		
Leu	Tyr	Ser	His	Phe	Ile	Gly	Arg	Lys	Ile	Lys	Gly	Ala	Gly	Thr	Lys
		35					40					45			
Ser	Ser	Gly	Asp	Thr	Ala	Val	Asp	Gly	Ser	Asp	Glu	Thr	Ile	Gln	Pro
	50					55					60				
Gly	Lys	Ala	Asp	His	Thr	Ile	Asp	Leu	Pro	Pro	Thr	Val	Ala	Asp	Val
65					70					75					80
Gly	Ala	Lys	Val	Thr	Asn	Ser	Glu	Asp	Leu	Asp	Phe	Asp	Ala	Glu	Asp
				85					90					95	
Glu	Thr	Ala	Leu	Arg	Gln	Gly	Ser	Leu	Gly						
			100						105						

&lt;210&gt; 41256

&lt;211&gt; 874

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41256

Ser	Arg	Arg	Leu	Asn	Cys	Ile	Leu	Thr	Ser	Leu	Val	Glu	Arg	Leu	Lys
1				5					10					15	
Ala	Pro	Glu	Gln	Asn	Leu	Leu	Gly	Ile	Pro	Leu	Ser	Thr	Ala	Pro	Met
			20					25					30		
Arg	Leu	Ser	Ser	Leu	Ala	Arg	Pro	Thr	Thr	Pro	Leu	Ile	Cys	Arg	Leu
		35					40					45			
Pro	Ser	Pro	Thr	Trp	Ala	Pro	Lys	Ser	Pro	Ile	Leu	Arg	Thr	Trp	Ile
	50					55					60				
Ser	Thr	Arg	Lys	Met	Arg	Arg	Leu	Cys	Gly	Lys	Ala	Ala	Leu	Ala	Asn
65					70					75					80
Ala	Gln	Asn	Ala	Val	Lys	Glu	Ala	Gln	Glu	Arg	Ala	Arg	Ala	Phe	Asn
				85					90					95	
Ala	Glu	Glu	Asn	Pro	Met	Ala	Ala	Leu	Asp	Glu	Gly	Glu	Leu	Asn	Phe
			100					105					110		
Gln	Asn	Pro	Thr	Ser	Leu	Gly	Asp	Ile	Glu	Ile	Ser	Gln	Pro	Lys	Met
		115					120					125			
Leu	Thr	Ala	Lys	Leu	Lys	Glu	Tyr	Gln	Leu	Lys	Gly	Leu	Asn	Trp	Leu
	130					135					140				
Val	Asn	Leu	Tyr	Glu	Gln	Gly	Ile	Asn	Gly	Ile	Leu	Ala	Asp	Glu	Met
145					150					155					160
Gly	Leu	Gly	Lys	Thr	Ile	Gln	Ser	Ile	Ser	Val	Met	Ala	Tyr	Leu	Ala
				165					170					175	
Glu	Val	His	Asn	Ile	Trp	Gly	Pro	Phe	Leu	Val	Ile	Ala	Pro	Ala	Ser
			180					185					190		
Thr	Leu	His	Asn	Trp	Gln	Gln	Glu	Ile	Thr	Lys	Phe	Val	Pro	Asp	Ile
		195					200					205			
Lys	Val	Leu	Pro	Tyr	Trp	Gly	Ser	Ala	Lys	Asp	Arg	Lys	Val	Leu	Arg

210		215		220
Lys Phe Trp Asp Arg	Lys His Ile Thr Tyr	Thr Lys Glu Ser Glu Phe		
225	230	235		240
His Val Leu Val Thr	Ser Tyr Gln Leu Val	Val Leu Asp Ser Gln Tyr		
	245	250		255
Phe Gln Lys Val Lys	Trp Gln Tyr Met	Ile Leu Asp Glu Ala Gln Ala		
	260	265		270
Ile Lys Ser Ser Gln	Ser Ser Arg Trp	Lys Asn Leu Leu Gly Phe His		
	275	280		285
Cys Arg Asn Arg Leu	Leu Leu Thr Gly	Thr Pro Ile Gln Asn Asn Met		
	290	295		300
Gln Glu Leu Trp Ala	Leu Leu His Phe	Ile Met Pro Thr Leu Phe Asp		
305	310	315		320
Ser His Asp Glu Phe	Ser Glu Trp Phe	Ser Lys Asp Ile Glu Ser His		
	325	330		335
Ala Gln Ser Asn Thr	Lys Leu Asn Glu	Asp Gln Leu Arg Arg Leu His		
	340	345		350
Met Ile Leu Lys Pro	Phe Met Leu Arg	Arg Val Lys Lys His Val Gln		
	355	360		365
Gln Glu Leu Gly Asp	Lys Val Glu Lys	Asp Val Phe Cys Asp Leu Thr		
	370	375		380
Tyr Arg Gln Arg Ala	Tyr Tyr Thr Asn	Leu Arg Asn Arg Val Ser Ile		
385	390	395		400
Met Asp Leu Ile Glu	Lys Ala Ala Val	Gly Asp Glu Ala Asp Ser Thr		
	405	410		415
Thr Leu Met Asn Leu	Val Met Gln Phe	Arg Lys Val Cys Asn His Pro		
	420	425		430
Asp Leu Phe Glu Arg	Ala Glu Thr Lys	Ser Pro Phe Ser Val Gly Tyr		
	435	440		445
Phe Ala Glu Thr Ala	Ser Phe Val Arg	Glu Gly Gln Asn Val Asp Val		
	450	455		460
Arg Tyr Ser Thr Arg	Asn Leu Ile Glu	Tyr Asn Leu Pro Arg Leu Leu		
465	470	475		480
Cys Ser Pro Ser Gly	Arg Ile Asp Met	Ala Gly Pro Gly Asn Glu His		
	485	490		495
Ala Gly Phe Arg Gly	Lys Tyr Leu Gln	His Leu Met Asn Ile Phe Thr		
	500	505		510
Pro Glu Asn Ile Lys	Arg Ser Ile Asp	Glu Asp Gly Ala Phe Ser Phe		
	515	520		525
Leu Arg Phe Ala Asp	Thr Ser Ile Asn	Glu Ala Tyr Glu Gln Ser His		
	530	535		540
Leu Gly Val Phe Glu	Arg Ala Val Arg	Arg Arg Gly Gln Ser Asn Arg		
545	550	555		560
Leu Ser His Leu Asn	Val Ile Tyr Asp	Asp Glu Glu Asp Glu Gln Thr		
	565	570		575
Ser Lys Phe Val Leu	Pro His Ser Leu	Phe Asn Ile Val Gln Arg Asn		
	580	585		590
Asp Arg Gln Ala Val	Arg Asn Val Thr	Val Glu Gly Tyr Met Arg Asp		
	595	600		605
Leu Met Asn Val Ser	Glu Ala Thr Phe	Glu Arg Asp Gly Leu Gly Val		
	610	615		620
Ile Glu Pro Ser Ala	Ser Pro Ala Ala	Ser Ala Pro Pro Ile Thr Ile		
625	630	635		640
Ser Cys Ser Gly Gln	Val Ala Leu Arg	Glu Thr Gln Asp Thr Phe Phe		
	645	650		655
Asn Val Ser Val Arg	His Ala Leu Phe	Ser Thr Pro Ser Arg Gln Met		

```

        660                665                670
Glu Gln Gln Ile Leu Glu Lys Lys Leu Asp Pro Ala Pro Phe Ser Leu
        675                680                685
Pro Pro Met Leu Pro Lys Pro Ile Ser Thr Lys Gly Arg Tyr Thr His
        690                695                700
Ile Glu Val Pro Ser Met Arg Arg Phe Val Thr Asp Ser Gly Lys Leu
705                710                715                720
Ala Lys Leu Asp Glu Leu Leu Arg Glu Leu Lys Ala Gly Gly His Arg
        725                730                735
Val Leu Leu Tyr Phe Gln Met Thr Arg Met Ile Asp Leu Met Glu Glu
        740                745                750
Tyr Leu Thr Tyr Arg Asn Tyr Lys Tyr Cys Arg Leu Asp Gly Ser Thr
        755                760                765
Lys Leu Glu Asp Arg Arg Asp Thr Val Ala Asp Phe Gln Gln Arg Pro
        770                775                780
Glu Ile Phe Val Phe Leu Leu Ser Thr Arg Ala Gly Gly Leu Gly Ile
785                790                795                800
Asn Leu Thr Ala Ala Asp Thr Val Ile Phe Tyr Asp Ser Asp Trp Asn
        805                810                815
Pro Thr Ile Asp Ser Gln Ala Met Asp Arg Ala His Arg Leu Gly Gln
        820                825                830
Thr Arg Gln Val Thr Val Tyr Arg Leu Ile Thr Arg Gly Thr Ile Glu
        835                840                845
Glu Arg Ile Arg Lys Arg Ala Leu Gln Lys Glu Glu Val Gln Arg Val
        850                855                860
Val Ile Ser Gly Gly Ala Ala Gly Arg Ser
865                870

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&lt;210&gt; 41257

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41257

```

Glu Ser His Lys Ile Pro Leu Tyr Tyr Ile Ala Phe Val Phe Leu Phe
1                5                10                15
Ser His Phe Pro Pro Ser Pro Phe Pro Ile Arg Leu Phe Ser Pro Leu
        20                25                30
Val Ser Lys Leu Leu Ser Pro Ile Ser Gln His His Gln Thr Asn Ser
        35                40                45
Cys Leu Asp Glu Ser Leu Cys Ser Leu Ala Ala Val Thr Met Glu Ser
        50                55                60
Leu Leu Gln Gln Ser Arg Ala Met Cys Pro Phe Leu Lys Arg Thr Ser
65                70                75                80
Pro Thr Ala Leu Arg Thr Leu Ala Thr Ala Thr Arg Pro Ser Met Ser
        85                90                95
Pro Gly Gly Gly Thr Met Ser Asn Leu Gln Val Ile Ala Arg Arg Cys
        100                105                110
Pro Val Met Ser Lys Ala Leu Ala Val Gln Ser Ala Arg Met Ala Gly
        115                120                125
Ala Lys Arg Phe Thr Ser Thr Ala Ala Gly Val Pro Gly Met Ser Ser
        130                135                140
Lys His Phe Arg Pro Ala Gln Thr Arg Arg Ala Leu His Ser Thr Gly
145                150                155                160
Gly Asn Gly Ala Asn Leu Ser Pro Asp Leu Tyr Lys Asn Thr Asp Arg
        165                170                175

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## 18205

Arg Ala Tyr Cys Ser Gln Pro Met Asp Trp Arg Tyr Ile Ala Asn  
 180 185 190

<210> 41258

<211> 526

<212> PRT

<213> A.fumigatus

<400> 41258

Thr Val Gln Pro Thr Phe Gly Thr Gly Lys Gly Lys Thr Pro Arg Ala  
 1 5 10 15  
 Thr Ser Pro Ser Thr Val Ala Gly Pro Arg Pro Glu Val Pro Ala Pro  
 20 25 30  
 Ala Pro Phe Asp Tyr Asn Ala Phe Tyr Leu Gly Glu Leu Glu Lys Lys  
 35 40 45  
 His Lys Asp Lys Ser Tyr Arg Tyr Phe Asn Asn Ile Asn Arg Leu Ala  
 50 55 60  
 Lys Glu Phe Pro Arg Ala His Thr Ala Ser Met Glu Glu Arg Val Thr  
 65 70 75 80  
 Val Trp Cys Ser Asn Asp Tyr Leu Gly Met Gly Arg Asn Pro Glu Val  
 85 90 95  
 Leu Ala Thr Met His Glu Thr Leu Asp Thr Tyr Gly Ala Gly Ala Gly  
 100 105 110  
 Gly Thr Arg Asn Ile Ser Gly His Asn Lys His Ala Val Ala Leu Glu  
 115 120 125  
 Asn Thr Leu Ala Asn Leu His Gly Lys Glu Ala Ala Leu Val Phe Ser  
 130 135 140  
 Ser Cys Tyr Val Ala Asn Asp Ala Thr Leu Ala Thr Leu Gly Ser Lys  
 145 150 155 160  
 Met Pro Asp Cys Val Ile Leu Ser Asp Ser Leu Asn His Ala Ser Met  
 165 170 175  
 Ile Gln Gly Ile Arg His Ser Gly Ala Lys Lys Met Val Phe Lys His  
 180 185 190  
 Asn Asp Leu Val Asp Leu Glu Gln Lys Leu Ala Ser Leu Pro Leu His  
 195 200 205  
 Val Pro Lys Ile Ile Ala Phe Glu Ser Val Tyr Ser Met Cys Gly Ser  
 210 215 220  
 Ile Ala Pro Ile Glu Ala Ile Cys Asp Leu Ala Asp Lys Tyr Gly Ala  
 225 230 235 240  
 Ile Thr Phe Leu Asp Glu Val His Ala Val Gly Met Tyr Gly Pro His  
 245 250 255  
 Gly Ala Gly Val Ala Glu His Leu Asp Tyr Glu Ile Tyr Ala Ser Gln  
 260 265 270  
 Asp Thr Pro Asn Pro Arg Ser Thr Lys Gly Thr Val Met Asp Arg Val  
 275 280 285  
 Asp Ile Ile Thr Gly Thr Leu Gly Lys Ala Tyr Gly Cys Val Gly Gly  
 290 295 300  
 Tyr Ile Ala Gly Ser Ala Ala Met Val Asp Thr Ile Arg Ser Leu Ala  
 305 310 315 320  
 Pro Gly Phe Ile Phe Thr Thr Ser Leu Pro Pro Ala Thr Met Ala Gly  
 325 330 335  
 Ala Asn Thr Ala Ile Leu Tyr Gln Ala Arg His Lys Gly Asp Arg Val  
 340 345 350  
 Leu Gln Gln Leu His Thr Arg Ala Val Lys Lys Ala Leu Lys Glu Leu  
 355 360 365  
 Asp Ile Pro Val Ile Pro Asn Pro Ser His Ile Val Pro Leu Leu Val

370	375	380
Gly Asp Ala Glu Leu Ala Lys Lys Ala Ser Asp Lys Leu Leu Glu Glu		
385	390	395
His Gly Ile Tyr Val Gln Ala Ile Asn Tyr Pro Thr Val Pro Arg Gly		400
	405	410
Glu Glu Arg Leu Arg Ile Thr Pro Thr Pro Gly His Val Lys Glu His		415
	420	425
Arg Asp His Leu Val His Ala Val Gln Ala Val Trp Asn Asp Leu Gly		430
	435	440
Ile Lys Arg Thr Ser Asp Trp Ala Ala Gln Gly Gly Phe Val Gly Val		445
	450	455
Gly Val Glu Gly Ala Glu Glu Gln Asn Gln Pro Ile Trp Lys Asp Ala		460
465	470	475
Gln Leu Gly Leu Val Glu Tyr Glu Ser Leu Glu Gln Ala Val Glu Arg		480
	485	490
Glu Phe Gln Gln Ala Pro Arg Met Gln Thr Ala Thr Pro Ile His Pro		495
	500	505
Ala Ala Ala Pro Ala Ala Ser Ile Pro Val Gly Val Ala Ala		510
	515	520
		525

&lt;210&gt; 41259

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (159)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41259

Thr Ser Pro Pro Arg Arg Pro Pro Cys Arg Arg Arg Cys Lys Pro Ile	
1	5
Ser Leu Ser Arg Lys Pro Thr Trp Thr Gln Arg Thr Leu Pro Thr Tyr	10
	20
Thr Arg Ser Thr Cys Ser Ser Pro Thr Gly Trp Ser Pro Ser Ala Ser	25
	30
	35
Ser Pro Ala Ser Arg Ser Gly Pro Thr Pro Ser Pro Pro Ala Ser Pro	40
	45
	50
Trp Pro Arg Pro Arg Ala Thr Ser Pro Ala Ala Ser Arg Arg Ser Ser	55
65	60
	65
Ser Pro Ala Thr Pro Pro Thr Ser Arg Ser Ser Ala Ser Ser Ser Ser	70
	75
	80
	85
Cys Ser Ser Ser Pro Ala Pro Tyr Ala Pro Val Glu Thr Pro Asn Arg	90
	95
	100
Pro Leu Asp Gln Ala Ala Ser Ala Ser Arg Ile Ala Arg Glu Cys Glu	105
	110
	115
Ala Ser Tyr Pro Arg Pro Arg Ala Thr Pro Pro Arg Pro Ala Ser Ser	120
	125
	130
Asn Ser Arg Ile Gln Ala Asn Pro Thr Pro Ala Leu Ser Arg Xaa Pro	135
145	140
	145
Ser Ser Thr Pro Ser Ala Ala Asn Ser Pro Arg Arg Ala Leu Thr Ser	150
	155
	160
	165
Pro Arg Thr Thr Leu Pro Ser Cys Thr Pro Pro Ser Ala Arg Ser Arg	170
	175
	180
Cys Ile Phe Pro Arg Ser Pro Pro Arg Thr Ala Ala Pro Ala Pro Trp	185
	190



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<210> 41260
<211> 152
<212> PRT
<213> A.fumigatus
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<210> 41261
<211> 127
<212> PRT
<213> A.fumigatus
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<400> 41261																
Asp	Ile	Ala	Ser	Lys	Ala	Ala	Ala	Val	Gln	Ala	Gln	Val	Gln	Ala	Asn	
1				5					10					15		
Lys	Pro	Ile	Pro	Gln	Ala	Asn	Leu	Asp	Ala	Thr	His	Pro	Ala	Asp	Val	
			20					25					30			
Tyr	Pro	Ile	Asp	Val	Leu	Val	Pro	Asn	Gly	Leu	Val	Thr	Leu	Arg	Gln	
		35					40					45				
Leu	Pro	Gly	Val	Lys	Glu	Trp	Ala	Asp	Thr	Val	Ser	Ala	Gly	Leu	Pro	
	50					55					60					
Val	Ala	Thr	Thr	Ser	Arg	Tyr	Val	Ser	Arg	Arg	Val	Glu	Ala	Val	Val	
65					70					75					80	
Lys	Ser	Gly	Asn	Thr	Thr	His	Leu	Gln	Ile	Leu	Arg	Phe	Ile	Leu	Leu	
			85						90					95		
Leu	Leu	Glu	Phe	Ala	Arg	Ser	Leu	Arg	Ser	Gly	Arg	Asp	Pro	Lys	Ser	
			100					105					110			
Ser	Ala	Gly	Pro	Gly	Ser	Lys	Arg	Leu	Pro	His	Ser	Glu	Gly	Val		
		115					120					125				

<210> 41262  
 <211> 160  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (32)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 41262  
 Gly Ile Leu Ser Ser Ala Ser Gly Asn Pro Ala Ser Thr Ser Lys Gln  
 1 5 10 15  
 Gln Gln Gln Asn Thr Ser Gln Ser Asp Ala Gly Thr Leu Pro Asp Xaa  
 20 25 30  
 Val Ile Asp Ala Leu Arg Arg Lys Phe Ala Pro Gln Gly Ser His Leu  
 35 40 45  
 Thr Lys Asn Asp Leu Thr Phe Leu His Thr Thr Ile Cys Ala Leu Ser  
 50 55 60  
 Leu His Ile Pro Pro Gln Pro Ala Lys Asp Gly Gly Ala Ser Ser Leu  
 65 70 75 80  
 Gly Gly Asn Ser Pro Asn Glu Leu Ala Thr Asp Pro Ala Asp Leu Arg  
 85 90 95  
 Asp Asp Leu Arg Leu Glu Ser Ala Thr Ile Leu Gln Tyr Phe Arg Glu  
 100 105 110  
 Leu Gly Cys Arg Val Asp Lys Pro Arg Glu Ser Glu Phe Ala Lys Trp  
 115 120 125  
 Asn Ile Lys Gly Gly Lys Ala Glu Ala Ala Ala Arg Arg Ile Ala Arg  
 130 135 140  
 Leu Lys Ile Pro Val Glu Phe Pro Lys Val Ser Arg Gly Gly Arg Arg  
 145 150 155 160

<210> 41263  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 41263  
 Ile Gly Arg Gln Arg Lys Leu Ala Gln Lys Glu Leu Leu Leu Ile Gly  
 1 5 10 15  
 Asn Asp Ser Ala Thr Thr Lys Phe Leu Val Phe Arg Lys Glu Arg Ser  
 20 25 30  
 Gln Tyr Tyr Val Arg Tyr Lys Pro Ala Lys Ile Leu Thr Leu Asp Ile  
 35 40 45  
 Ser Asp Val Ser Val Gly Gln Met Arg Thr Ile Ser Val Gly Ile Val  
 50 55 60  
 Pro Gln Thr His  
 65

<210> 41264  
 <211> 383  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE

&lt;222&gt; (101),(129)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41264

Val	Tyr	Lys	Ser	Ala	Thr	Val	Asp	Val	Asn	Leu	Leu	His	Phe	Ala	Pro
1				5					10					15	
Ser	Thr	Gln	Ala	Gly	Thr	Thr	Thr	Gly	Val	Pro	Met	Asp	Pro	Ala	Thr
			20					25					30		
Glu	Lys	Leu	Tyr	Val	Ser	Ala	Glu	Asn	Ala	Arg	Thr	Phe	Val	Gln	Ser
		35					40					45			
Val	Leu	Thr	Gly	Asn	Gly	Val	Ser	Pro	Glu	Asn	Ala	Thr	Ile	Ile	Ala
	50				55					60					
Asp	Cys	Leu	Val	Arg	Ala	Asp	Leu	Arg	Gly	Val	Asp	Thr	His	Gly	Ile
65				70					75					80	
Asn	Arg	Ile	Pro	Ser	Tyr	Met	Glu	Arg	Ile	Arg	Gln	Gly	Val	Leu	Asp
			85					90					95		
Ala	Lys	Ala	Thr	Xaa	Val	Val	Asn	Gln	Val	Thr	Pro	Val	Val	Ala	Gln
			100					105					110		
Val	Asp	Gly	Gln	Asn	Gly	Phe	Gly	Phe	Ile	Ala	Ala	His	Leu	Gly	Met
		115					120					125			
Xaa	Arg	Ala	Ile	Glu	Met	Ala	Arg	Glu	Phe	Gly	Ile	Gly	Phe	Val	Ser
	130					135					140				
Val	Lys	His	Ser	Asn	His	Phe	Gly	Met	Ser	Ala	Trp	Val	Val	Gln	Gln
145				150					155					160	
Ala	Leu	Asp	Ala	Gly	Met	Met	Ser	Leu	Val	Phe	Thr	Asn	Ser	Ser	Pro
			165					170					175		
Ala	Leu	Pro	Val	Trp	Gly	Gly	Arg	Glu	Lys	Leu	Met	Gly	Val	Ser	Pro
		180					185					190			
Leu	Ala	Ser	Gly	Ala	Pro	Ala	Gly	Lys	Glu	Lys	Pro	Phe	Ile	Leu	Asp
		195					200					205			
Met	Ala	Pro	Ser	Ile	Ala	Ala	Arg	Gly	Lys	Ile	Tyr	Lys	Ala	Ala	Arg
	210				215						220				
Arg	Gly	Glu	Lys	Ile	Pro	Ser	Asp	Trp	Ala	Leu	Asp	Gly	Glu	Gly	Arg
225				230						235				240	
Pro	Thr	Asp	Asp	Pro	His	Lys	Ala	Leu	Glu	Gly	Val	Met	Leu	Pro	Met
			245					250					255		
Gly	Gly	Pro	Lys	Gly	Ser	Ala	Leu	Ala	Val	Met	Met	Asp	Val	Phe	Ser
		260					265					270			
Gly	Val	Leu	Ser	Gly	Ser	Ala	Phe	Ala	Gly	His	Val	Thr	Asn	Pro	Tyr
		275				280						285			
Asp	Pro	Ser	Thr	Pro	Ala	Asp	Val	Gly	His	Phe	Leu	Val	Ala	Ile	Lys
	290				295						300				
Pro	Asp	Leu	Phe	Met	Gly	Leu	Glu	Glu	Phe	Lys	Glu	Arg	Met	Asp	Tyr
305				310					315					320	
Leu	Tyr	Gln	Arg	Val	Val	Gly	Ser	Glu	Lys	Met	Ala	Gly	Val	Asp	Arg
			325					330					335		
Ile	Tyr	Phe	Pro	Gly	Glu	Ile	Glu	Gln	Ile	Thr	His	Glu	Glu	Arg	Leu
		340				345						350			
Lys	Thr	Gly	Ile	Pro	Tyr	Val	Gln	Ala	Glu	Ile	Asp	Ala	Leu	Asn	Arg
	355					360					365				
Glu	Ala	Glu	Lys	Val	Gly	Ala	Glu	Arg	Ile	Val	Ile	Asp	Arg	Lys	
	370				375					380					

&lt;210&gt; 41265

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41265

Ser Arg Leu Ser Ser Thr Val Asp Val Arg Thr Lys His His Asp Thr  
 1 5 10 15  
 Tyr His Tyr Cys Ser Thr Thr Ile Lys Met Thr Thr Asp Tyr Ser Lys  
 20 25 30  
 Lys Thr Asn Ala Glu Leu Val Glu Ile Leu Lys Ser Arg Ser Leu Pro  
 35 40 45  
 His Thr Gly Lys Lys Ala Glu Met Val Ala Arg Leu Gln Glu Asp Asp  
 50 55 60  
 Gln Asn Lys Ala Lys Ala Ala Thr Ala Pro Ala Pro Ala Pro Ala Ala  
 65 70 75 80  
 Lys Thr Asp Ala Ala Asp Asp Val Ile Asp Trp Glu Asp Asp Asp Val  
 85 90 95  
 Pro Ala Ala Asp Thr Thr Ala Val Lys Pro Ser Thr Glu Ala Gly Ala  
 100 105 110  
 Ala Ala Ile Ala Ala Gly Gly Lys Gly Ala Val Ala Asn Pro Val Ala  
 115 120 125  
 Val Pro Asn Gln Lys Val Asp Thr Asp Pro Ala Thr Thr Asn Asp Leu  
 130 135 140  
 Lys Val Glu Ser Lys Gly Ala Ala Pro Ser Ala Glu Ser Gly Ala Gln  
 145 150 155 160  
 Gly His Glu Gly Thr Glu Gly Ala Pro Val Glu Ala Ala Pro Ala Ala  
 165 170 175  
 Pro Ala Glu Lys Lys Pro Ala Pro Asp Tyr Ser Met Gly Leu Pro Ile  
 180 185 190  
 Thr Glu Met Glu Glu Glu Leu Lys Lys Arg Lys Ala Arg Ala Glu Lys  
 195 200 205  
 Phe Gly Ile Thr Glu Glu Ser Lys Ala Ala Ile Ala Glu Ala Glu Lys  
 210 215 220  
 Gln Leu Glu Arg Ala Lys Arg Phe Gly Thr Val Val His Pro Thr Pro  
 225 230 235 240  
 Ala Gly Gly Val Lys Gly Leu Asp Glu Ala Leu Pro Thr Glu Lys Ser  
 245 250 255  
 Arg Lys Arg Gly Arg Gly Asp Asn Asp Gln Ala Ser Arg Gly Gly Lys  
 260 265 270  
 Arg Arg Asp Ile Gly Gly Arg Gly Lys Phe Arg Gly Lys Arg Arg Gly  
 275 280 285  
 Asn Arg Asn Gln Asn Gln Arg Asn Glu Gly Thr Leu Gly Asn Gln Arg  
 290 295 300  
 Pro Arg  
 305

&lt;210&gt; 41266

&lt;211&gt; 1139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (775)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41266

Arg Tyr Ile Thr Leu Tyr Leu Ile Cys Gly Leu Leu Ile Ala Ala Asn

## 18211

1 5 10 15  
 Met Ser Asp Gly Gly Phe Leu Pro Pro Leu Thr Asp Asp Ala Val Leu  
 20 25 30  
 Ile Ala Ser Ala Ala Asp Phe Glu Ala Val Arg Lys Leu Gln Ala Glu  
 35 40 45  
 Arg Asn Ala Ala Thr Ala Gly Lys Lys Gly Ser Arg Thr Phe Asp Ser  
 50 55 60  
 Ser Ser Gln Arg Thr Asp Asn Ser Thr Lys Ala Ser Leu Thr Glu Thr  
 65 70 75 80  
 Phe Asp Thr Thr Leu Tyr Asp Arg Glu Gly Pro Asp Lys Tyr Ala Gly  
 85 90 95  
 Tyr Asn Thr Ser Ile Ala Val Asp Gly Asp Glu Glu Met Glu Asp Glu  
 100 105 110  
 Asp Gly Gly His Arg Leu Val Gly Gln Tyr Thr Ala Thr Arg Asp Gln  
 115 120 125  
 Ile Asp Glu Leu Ala His Gly Asn Gly Val Glu Glu Asp Ile Ile  
 130 135 140  
 Thr Gly Arg Glu Lys Ala Ala Arg Ile Ala Asp Arg Glu Thr Asp Tyr  
 145 150 155 160  
 Gln Lys Arg Arg Phe Asn Arg Gly Pro Leu Thr Pro Thr Arg Ala Asp  
 165 170 175  
 Pro Phe Ala Ala Asn Thr His Ala Asn Val Glu Thr Asp Gly Gln Thr  
 180 185 190  
 Tyr Arg Glu Ile Met Ala Leu Arg Glu Leu Glu Lys Glu Glu Glu Arg  
 195 200 205  
 Val Gln Lys Leu Ile Ala Glu Lys Gln Ala Arg Gly Glu Ile Gly Val  
 210 215 220  
 Thr Glu His Glu Ala Thr Leu Lys Ser Glu Asp Lys Asp Asn Ala Asp  
 225 230 235 240  
 Ala Gly Ser Thr Val Ser Val Ala Thr Gly Arg Lys Arg Lys Gln Arg  
 245 250 255  
 Trp Asp Val Ser Asn Glu Pro Thr Glu Ala Val Pro Glu Ala Pro Gln  
 260 265 270  
 Pro Ser Glu Thr Lys Thr Lys Arg Ser Arg Trp Asp Gln Thr Pro Ala  
 275 280 285  
 Pro Ala Val Pro Gly Thr Thr Gly Glu Ala Pro Lys Arg Arg Ser Arg  
 290 295 300  
 Trp Asp Gln Ala Pro Ala Ile Thr Ala Ala Thr Pro Val Gly Asn Gln  
 305 310 315 320  
 Gly Leu Ala Thr Pro Met His Pro Ser Gln Val Gly Val Pro Met Ile  
 325 330 335  
 Pro Thr Ser Phe Gly Thr Asp Ile Ser Gly Arg Asn Ala Pro Leu Ser  
 340 345 350  
 Asp Glu Glu Leu Asp Met Met Leu Pro Ser Glu Gly Tyr Lys Ile Leu  
 355 360 365  
 Glu Pro Pro Pro Gly Tyr Ala Pro Ile Arg Thr Pro Ala Arg Lys Leu  
 370 375 380  
 Met Ala Thr Pro Ala Pro Val Pro Ala Ala Gly Gly Val Gly Gly Phe  
 385 390 395 400  
 Met Met Gln Glu Pro Glu Ser Ala Arg Ala Leu Gly Lys Gln Leu Pro  
 405 410 415  
 Thr Glu Ile Pro Gly Val Gly Asp Leu Gln Phe Phe Lys Pro Glu Asp  
 420 425 430  
 Met Ala Tyr Phe Gly Lys Leu Met Glu Gly Gly Asp Glu Ser Thr Met  
 435 440 445  
 Ser Val Glu Glu Leu Lys Glu Arg Lys Ile Met Arg Leu Leu Leu Lys

450		455		460
Val Lys Asn Gly Thr Pro	Pro Met Arg Lys Thr	Ala Leu Arg Gln Leu		
465	470	475		480
Thr Asp Asn Ala Arg Gln	Phe Gly Ala Gly Pro	Leu Phe Asn Gln Ile		
	485	490		495
Leu Pro Leu Leu Met Glu	Lys Ser Leu Glu Asp	Gln Glu Arg His Leu		
	500	505		510
Leu Val Lys Val Ile Asp	Arg Val Leu Tyr Lys	Leu Asp Asp Leu Val		
	515	520		525
Arg Pro Tyr Val His Lys	Ile Leu Val Val Ile	Glu Pro Leu Leu Ile		
	530	535		540
Asp Gln Asp Tyr Tyr Ala	Arg Val Glu Gly Arg	Glu Ile Ile Ser Asn		
545	550	555		560
Leu Ala Lys Ala Ala Gly	Leu Ala Thr Met Ile	Ser Thr Met Arg Pro		
	565	570		575
Asp Ile Asp His Val Asp	Glu Tyr Val Arg Asn	Thr Thr Ala Arg Ala		
	580	585		590
Phe Ala Val Val Ala Ser	Ala Leu Gly Ile Pro	Ala Leu Leu Pro Phe		
	595	600		605
Leu Arg Ala Val Cys Arg	Ser Lys Lys Ser Trp	Gln Ala Arg His Thr		
	610	615		620
Gly Val Lys Ile Val Gln	Gln Ile Pro Ile Leu	Met Gly Cys Ala Ile		
625	630	635		640
Leu Pro His Leu Lys Gly	Leu Val Asp Cys Ile	Ala Asp Asn Leu Ser		
	645	650		655
Asp Glu Gln Ala Lys Val	Arg Thr Val Thr Ala	Leu Ala Val Ala Ala		
	660	665		670
Leu Ala Glu Ala Ala Asn	Pro Tyr Gly Ile Glu	Ser Phe Asp Glu Ile		
	675	680		685
Leu Asn Pro Leu Trp Thr	Gly Ala Arg Lys Gln	Arg Gly Lys Gly Leu		
	690	695		700
Ala Ala Phe Leu Lys Ala	Val Gly Tyr Ile Ile	Pro Leu Met Asp Glu		
705	710	715		720
Glu Tyr Ala Asn Tyr Thr	Ser Gln Ile Met Glu	Ile Leu Leu Arg		
	725	730		735
Glu Phe Ser Ser Pro Asp	Glu Glu Met Lys Lys	Val Val Leu Lys Val		
	740	745		750
Val Ser Gln Cys Ala Ser	Thr Asp Gly Val Thr	Ala Ser Tyr Leu Lys		
	755	760		765
Glu Leu Val Leu Asn Asp	Xaa Phe Lys Ser Phe	Trp Val Arg Arg Met		
	770	775		780
Ala Leu Asp Arg Arg Asn	Tyr Arg Gln Val Val	Asp Thr Thr Val Asp		
785	790	795		800
Leu Gly Gln Lys Val Gly	Val Gly Glu Ile Leu	Glu Arg Val Val Asn		
	805	810		815
Asn Leu Lys Asp Glu Ser	Glu Pro Tyr Arg Lys	Met Thr Val Glu Thr		
	820	825		830
Val Glu Lys Leu Ile Ala	Ala Leu Gly Ala Ala	Asp Ile Ser Glu Arg		
	835	840		845
Leu Glu Glu Arg Leu Ile	Asp Gly Val Leu Tyr	Ala Phe Gln Glu Gln		
	850	855		860
Ser Ile Glu Asp Ile Val	Ile Leu Asn Gly Phe	Gly Thr Val Val Asn		
865	870	875		880
Ala Leu Gly Thr Arg Cys	Lys Pro Tyr Leu Pro	Gln Ile Val Ser Thr		
	885	890		895
Ile Leu Trp Arg Leu Asn	Asn Lys Ser Ala Thr	Val Arg Gln Gln Ala		

## 18213

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          900          905          910
Ala Asp Leu Ile Ser Arg Ile Ala Met Val Met Lys Gln Cys Gly Glu
    915          920          925
Asp Ala Leu Met Gly Lys Leu Gly Ile Val Leu Tyr Glu Tyr Leu Gly
    930          935          940
Glu Glu Tyr Pro Glu Val Leu Gly Ser Ile Leu Gly Ala Leu Arg Ser
    945          950          955          960
Ile Val Thr Val Val Gly Ile Asn Gln Met Gln Pro Pro Ile Arg Asp
    965          970          975
Leu Leu Pro Arg Leu Thr Pro Ile Leu Arg Asn Arg His Glu Lys Val
    980          985          990
Gln Glu Asn Thr Ile Asp Leu Val Gly Arg Ile Ala Asp Arg Gly Pro
    995          1000          1005
Glu Ser Val Asn Ala Arg Glu Trp Met Arg Ile Cys Phe Glu Leu Leu
    1010          1015          1020
Asp Met Leu Lys Ala His Lys Lys Gly Ile Arg Arg Ala Ala Asn Asn
    1025          1030          1035          1040
Thr Phe Gly Phe Ile Ala Lys Ala Ile Gly Pro Gln Asp Val Leu Ala
    1045          1050          1055
Thr Leu Leu Asn Asn Leu Arg Val Gln Glu Arg Gln Ser Arg Val Cys
    1060          1065          1070
Thr Ala Val Ala Ile Gly Ile Val Ala Glu Thr Cys Ala Pro Phe Thr
    1075          1080          1085
Val Leu Pro Ala Leu Met Asn Glu Tyr Arg Val Pro Glu Leu Asn Val
    1090          1095          1100
Gln Asn Gly Val Leu Lys Ala Met Ser Phe Leu Phe Glu Tyr Ile Gly
    1105          1110          1115          1120
Glu Met Ala Lys Asp Tyr Val Tyr Ala Val Ile Pro Val Leu Glu Thr
    1125          1130          1135
Arg Gln Glu

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<210> 41267  
 <211> 136  
 <212> PRT  
 <213> A.fumigatus

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<400> 41267
Ser Gly Ala Gly Phe Phe Ser Ala Gly Ala Ala Gly Ala Ala Ser Thr
1          5          10          15
Gly Ala Pro Ser Val Pro Ser Cys Pro Cys Ala Pro Leu Ser Ala Asp
    20          25          30
Gly Ala Ala Pro Phe Asp Ser Thr Phe Arg Ser Phe Val Val Ala Gly
    35          40          45
Ser Val Ser Thr Phe Trp Phe Gly Thr Ala Thr Gly Leu Ala Thr Ala
    50          55          60
Pro Leu Pro Pro Ala Ala Met Ala Ala Ala Pro Ala Ser Val Glu Gly
    65          70          75          80
Phe Thr Ala Val Val Ser Ala Ala Gly Thr Ser Ser Ser Ser Gln Ser
    85          90          95
Met Thr Ser Ser Ala Ala Ser Val Phe Ala Ala Gly Ala Gly Ala Gly
    100          105          110
Ala Val Ala Ala Leu Ala Leu Phe Trp Ser Ser Ser Trp Arg Arg Ala
    115          120          125
Thr Ile Ser Ala Phe Leu Pro Val
    130          135

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<210> 41268  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 41268  
 Ile Leu Pro Arg Ala Ala Ile Glu Gly Ala Ile Ser Lys Ile Asn Gly  
 1 5 10 15  
 Phe Ser Phe Pro Ala Gly Ala Pro Leu Ala Lys Gly Asp Thr Pro Ile  
 20 25 30  
 Asn Phe Ser Leu Pro Pro Gln Thr Gly Asn Ala Gly Asp Glu Phe Val  
 35 40 45  
 Lys Thr Arg Leu Ile Ile Pro Ala Ser Ser Ala Cys Cys Thr Thr His  
 50 55 60  
 Ala Asp Ile Pro Lys  
 65

<210> 41269  
 <211> 328  
 <212> PRT  
 <213> A.fumigatus

<400> 41269  
 Ile Leu Glu Val Cys Tyr Lys Cys Gly Val Lys Val Val Thr Ile Tyr  
 1 5 10 15  
 Ala Phe Ser Ile Glu Asn Phe Lys Arg Ser Lys Phe Glu Val Asp Ala  
 20 25 30  
 Leu Met Asp Met Ala Lys Val Lys Leu Gln Gln Met Ala Gln His Gly  
 35 40 45  
 Asp Leu Leu Asp Arg Tyr Gly Ala Lys Val Arg Val Leu Gly Arg Leu  
 50 55 60  
 Asp Leu Leu Lys Pro Asp Val Leu Asp Ala Val Asn Arg Ala Val Glu  
 65 70 75 80  
 Met Thr Ser Arg Asn Gly Glu Arg Val Leu Asn Ile Cys Phe Pro Tyr  
 85 90 95  
 Thr Ser Arg Asp Glu Ile Thr Gly Ala Ile Arg Asp Thr Val Ala Asp  
 100 105 110  
 Tyr Ser Lys Pro Leu Gln Ser Ile Arg Ser Asn Ser Ser Ala Arg Thr  
 115 120 125  
 Pro Phe Ser Glu Ala Gln Ile Ala Leu Lys Ile Arg Ala Gln Ala Gln  
 130 135 140  
 Ser Ala Lys Val Glu Gln Asp Thr Ile Ser Asp Asn Glu Ser Thr Ser  
 145 150 155 160  
 Val Ser Ser Ile Pro Glu Glu Asp Pro Ser Asp Arg Ser Glu Gly Pro  
 165 170 175  
 Asp Arg Val Tyr Glu Ala Gly Ser Gly Phe Ser Ser Ser Thr Thr Leu  
 180 185 190  
 His Leu Gly Gly His Gln Asp Ala Ala Asn Gly Lys Ala Pro Glu Leu  
 195 200 205  
 Gly Asn Ala Ser Glu Ser Gly Lys Ile Val Phe Pro Ser Pro Asp Thr  
 210 215 220  
 Ile Thr Arg Gln Thr Leu Thr Asp His Met Leu Thr Lys Gly Asn Pro  
 225 230 235 240  
 Pro Leu Asp Leu Leu Val Arg Thr Ser Gly Val Glu Arg Leu Ser Asp  
 245 250 255



## 18215

Phe Met Leu Trp Gln Cys Asp Glu Asp Thr Glu Ile Val Phe Leu Asp  
 260 265 270  
 Val Leu Trp Pro Glu Phe Asp Leu Trp His Phe Leu Pro Val Leu Leu  
 275 280 285  
 Ser Trp Gln Arg Arg Ile Ser Lys Ser Lys Lys Asn Pro Arg Leu Lys  
 290 295 300  
 Glu Thr Leu Met Val Thr Ser Val Lys Val Leu Met Pro Asn Ser Ile  
 305 310 315 320  
 Pro Val Gly Asn Val Lys Gly Leu  
 325

&lt;210&gt; 41270

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41270

Phe Val Ala Cys Arg Thr Leu Glu Ser Ala Gln Lys Leu Cys Gln Gly  
 1 5 10 15  
 Phe Pro Asn Thr Lys Ala Ile Ala Leu Asp Val Asn Asp Ala Ala Ala  
 20 25 30  
 Leu Asp Lys Ala Phe Glu Gln Ala Asp Leu Ala Ile Ser Leu Ile Pro  
 35 40 45  
 Tyr Thr Phe His Ala Leu Val Ile Lys Ser Ala Ile Arg Thr Lys Lys  
 50 55 60  
 His Val Val Thr Thr Ser Tyr Val Ser Pro Ala Met Met Glu Leu Asp  
 65 70 75 80  
 Glu Glu Cys Lys Lys Ala Gly Ile Thr Val Met Asn Glu Ile Gly Leu  
 85 90 95  
 Asp Pro Val Cys Ser Ala Ser Thr Leu Arg Ile Asn Val Gly Ile  
 100 105 110

&lt;210&gt; 41271

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41271

Leu Leu Pro Leu Pro Arg Ala Val Pro Asp Pro Arg Gly Pro Asp Arg  
 1 5 10 15  
 His Pro Trp Tyr Ser Ala Leu Pro Gly Leu Pro Arg Asp Asp Gln Gly  
 20 25 30  
 Ala Gly Gly His Trp Phe Pro Gln Arg Arg Gly Gln Gly Leu Pro Gln  
 35 40 45  
 Leu Pro His Pro Leu Glu Arg Gly His Ala Glu Asp Ser Arg Ser His  
 50 55 60  
 Leu Ile Gly Arg Glu Gly Pro Gly Val Gly His Cys Leu Gln Asp His  
 65 70 75 80  
 Leu His Gly Gln Arg Leu Gly Ala Thr Ala Ser Ser Pro Ala Phe Val  
 85 90 95  
 Gly Ser Pro Ile Ile Arg Thr Ser Arg Ser Pro Pro Ala Val Thr Pro  
 100 105 110  
 Trp Thr Leu Phe Ala Pro Leu Ser Ser Ala Arg Cys Ser Thr Ala Pro  
 115 120 125  
 Ala Ser Gly Thr Trp Ser Cys Cys Ser Thr Ser Ser Val Ser Ser Thr  
 130 135 140

## 18216

Arg Thr Ala Pro Arg Arg Leu Glu Pro Ala Pro Leu Leu Ser Thr Val  
 145 150 155 160  
 Ile Pro Thr Val Thr Pro Pro Trp Pro Arg Pro Ser Val Ser Pro Ala  
 165 170 175  
 Glu Leu Arg Ser Ser Trp Ser Ser Met Ala Pro Ser Ala Arg Arg  
 180 185 190

&lt;210&gt; 41272

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41272

Ser Thr Met Ala Thr Ser Met His Leu Ser Lys Leu Arg Asn Trp Phe  
 1 5 10 15  
 Leu Ala Ser Pro Pro Ala Glu Phe Ile Ala Lys Leu Arg Glu Leu  
 20 25 30  
 Leu Ile Gly Ala Leu Lys Gln Gly Pro Val Pro Gln His Ile Ala Phe  
 35 40 45  
 Val Met Asp Gly Asn Arg Arg Phe Ala Arg Ser His Gly Ile Glu Thr  
 50 55 60  
 Val Glu Gly His Asn Leu Gly Phe Glu Ala Leu Ala Arg Val Ser Arg  
 65 70 75 80  
 Pro Phe Ser Lys Ile Cys Leu Leu Leu Gln Lys His Pro Pro Gly Ser  
 85 90 95  
 Trp Leu Phe Val Trp Tyr  
 100

&lt;210&gt; 41273

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41273

Gly Ile Asp His Leu Tyr Ala Val Lys Thr Ile Ser Glu Val His Ala  
 1 5 10 15  
 Glu Gly Gly Lys Ile Thr Ser Phe Leu Ser Tyr Cys Gly Gly Leu Pro  
 20 25 30  
 Ala Pro Glu Cys Ser Asp Asn Pro Leu Gly Tyr Lys Phe Ser Trp Ser  
 35 40 45  
 Ser Arg Gly Val Leu Leu Ala Leu Arg Asn Ala Ala Lys Phe Tyr Gln  
 50 55 60  
 Asp Gly Lys Glu Phe Ser Val Ala Gly Pro Asp Leu Met Ala Thr Ala  
 65 70 75 80  
 Lys Pro Tyr Tyr Ile Tyr Pro Gly Tyr Ala Phe Val Ala Tyr Pro Asn  
 85 90 95  
 Arg Asp Ser Cys Pro Tyr Arg Glu Arg Tyr Gln Ile Pro Glu Ala Gln  
 100 105 110  
 Thr Val Ile Arg Gly Thr Leu Arg Tyr Gln Gly Phe Pro Glu Met Ile  
 115 120 125  
 Lys Val Leu Val Asp Ile Gly Phe Leu Ser Asp Glu Ala Lys Asp Phe  
 130 135 140  
 Leu Asn Ser Pro Ile Pro Trp Lys Glu Ala Thr Gln Lys Ile Leu Gly  
 145 150 155 160  
 Ala Thr Ser Ser Asp Glu Lys Asp Leu Glu Trp Ala Ile Ala Ser Lys  
 165 170 175

## 18217

Thr Thr Phe Thr Asp Lys Asp Trp Gly Gln Pro Arg His Leu Arg His  
 180 185 190  
 Ser Leu Asp Arg Leu Leu Phe Gly Arg Ala Asp His Pro Pro Arg  
 195 200 205

<210> 41274

<211> 135

<212> PRT

<213> A.fumigatus

<400> 41274

Val Arg Ser Ser Asp Ser Ala Phe Arg Ala Ser Thr Thr Cys Thr Leu  
 1 5 10 15  
 Ser Arg Pro Ser Pro Arg Tyr Thr Pro Arg Val Val Arg Ser Leu Leu  
 20 25 30  
 Ser Ser Pro Thr Val Val Val Ser Leu Pro Pro Ser Ala Pro Thr Thr  
 35 40 45  
 Arg Trp Val Thr Ser Phe Arg Gly Pro Ala Ala Val Phe Phe Leu Pro  
 50 55 60  
 Phe Ala Thr Pro Pro Asn Phe Thr Arg Thr Ala Arg Ser Ser Ala Trp  
 65 70 75 80  
 Leu Gly Pro Thr Ser Trp Leu Pro Pro Ser Pro Ile Thr Ser Thr Pro  
 85 90 95  
 Gly Thr Pro Ser Ser Pro Thr Pro Thr Val Thr Pro Ala Pro Thr Ala  
 100 105 110  
 Ser Gly Thr Arg Ser Pro Arg Pro Arg Pro Ser Ser Val Val Leu Cys  
 115 120 125  
 Ala Thr Arg Ala Ser Pro Arg  
 130 135

<210> 41275

<211> 170

<212> PRT

<213> A.fumigatus

<400> 41275

Ser Arg Cys Trp Trp Thr Leu Val Ser Ser Ala Thr Arg Pro Arg Thr  
 1 5 10 15  
 Ser Ser Thr Pro Pro Ser Pro Gly Lys Arg Pro Arg Arg Arg Phe Ser  
 20 25 30  
 Glu Pro Pro His Arg Thr Arg Arg Thr Trp Ser Gly Pro Leu Pro Pro  
 35 40 45  
 Arg Pro Pro Ser Arg Thr Lys Ile Gly Gly Asn Arg Val Ile Ser Gly  
 50 55 60  
 Ile Arg Trp Ile Ala Tyr Tyr Ser Asp Glu Gln Ile Thr Pro Arg Gly  
 65 70 75 80  
 Asn Pro Leu Asp Thr Phe Cys Ala Thr Leu Glu Arg Lys Met Gln Tyr  
 85 90 95  
 Gly Pro Gly Glu Arg Asp Met Val Met Leu Gln His Lys Phe Gly Ile  
 100 105 110  
 Glu His Lys Asp Gly Ser Lys Glu Thr Arg Thr Ser Thr Leu Val Glu  
 115 120 125  
 Tyr Gly Asp Pro Asn Gly Tyr Ser Ala Met Ala Lys Thr Val Gly Val  
 130 135 140  
 Pro Cys Gly Val Ala Val Lys Leu Val Ile Asp Gly Thr Ile Ser Gln  
 145 150 155 160

18218

Lys Val Ser His Gln His Ser Phe Pro Cys  
165 170

<210> 41276  
<211> 80  
<212> PRT  
<213> A.fumigatus

<400> 41276  
Gln Asn Ile Ile Met Val Leu His Asn Pro Asn Asn Trp His Trp Val  
1 5 10 15  
Asn Lys Asp Ala Ser Ala Trp Ala Lys Thr Tyr Leu Lys Glu Lys Leu  
20 25 30  
Arg Thr Leu Ser Ala Glu Glu Asp Gly Val Ser Val Lys Ile Ser Asp  
35 40 45  
Leu Leu Thr Met Asp Gly Asp Val Asp Val Ser Gln Arg Lys Gly Lys  
50 55 60  
Val Ile Thr Leu Phe Asp Val Lys Leu Gln Leu Glu Tyr Glu Gly Ser  
65 70 75 80

<210> 41277  
<211> 277  
<212> PRT  
<213> A.fumigatus

<400> 41277  
Phe Glu Ile Glu Asn Tyr Ser Asp Ser Ala Ser Lys Gln Pro Val Lys  
1 5 10 15  
Asp Leu Val Arg Ser Lys Leu Val Pro Gln Ile Arg Gln Glu Leu Gly  
20 25 30  
Lys Leu Ala Pro Ala Leu Ile Ala Glu His Gly Lys Asp Ile Gln His  
35 40 45  
Ala Pro Gly Val Asp Pro Ser Ser Gly Phe Ala Thr Pro Pro Ser Tyr  
50 55 60  
Pro Gln Thr Ser Lys Gly Ala Ser Pro Ala Pro Gln Thr Thr Thr Thr  
65 70 75 80  
Thr Thr Thr Thr Asn Lys Val Ala Val Asn Thr Thr Thr Val Thr Ala  
85 90 95  
Ser Asp Glu Phe Arg Thr Thr Ala Glu Glu Met Tyr Thr Thr Phe Thr  
100 105 110  
Asp Pro Gln Arg Ile Ala Ala Phe Thr Arg Gly Ala Pro Arg Gln Phe  
115 120 125  
Asp Gly Ala Gln Val Gly Gly Lys Phe Ser Ile Phe Asp Gly Asn Val  
130 135 140  
Asn Gly Glu Phe Val Lys Leu Asp Lys Pro Lys Gln Ile Val Gln Lys  
145 150 155 160  
Trp Arg Leu Ala Gln Trp Pro Glu Gly His Phe Ser Thr Leu Glu Ile  
165 170 175  
Asn Phe Asp Gln Asn Asp Val Asp Ala Val Thr Gln Met Arg Val Thr  
180 185 190  
Trp Thr Gly Val Pro Val Gly Gln Glu Asp Val Thr Lys Gln Asn Trp  
195 200 205  
Asp Val Tyr Tyr Val Arg Ser Ile Lys Gln Thr Phe Gly Tyr Val Ile  
210 215 220  
Leu Pro Cys Ser Ser Ile Gln Leu Leu Pro Tyr His Val Pro Leu Arg  
225 230 235 240

## 18219

Ser Arg Pro Thr Ser Trp Arg Gln Leu Leu Ile Ala Leu Phe Val Leu  
                   245                  250                  255  
 Phe Ile Ala Ile Gly Leu Ala Leu Phe Ser Asp Arg Ile His Gly Val  
                   260                  265                  270  
 Leu Glu Thr Thr Tyr  
                   275

&lt;210&gt; 41278

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41278

Ala Glu Gly Arg Lys Arg Gly Arg Thr Glu Gly Arg Glu Lys Thr Gln  
 1                  5                  10                  15  
 Ser Ser Ser Trp Thr Phe Ser Val Ala Asp Asp Thr Gly Gln Ala Gln  
                   20                  25                  30  
 Ile Gln Lys Ile Lys Asp Arg Arg Ala Ala Lys Glu Glu Lys Glu Arg  
                   35                  40                  45  
 Tyr Glu Lys Met Ala Glu Lys Met His Arg Lys Arg Val Glu Arg Leu  
                   50                  55                  60  
 Lys Arg Arg Glu Lys Arg Asn Lys Leu Leu His Ser  
                   65                  70                  75

&lt;210&gt; 41279

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41279

Ala Ala Gly Met Ala Gly Lys Val Ile Glu Tyr Pro Phe Asp Thr Val  
 1                  5                  10                  15  
 Lys Val Arg Leu Gln Ser Gln Pro Ser His Ile Pro Leu Arg Tyr Gln  
                   20                  25                  30  
 Gly Pro Leu Asp Cys Phe Arg Gln Ser Ile Gln Ala Asp Gly Leu Arg  
                   35                  40                  45  
 Gly Leu Tyr Arg Gly Ile Ser Ala Pro Leu Ala Gly Ala Ala Ile Glu  
                   50                  55                  60  
 Asn Ser Cys Leu Phe Phe Ser Tyr Arg Ile Ile Gln Asp Ile Leu Arg  
                   65                  70                  75                  80  
 Ala Thr Cys Tyr Pro Thr Ala Asp Ser Met Pro Phe Ser Ala Leu Leu  
                   85                  90                  95  
 Phe Ser Gly Ala Ala Ser Gly Ser Ile Thr Ser Leu Ala Leu Thr Pro  
                   100                  105                  110  
 Ile Glu Leu Ile Lys Cys Lys Met Gln Val Pro Leu Glu Ala Ser Ser  
                   115                  120                  125  
 Ser Lys Met Pro Gly Pro Leu Thr Leu Ile Ala Ala Ile Phe Arg Gln  
                   130                  135                  140  
 Asp Gly Ile Leu Gly Phe Trp Arg Gly Gln Met Gly Thr Leu Ile Arg  
                   145                  150                  155                  160  
 Glu Thr Gly Gly Gly Ala Ala Trp Phe Gly Gly Tyr Glu Gly Val Ser  
                   165                  170                  175  
 Ala Phe Phe Arg Lys Tyr His Ser Thr Val Ser Pro Arg Asp Ser Glu  
                   180                  185                  190  
 Ser Leu Pro Ile Tyr Gln Gln Met Ile Ala Gly Ala Ala Ala Gly Ile  
                   195                  200                  205

## 18220

Ser Tyr Asn Phe Leu Phe Tyr Pro Ala Asp Thr Val Lys Ser Arg Met  
 210 215 220  
 Gln Thr Glu Asp Ile Asn Ser Pro Gly Asn Ser Gly His Arg Gln Thr  
 225 230 235 240  
 Phe Trp Ser Val Gly Arg Ala Leu Trp Lys Gln Gln Gly Leu Arg Ala  
 245 250 255  
 Leu Tyr Arg Gly Cys Gly Ile Thr Cys Ala Arg Ser Ala Pro Ser Ser  
 260 265 270  
 Ala Phe Ile Phe Thr Ile Tyr Glu Gly Leu Arg Asn Cys Phe Ser  
 275 280 285

&lt;210&gt; 41280

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41280

Ala Gly Pro Tyr Ser Lys Phe Arg Val Gly Ala Cys Val Leu Thr Lys  
 1 5 10 15  
 Ala Gly Glu Tyr Ile Ala Gly Ala Asn Ile Glu Asn Val Ala Tyr Pro  
 20 25 30  
 Val Gly Thr Cys Ala Glu Arg Val Ala Phe Gly Thr Ala Ile Val Ser  
 35 40 45  
 Thr Ser Tyr Asp Val Ser Leu Ser Thr Trp Leu Val Arg Val Asn Ala  
 50 55 60  
 Tyr Gly Trp Pro Glu Thr Ser  
 65 70

&lt;210&gt; 41281

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41281

Arg Leu Ser Pro Ile Thr Ser Ser Glu Trp Pro Thr Glu Ile Leu Gly  
 1 5 10 15  
 Val Glu Ala Leu Ser Ser Asn Leu Ser Glu Leu Ser Val Ser Val Arg  
 20 25 30  
 Glu Arg Ala Ala Lys Asp Ala Ala Lys Lys Glu Ala Lys Ala Ala Ala  
 35 40 45  
 Ala Glu Ala Arg Asp Ala Glu Arg Lys Ala Ala Ala Lys Val Gln Ile  
 50 55 60  
 Lys Arg Val Glu Arg Asn Lys Arg Lys His Val Thr Val Ile Thr Gly  
 65 70 75 80  
 Leu Glu Val His Gly Leu Glu Asn Lys Lys Val Ala Lys Glu Leu Gly  
 85 90 95  
 Lys Lys Phe Ala Thr Gly Ser Ser Val Thr Lys Ser Pro Ala Gly Val  
 100 105 110  
 Glu Glu Ile Thr Val Gln Gly Asp Val Ser Glu Asp Val Lys Glu Trp  
 115 120 125  
 Leu Leu Glu Leu Tyr Gly Lys Glu Ile Pro Glu Ser Asn Ile Glu Leu  
 130 135 140  
 Val Glu Asp Lys Lys Lys Lys Thr Ser Gly  
 145 150

&lt;210&gt; 41282

18221

<211> 63  
<212> PRT  
<213> A.fumigatus

<400> 41282  
Ile Thr Pro Ala Met Pro Ala Ser Leu Met Leu Gly Ser Tyr Glu Phe  
1 5 10 15  
Tyr Ser Ser Ala Leu Cys Asp Ile Cys Pro Arg His Asp Ser Thr Val  
20 25 30  
Leu Ser Ala Ser Arg Arg Trp Thr Thr Cys Val Ala Ala Pro Tyr Ser  
35 40 45  
Pro Ala Leu Val Asn Asp Ser Ala Phe Val Asn Phe Lys Ile Tyr  
50 55 60

<210> 41283  
<211> 102  
<212> PRT  
<213> A.fumigatus

<400> 41283  
Ala Thr Asp Pro Gly Pro Thr Met Ser Arg Pro Leu Pro Ala Val Phe  
1 5 10 15  
Arg Pro Ile Leu Gly Arg Arg Asn Phe Ser Val Ser Ala Asn Lys Arg  
20 25 30  
Ala Ile Asn Lys Val Cys Ala Ser Ala Gln Glu Ala Ile Lys Asp Met  
35 40 45  
Lys Gly Ser Ser Thr Val Leu Cys Gly Gly Phe Gly Phe Ser Gly Val  
50 55 60  
Ala Asn Thr Leu Ile Asn Ala Val Arg Asp Arg Pro Asp Ile Lys Asp  
65 70 75 80  
Leu Thr Val Val Ser Asn Asn Ala Gly Met Pro Gly Ala Gly Leu Gly  
85 90 95  
Met Leu Ser Ala Ile Arg  
100

<210> 41284  
<211> 81  
<212> PRT  
<213> A.fumigatus

<400> 41284  
His Leu Ser Gly Gln Leu Leu Glu Ser Gly Gln Ile Thr Lys Met Ile  
1 5 10 15  
Ala Ser Phe Ile Gly Glu Asn Lys Val Phe Glu Lys Met Tyr Leu Asn  
20 25 30  
Gly Asp Leu Ala Leu Glu Leu Thr Pro Gln Gly Thr Ile Ala Glu Lys  
35 40 45  
Cys Ala Ala Gly Ala Ala Gly Ile Pro Ala Phe Tyr Thr Pro Ala Ala  
50 55 60  
Tyr Gly Thr Ile Gly Arg Leu Asp Arg Asp Leu Arg Leu Gln Ile Arg  
65 70 75 80  
Ser

<210> 41285  
<211> 71

18222

<212> PRT

<213> A.fumigatus

<400> 41285

```

Glu Pro Ser Ile Lys Asp Ala Gly Ile Ala Gly Val Ile Tyr Asn Tyr
1           5           10           15
Ile Val Pro Gln Ser Asp Met Gln Ser Gln Leu Leu Ala Arg Glu Ile
          20           25           30
Gly Val His Lys Thr Leu Phe Asn Ile His Glu Asp Ile Thr His Tyr
          35           40           45
Val Lys Asp Val Arg Glu Leu Ser Asp Ala Pro Phe Pro Arg Val Leu
          50           55           60
Gln Glu Pro Arg Val Val Glu
65           70

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<210> 41286

<211> 68

<212> PRT

<213> A.fumigatus

<400> 41286

```

Arg Tyr Gly Leu Ser Lys Thr Tyr Arg Ile Lys His Ser Leu Asn Ala
1           5           10           15
Gly Glu Tyr Ile Ser Thr Ser His Ile Val Ile Ser Ala His Ile Asn
          20           25           30
Lys Ser Leu Ala Ile Asn Gln Ala Ser Ser Leu Pro Pro Val Val Ala
          35           40           45
Pro Ser Leu Val Pro Asp Val Lys Asp Val Asp Arg Thr Arg Val Glu
          50           55           60
Ile Val Ile Pro
65

```

<210> 41287

<211> 113

<212> PRT

<213> A.fumigatus

<400> 41287

```

Val Arg Ser Gly Phe Thr Ala Ser Asn Ser Gln Leu Thr Ile Ala Val
1           5           10           15
Gln Thr Gly Glu Leu Pro Val Arg Tyr Asn Lys Asp Gly Thr Val Lys
          20           25           30
Glu Tyr Ser Lys Pro Lys Glu Val Arg Gln Phe Asn Gly Lys Asn Tyr
          35           40           45
Leu Leu Glu Glu Ser Ile Phe Gly Asp Tyr Ala Leu Ile Arg Val His
          50           55           60
Lys Ala Asp Lys Leu Gly Asn Cys Gln Phe Arg Lys Ala Met Asn Asn
          65           70           75           80
Phe Asn Glu Ala Met Ala Lys Asn Ala Lys Tyr Thr Ile Val Glu Ala
          85           90           95
Asp His Ile Val Val Phe Thr Thr Gly Leu Glu Gly Ser Ala Met Val
          100          105          110
Lys

```

<210> 41288



18223

<211> 133  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (1)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41288  
Xaa Val His Ala Met Leu Arg Ser Phe Ser Gly Ala Gly Lys Cys Lys  
1 5 10 15  
Cys Arg Ile Pro Val Ser Arg Gln Pro Val Cys Gly Arg Ser Leu Arg  
20 25 30  
Ile Ser Ser Thr Leu Thr Pro Trp Asn Gln Ser Arg Arg Ala Ala Ser  
35 40 45  
Thr Val Thr Ser Leu Asp Ser Phe Pro Asn Val Gly Glu Lys Leu His  
50 55 60  
Gly Phe Thr Val Gln Glu Lys Lys His Val Pro Glu Leu His Leu Thr  
65 70 75 80  
Ala Val Arg Leu Lys His Asp Lys Thr Asp Ala Asp Tyr Leu His Val  
85 90 95  
Ala Arg Glu Asp Lys Asn Asn Val Phe Gly Ile Gly Phe Lys Thr Asn  
100 105 110  
Pro Pro Asp Ala Thr Gly Val Pro His Ile Leu Glu His Thr Thr Leu  
115 120 125  
Cys Gly Ser Glu Lys  
130

<210> 41289  
<211> 92  
<212> PRT  
<213> A.fumigatus

<400> 41289  
Asn Arg Ile Leu Thr Leu Leu Val Ala Asp Leu Arg Leu Ile Gln Thr  
1 5 10 15  
Gln Leu Asn Thr Leu Lys Arg Ser Asp Pro Ser Thr Leu Ser Ile His  
20 25 30  
Gly Val Leu Ala Glu Arg Leu Gln Ser Gly Ile Gln Ser Met His Thr  
35 40 45  
Pro Pro Asp Asn Gly Pro Asp Phe Ala Phe Pro Ala Pro Asn Met Asp  
50 55 60  
Tyr Ser Trp Thr Ile Phe Asp Gln Gln Ile Met Asn Leu Ala Asn Pro  
65 70 75 80  
Pro Trp Leu Phe Asp Asp Ser Ser Gln Ala Pro Pro  
85 90

<210> 41290  
<211> 1013  
<212> PRT  
<213> A.fumigatus

<400> 41290  
Ser Thr Thr Arg Gln Thr Gln Ile Thr Phe Met Ser Leu Gly Arg Ile  
1 5 10 15

Arg Thr Met Ser Leu Val Leu Gly Leu Arg Arg Thr Pro Gln Met Arg  
 20 25 30  
 Leu Val Tyr His Ile Phe Trp Ser Thr Pro Arg Cys Val Glu Val Lys  
 35 40 45  
 Ser Glu Lys Ala Ser Val Arg Leu Leu Arg Glu Tyr Lys Cys Ala Phe  
 50 55 60  
 Arg Asp Gly Leu Ile Ala Asp Met Pro Pro His Cys Arg Tyr Pro Ile  
 65 70 75 80  
 Arg Asp Pro Phe Phe Lys Met Leu Pro Arg Ser Leu Ser Asn Phe Met  
 85 90 95  
 Asn Ala Phe Thr Ser Ala Asp His Thr Thr Tyr Pro Phe Ala Thr Thr  
 100 105 110  
 Asn Arg Gln Asp Phe Gln Asn Leu Leu Ser Val Tyr Leu Asp Ala Thr  
 115 120 125  
 Leu His Pro Leu Leu Lys Glu Glu Asp Phe Arg Gln Glu Gly Trp Arg  
 130 135 140  
 Leu Gly Pro Glu Asp Pro Arg Ser Ile Leu Thr Gln Gly Glu Gln Ser  
 145 150 155 160  
 Lys Gly Asn Leu Gln Ser Glu Asp Val Val Phe Lys Gly Val Val Tyr  
 165 170 175  
 Asn Glu Met Lys Gly Gln Ile Ser Asp Ala Asn Tyr Leu Tyr Tyr Ile  
 180 185 190  
 Lys Tyr Arg Glu Ser Ile Cys Pro Ser Leu Asn Asn Ser Gly Gly Asp  
 195 200 205  
 Pro Gln Tyr Ile Thr Asp Leu Thr His Gln Gln Leu Val Asp Phe Ser  
 210 215 220  
 Lys Arg Asn Tyr His Pro Ser Asn Ala Lys Ile Leu Thr Tyr Gly Asp  
 225 230 235 240  
 Met Pro Leu Ser Val His Leu Lys Gln Ile Gly Glu Val Leu Asp Gly  
 245 250 255  
 Phe Glu Lys Gly Gln Ala Asp Thr Asp Val Lys Leu Pro Leu Asp Leu  
 260 265 270  
 Ser Arg Gly Pro Leu Asn Val Thr Val Pro Gly Pro Ile Asp Thr Phe  
 275 280 285  
 Ala Ser Glu Asp Lys Gln Tyr Lys Thr Ser Thr Ser Trp Tyr Met Gly  
 290 295 300  
 Asp Thr Thr Asp Val Val Glu Thr Phe Ser Val Gly Ile Leu Ser Ser  
 305 310 315 320  
 Leu Leu Leu Asp Gly Tyr Gly Ser Pro Met Tyr Arg Ala Leu Ile Glu  
 325 330 335  
 Gly Gly Leu Gly Ser Ser Phe Thr Pro Asn Thr Gly Leu Asp Ser Ser  
 340 345 350  
 Gly Arg Val Pro Ile Phe Ser Val Gly Leu Thr Gly Val Ser Glu Ala  
 355 360 365  
 Asp Ala Pro Lys Val Lys Ser Thr Ile Lys Arg Val Phe Glu Glu Ser  
 370 375 380  
 Leu Ser Ser Gly Phe Asn Asp Glu Lys Val Gln Gly Phe Leu His Gln  
 385 390 395 400  
 Leu Glu Leu Ala Leu Arg His Lys Thr Ala Asn Phe Gly Ile Gly Val  
 405 410 415  
 Met Glu Lys Thr Leu Ser Ser Trp Phe Asn Gly Ser Asn Pro Met Lys  
 420 425 430  
 Glu Leu Ser Trp Asn Glu Val Ile Asp Glu Phe Lys Lys Lys Tyr Glu  
 435 440 445  
 Gln Gly Gly Tyr Leu Glu Ser Leu Met Gln Lys Tyr Leu Met Asn Asp  
 450 455 460

## 18225

Asn Cys Leu Thr Phe Thr Met Val Gly Thr Pro Ser Tyr Asn Lys Asp  
 465 470 475 480  
 Leu Asp Asp Gln Glu Met Val Arg Lys Glu Lys Lys Leu Ser Glu Leu  
 485 490 495  
 Val Glu Arg His Gly Ser Val Glu Gln Ala Val Ser Ala Leu Ala Glu  
 500 505 510  
 Glu Glu Leu Gln Leu Leu Lys Ile Gln Glu Glu Ala Gln Asn Ala Asp  
 515 520 525  
 Leu Ser Cys Leu Pro Ser Leu Arg Val Glu Asp Ile Ser Arg Glu Lys  
 530 535 540  
 Glu Arg Lys Pro Val Arg Glu Ser Lys Met Asp Asp Ile Asp Val Val  
 545 550 555 560  
 Trp Arg Glu Ala Pro Thr Asn Gly Leu Thr Tyr Phe Gln Ala Leu Asn  
 565 570 575  
 Ser Phe Glu Glu Leu Pro Asp Asp Leu Arg Leu Leu Leu Pro Leu Phe  
 580 585 590  
 Asn Asp Cys Ile Met Arg Leu Gly Thr Gly Asp Lys Thr Met Glu Gln  
 595 600 605  
 Trp Glu Asp Leu Ile Lys Leu Lys Thr Gly Gly Ile Thr Thr Ser Thr  
 610 615 620  
 Leu His Thr Ser Ser Pro Ala Glu Leu Gly Lys Phe Arg Glu Gly Leu  
 625 630 635 640  
 Gln Phe Ser Gly Tyr Ala Leu Asp Asn Asn Ile Pro Asp Met Leu Gln  
 645 650 655  
 Ile Leu Thr Thr Leu Val Thr Glu Thr Asp Phe Thr Ser Pro His Ala  
 660 665 670  
 Pro Ala Met Ile Gln Glu Leu Pro Arg Met Thr Thr Asn Gly Ala Leu  
 675 680 685  
 Asp Ala Val Ala Gly Ser Gly His Arg Tyr Gly Val Asn Ala Ala Ala  
 690 695 700  
 Ala Val Cys Ser Arg Ser Phe Trp Val Gln Glu Gln Gln Ser Gly Leu  
 705 710 715 720  
 Ala Gln Leu Gln Asp Thr Ala Asn Ile Ile Arg Asp Ala Glu Ser Ser  
 725 730 735  
 Pro Glu Val Leu Ala Glu Leu Ile Asp Lys Leu Arg Leu Ile Gln Ser  
 740 745 750  
 Phe Ala Ile Ser Lys Gly Ser Gly Leu Arg Val Arg Met Val Cys Glu  
 755 760 765  
 Pro Ser Ser Ala Ser Gln Asn Glu Ile Val Leu Gln Lys Trp Leu Ala  
 770 775 780  
 Gly Leu Pro Arg Asn Arg Ser Pro Thr Ser Pro Leu Asp His Thr Ser  
 785 790 795 800  
 Val Asn Ser Val Ala Asn Arg Val Leu Tyr Asp Leu Pro Tyr Lys Val  
 805 810 815  
 Tyr Tyr Ser Gly Leu Asp Met Gln Thr Val Pro Phe Ile Asp Pro Ser  
 820 825 830  
 Ser Ala Pro Leu Ser Val Leu Ser Gln Leu Leu Thr His Lys Tyr Leu  
 835 840 845  
 His Pro Glu Ile Arg Glu Lys Gly Gly Ala Tyr Gly Ala Gly Ala Ser  
 850 855 860  
 Asn Gly Pro Ile Lys Gly Phe Phe Ala Phe Thr Ser Tyr Arg Asp Pro  
 865 870 875 880  
 Asn Pro Val Asn Ser Leu Lys Val Phe Gln Asn Ser Gly Ile Phe Ala  
 885 890 895  
 Arg Asp Arg Ala Trp Ser Asp Arg Glu Leu Ala Glu Ala Lys Leu Gly  
 900 905 910

## 18226

```

Ile Phe Gln Gly Leu Asp Ala Pro Met Ser Val Asp Glu Glu Gly Ala
    915                      920                      925
Arg Tyr Phe Met Ser Gly Val Thr His Glu Met Asp Gln Arg Trp Arg
    930                      935                      940
Glu Gln Val Leu Asp Val Thr Ala Lys Asp Val Asn Glu Val Ala Gln
    945                      950                      955                      960
Lys Phe Leu Val Glu Gly Ser Arg Gln Ser Ile Cys Leu Leu Gly Glu
    965                      970                      975
Lys Lys Asp Trp Ala Asp Ser Asp Asp Trp Glu Val Arg Lys Leu Ser
    980                      985                      990
Met Asn Ala Ser Gly Glu Pro Val Ile Asp Pro Leu Ser Gln Asp Gly
    995                      1000                      1005
Ala Val Ala Ser Ala
    1010

```

&lt;210&gt; 41291

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (8), (15), (66)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41291

```

Tyr Thr Thr Phe Thr Pro Ser Xaa Ser Phe Ser Ser Ser Phe Xaa Arg
1          5          10          15
Leu His Arg Ser Ser Ala Ser Gln Glu Gln Ile Ser Thr Pro Ser Ser
    20          25          30
Ile Leu Ile Ala Met Val Gly Lys Trp Leu Val Leu Leu Ala Ser Gln
    35          40          45
Ala Trp Ser Lys Arg Lys Ile Asn Lys Asn Val Asn Pro Arg Gly Thr
    50          55          60
Leu Xaa Val Ser Val Ser Gln Thr Leu Ser Glu Leu Ser Ala Tyr Ala
    65          70          75          80
Gly Arg Thr Lys Asn Ala Arg Thr
    85

```

&lt;210&gt; 41292

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41292

```

Ala Ala Ala Val Gln Ser Ile Pro Glu Arg Ser Gln Ser Val Gln Gly
1          5          10          15
Ala Leu Val Tyr His Pro Ser Ser Pro Asp Gln Asp Ser Ser Ser Ile
    20          25          30
Leu Gly Arg Leu Glu Arg Ile Glu Ser Leu Leu Gly Ile Gly Lys Glu
    35          40          45
Gly Asn Arg Ser Ser Leu Leu Thr Ile Asp Pro Asp Leu Glu Glu Glu
    50          55          60
Ser Asp Asp Val Ser Ser Arg Gly Leu Trp Lys Ala Val Glu Arg Leu
    65          70          75          80
Lys Ile Ile Thr Ser Pro Pro Gln Asp Gln Asn Ile Trp Ser Tyr Ala

```

## 18227

85 90 95  
 Val Val Thr Arg Leu Trp Ile Ser Tyr Val Ala His Thr Phe Val Ser  
 100 105 110  
 Leu Val Pro Ser Arg Cys Ala Asn  
 115 120

<210> 41293  
 <211> 104  
 <212> PRT  
 <213> A.fumigatus

<400> 41293  
 Gly Val Asp Thr Asn Arg His Ile Arg Thr Glu Arg Glu Val Lys Lys  
 1 5 10 15  
 Ala Thr Arg Asp Leu Asn Gln Leu Leu Ser Asn Ile Glu Ser Pro Met  
 20 25 30  
 Thr Arg Leu Glu Thr Val His Lys Tyr Thr Glu Leu Leu Ala Asp  
 35 40 45  
 Met Lys Lys Leu Asp Arg Asp Tyr Ala Lys Ser Lys Lys Arg Ala Asp  
 50 55 60  
 Gln Leu Gln Lys Asp Gln Asp Lys Gly Lys Ser Glu Leu Asn Lys Thr  
 65 70 75 80  
 Val Thr Met Lys Asp Lys Leu Glu Lys Leu Cys Arg Glu Leu Thr Lys  
 85 90 95  
 Glu Asn Lys Lys Val Lys Val Gly  
 100

<210> 41294  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

<400> 41294  
 Pro Leu His Tyr Ser Leu Arg Ala Lys Ile Lys Thr Ile Gly Glu Lys  
 1 5 10 15  
 Phe Glu Met Arg Glu Leu His Tyr Lys Ala Leu Leu Arg Ser Lys Asp  
 20 25 30  
 Ala Glu Ile Gln Cys Leu Thr Ala Lys Tyr Glu Glu Gln Arg Arg Ala  
 35 40 45  
 Ala Glu Asn Glu Ala Ala Arg Cys Arg Ala Leu Ser Ser Gln Val Ser  
 50 55 60  
 Thr Phe Ser His Thr Glu Ala Glu Leu Arg Ser Gln Leu Asn Ile Tyr  
 65 70 75 80  
 Val Glu Lys Phe Lys Gln Val Cys Phe Gly Val Leu Tyr Gln Ala His  
 85 90 95  
 His Phe Cys Tyr Asn Ser Arg  
 100

<210> 41295  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 41295  
 Leu Ser Arg Leu Ile Cys Leu Arg Ile Phe Leu Arg Tyr Val Cys Leu  
 1 5 10 15

## 18228

Tyr Pro Gly Ile His Gly Gln Pro Ala Thr Asn Asp Asp Glu Gln Gly  
                   20                                  25                                  30  
 Lys Tyr Asn Val His Ala Asp Val Tyr Thr Lys Asp Gly Lys Lys Ile  
                   35                                  40                                  45  
 Thr Cys Leu Asp Ala His Asp Ile Glu Phe Lys Ile Arg Pro  
                   50                                  55                                  60

<210> 41296

<211> 372

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (119)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41296

Trp Ser Ala Val Asp Glu Leu Val Cys Met Ser Pro Thr Ile Gln Gly  
 1                  5                                  10                                  15  
 Ala Cys Arg Gly Gly Phe Thr Glu Asp Glu Ser Leu Ile Gly Gly Cys  
                   20                                  25                                  30  
 Trp Gln Ala Ser Phe Ile Val His Leu Leu Ala Cys Phe Ser Ala Ser  
                   35                                  40                                  45  
 Asn Thr Phe Tyr Thr Phe Ser Arg Lys Arg Leu Tyr Arg Leu Phe Glu  
                   50                                  55                                  60  
 Ala Ser Ile Asp Gln Pro Pro Ala Thr Pro Ser Ala Arg Arg Val Arg  
 65                                  70                                  75                                  80  
 Val Asp Ser Asn Pro Met Ala Ala Ser Pro Leu Arg Tyr Phe Ala Asn  
                   85                                  90                                  95  
 Val Ile Ala Gly Ser Ala Glu Ser Arg Ala His Pro Asp Ala Gln Arg  
                   100                                  105                                  110  
 Asp Val Trp Glu Leu Ala Xaa Trp Asp Pro Leu Pro Ile Cys Leu Arg  
                   115                                  120                                  125  
 Leu Phe Cys Leu Phe Ser Pro Gly His Val Leu Val Tyr Trp Val Phe  
                   130                                  135                                  140  
 Leu Pro Thr Gln Leu Ser Asp Pro Arg Pro Ser Val Thr Ile Val Thr  
 145                                  150                                  155                                  160  
 Thr Ile Phe Ile Thr Thr Leu Leu Ser Val Gln Met Ser Phe Leu Ser  
                   165                                  170                                  175  
 Ser Ser Phe Thr Gln Gln Ala Lys Asp Ser Met Val Val His Lys Glu  
                   180                                  185                                  190  
 Val Leu Asn Glu Tyr Asp Thr Lys Phe Val His Pro Arg Thr Gln Pro  
                   195                                  200                                  205  
 Val Met Arg Asp Val Gly Thr Gln Phe Ser Asp Pro Asn Thr Ser Gln  
                   210                                  215                                  220  
 Pro Gly Ser Asp Ala Lys Tyr Asn Lys Val Asp Thr Phe Thr Pro Thr  
 225                                  230                                  235                                  240  
 Leu Val Ile His Arg Gly Phe Lys Thr Ser Pro Asn Pro Asn Tyr Val  
                   245                                  250                                  255  
 Thr Phe Val Asp Pro Glu Gly Ala Ser Pro Pro Thr Ser Asp Ile His  
                   260                                  265                                  270  
 Tyr Ala Lys Cys Phe Ser Gln Leu Tyr Val Ala Ala Asn Thr Leu Ser  
                   275                                  280                                  285  
 Phe Thr Arg Cys Leu Pro Gly Cys Thr Arg Pro Arg Cys Val His Thr  
                   290                                  295                                  300

## 18229

Pro Thr Ala Leu Pro Thr His Thr Glu Cys Tyr Gly Arg Trp Trp Gln  
 305 310 315 320  
 Phe Gly Asn Leu Leu Ala Arg Lys Phe Pro Leu Glu Ala Ile Tyr Thr  
 325 330 335  
 Gly Gln Tyr Arg Pro Pro Gly Ser Glu Pro Ser Arg Val Leu Ile Gln  
 340 345 350  
 Arg Pro Arg Tyr Pro Tyr Glu Glu Ala Ile Lys Ser Leu Glu Lys Glu  
 355 360 365  
 Gln Cys Ala Arg  
 370

&lt;210&gt; 41297

&lt;211&gt; 557

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41297

Ser Arg Pro His Gln Ser His Gln Gln Gln Asp Asn Cys Leu Leu Pro  
 1 5 10 15  
 Lys Glu Trp Val Thr Val Glu Gly Leu Pro Gly Leu Glu Val Gln Pro  
 20 25 30  
 Val Asn Asn Arg His Leu Arg Tyr Ser Met Asp Glu Val Leu His Leu  
 35 40 45  
 His Gln Gly His Phe Met Asn Leu Ser Pro Arg Arg Arg His Asp Lys  
 50 55 60  
 Arg Lys Glu Leu Asp Val Glu Glu Val Glu Asn Thr His Gln Glu Arg  
 65 70 75 80  
 Asn Thr Pro Asp Arg Ser Gly Ser Pro Met Asn Ser Arg Asp Thr Asp  
 85 90 95  
 Ser Gly Thr Gly Ser Pro Thr Ile Ala Arg Arg Thr Arg Pro Thr Lys  
 100 105 110  
 Leu Pro Leu Pro Arg Glu Leu Ala Ser Lys Val Lys Glu Gln Gln Lys  
 115 120 125  
 Asp Gln Pro Ala Thr Pro Gln Asp Gln Asp Tyr Gly Ser Leu Arg Asn  
 130 135 140  
 Val Arg Pro Lys Lys Pro Pro Thr Thr Leu Leu Tyr Ser Ser Pro Asp  
 145 150 155 160  
 Glu Val Arg Glu Gln Tyr Trp Arg Lys Val Arg Asp Lys Phe Glu Lys  
 165 170 175  
 Glu Ser Pro Ser Ala Lys Ser Gln Glu Lys Glu Lys Asp Lys Asp Lys  
 180 185 190  
 His Lys Glu Ile Tyr Tyr Gly Ala Tyr Lys Lys Ile Ile Ser Leu Ala  
 195 200 205  
 Ser Ser Pro Lys Ser Glu Leu Val Lys Gln Arg Leu Lys Ser Ala Gly  
 210 215 220  
 Gly Asp Leu Arg Gly Ser Pro Lys Ser Arg Ile Thr Ser Pro Ile Ile  
 225 230 235 240  
 His Pro Arg Leu Arg Pro Gly Tyr Ser Ser Pro Ser Lys Ser Asp Asn  
 245 250 255  
 Gln Leu Ile Ser Gln Gly Lys Arg Gln Leu Ser Gly Val Gln Arg Lys  
 260 265 270  
 Asn Ser Asp Thr Asp Glu Ser Ile Leu His Phe Ser Thr Asp Lys Thr  
 275 280 285  
 Asp Asn Ala Thr Asp Ser Ser Ile Asn Ser His Ser Ser Leu Ser Pro  
 290 295 300  
 Val Ser Gly Pro Ser Ser Ser Leu Thr Asp Trp Glu Asp Lys Phe Val

## 18230

305                      310                      315                      320  
 Val Asn Met Pro Ser Ala Lys Glu Pro Asn Pro Pro Thr Met Ser Ala  
                                  325                      330                      335  
 Gln Gln Ile Ala Glu Phe Gln Gln Ser Ile Glu Arg Val His Asn Asp  
                                  340                      345                      350  
 Gly Gly Ala Met Leu Asp Pro Asp Ser Leu Pro Ser Pro Arg Thr Gly  
                                  355                      360                      365  
 Thr Pro Glu Asp Lys Asp Leu Ser Ala Val Gln Pro Ala Lys Pro Thr  
                                  370                      375                      380  
 Ser Phe Asp Gly Gln Asp Leu Pro Pro Pro Pro Pro His Ser Ala Gly  
 385                                   390                      395                      400  
 Phe Glu Glu Ser Pro Pro Ser Gln Pro Glu His Pro Arg Tyr Tyr Cys  
                                  405                      410                      415  
 Pro Asp Glu Ile Gly Lys Asn Arg Ile Ser Thr Ile Trp Glu Glu Ser  
                                  420                      425                      430  
 Ala Ser Lys Ser Glu Lys Asn Val Pro Lys Val Asn Pro Asp Gly Ser  
                                  435                      440                      445  
 Phe Leu Gly Cys Lys Glu Ile Asn Gly Pro Asn Asp Lys Asn Pro Asp  
                                  450                      455                      460  
 Glu Ile Leu Leu Phe Ser Pro Val Asp Arg Pro Arg Val Val Asp Val  
 465                                   470                      475                      480  
 Ser Ser Pro Met Pro Arg Ser Pro Lys Glu Arg Lys Ile Pro Val Val  
                                  485                      490                      495  
 Arg Gln Arg Asn Pro Asp Leu Gly Glu Lys Thr Val Ala Arg Glu Glu  
                                  500                      505                      510  
 Trp Lys Pro Gly Thr Leu Asn Met Lys Leu Val Gln Cys Ser Lys Pro  
                                  515                      520                      525  
 Ser Pro Arg Thr Val Cys Arg Glu Thr Ser Cys Gln Gln Pro Glu Lys  
                                  530                      535                      540  
 Thr Ala Gln Lys Ser Ser Lys Ala Asp Arg Asp Ser Pro  
 545                                   550                      555

&lt;210&gt; 41298

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41298

Val Lys Asn Gly Trp Leu Ile Leu Asp His Ser Gly Gln Thr Leu Ser  
 1                                   5                                   10                                   15  
 Ile Asn Ala Ser Gly Asn Leu Lys Glu Arg Val Glu Glu Gly Ala Tyr  
                                  20                                   25                                   30  
 Val Ala Leu Glu Val Lys Tyr Gly Leu Ile Thr Leu Ile Lys Gln Thr  
                                  35                                   40                                   45  
 Ala Asp Leu Cys Glu Gln Ile Lys Asn Val Asp Leu Glu Cys Pro Leu  
                                  50                                   55                                   60  
 Glu Lys Gly Glu Met Thr Leu Thr Lys Gln Val Asp Leu Pro Ser His  
 65                                   70                                   75                                   80  
 Ile Pro Pro Val Arg Leu Pro Leu Ser Trp Tyr Ser Trp Pro Thr Ser  
                                  85                                   90                                   95

Tyr

&lt;210&gt; 41299

&lt;211&gt; 112

&lt;212&gt; PRT



&lt;213&gt; A.fumigatus

&lt;400&gt; 41299

His	Val	Thr	Asp	Gly	Pro	Asp	Ala	Gln	Arg	Asn	Phe	Leu	Val	Val	Asp
1				5					10					15	
Ser	Lys	Thr	Glu	Thr	Ser	Ala	Ile	Glu	Lys	Ala	Phe	Gln	Asn	Phe	Thr
			20					25				30			
Gln	Glu	Arg	Lys	Asp	Ile	Ala	Val	Leu	Leu	Ile	Asn	Gln	His	Val	Arg
			35				40					45			
Cys	Ile	Ala	Phe	Tyr	Ile	Thr	Arg	Asp	Gln	Leu	Ala	His	Arg	Ile	Arg
	50					55				60					
Leu	Pro	Asn	Ala	Ser	Asp	Thr	Ala	Ser	Thr	Pro	Ser	Pro	Thr	Arg	Ser
65					70				75					80	
Pro	Pro	Ser	Ser	Arg	Phe	Arg	Val	Lys	Thr	Ile	Pro	Thr	Thr	Pro	Lys
				85					90					95	
Arg	Thr	Val	Cys	Ser	Ser	Ala	Cys	Gly	Gly	Tyr	Leu	Val	Asn	Arg	Arg
			100					105					110		

&lt;210&gt; 41300

&lt;211&gt; 762

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41300

Val	Phe	Gln	Arg	Val	His	Ser	Ala	Thr	Asn	Leu	Leu	Ile	Leu	Ser	Ser
1				5					10					15	
Asp	Ala	Arg	Val	Pro	Ala	Glu	Ala	Thr	Pro	Arg	Ala	Val	Ala	Arg	Ser
			20					25				30			
Ile	Leu	Tyr	Gln	Leu	Phe	Asp	Lys	Arg	Ile	Gly	Asn	Val	Gln	Leu	Leu
			35				40					45			
Gln	Ile	Leu	Ser	Val	Ala	His	Glu	Arg	Ser	Lys	Lys	Ala	Thr	Ser	Glu
	50					55				60					
Gln	Asp	Tyr	Asp	Ser	Leu	Leu	Trp	Asn	Ala	Leu	Glu	Ala	Ala	Leu	Ser
65					70				75					80	
Val	Ala	Leu	Pro	Gly	Ala	Lys	Glu	Leu	Val	Ile	Val	Val	Asp	Gly	Val
				85					90					95	
Asp	Glu	Ala	Ser	Cys	Ser	Glu	Thr	Ala	Met	Leu	Asn	Gln	Leu	Ala	Thr
			100					105					110		
Ala	Thr	Ala	Lys	Gly	Ser	Asn	Val	Lys	Leu	Ile	Thr	Leu	Gly	Ala	Leu
			115				120						125		
Lys	Pro	Pro	Thr	Ala	Ala	Gly	Gln	Ala	Phe	Val	Gln	Ile	Thr	Glu	Glu
			130			135					140				
Leu	Ile	Phe	Asp	Asp	Ile	Ala	Ala	Val	Val	Arg	Ser	Gln	Leu	Gln	Gln
145					150					155				160	
Ser	Arg	Val	Phe	Leu	Gly	Met	Ser	Glu	Leu	Asp	Gln	Glu	Thr	Ile	Val
				165				170						175	
Gly	Arg	Ile	Thr	Glu	Ala	Ser	Gln	Gly	Ser	Phe	Leu	Trp	Gly	Lys	Leu
			180				185						190		
Ala	Ala	Lys	Arg	Val	Arg	Tyr	Glu	Gly	Thr	Glu	Glu	Ser	Leu	His	Lys
		195					200					205			
Ala	Val	Asp	Ala	Leu	Leu	Ser	Ala	Lys	Leu	Thr	Leu	Thr	Asp	Phe	Ala
	210					215					220				
Leu	Gln	Leu	Leu	Gln	Gly	Pro	Asn	Val	Thr	Glu	Asp	Ala	Lys	Asn	Met
225					230					235				240	
Leu	Val	Trp	Leu	Ile	Thr	Ala	Asp	Arg	Pro	Leu	Ser	Phe	Lys	Glu	Leu
				245					250					255	

Glu Leu Leu Ala Ser Ile Gln Ile Asp Lys Leu Thr Val Ala Asp Arg  
 260 265 270  
 Lys Leu Asp Val Leu Gln Val Leu Lys Pro Leu Asn Val Leu Val Phe  
 275 280 285  
 Val Gln Asp Gly Gln Val Phe Ile Arg His Gly Leu Phe Arg Ala Ser  
 290 295 300  
 Leu Leu Glu Ile Phe Ser Lys Gly Lys Leu Val Ser Thr Val Lys Asp  
 305 310 315 320  
 His His Ala Asp Leu Val Thr Arg Leu Leu Ile Tyr Ile Arg Ala Thr  
 325 330 335  
 Val Thr Gln Glu Asn Glu Leu Ser Leu Val Ser Leu Asp Trp His Asp  
 340 345 350  
 Thr Asp Arg Leu Ile Asn Arg Asn Pro Leu Leu Glu Phe Ala Val Arg  
 355 360 365  
 Tyr Trp Val His His Val Arg Gln Thr Ser Ala Phe Thr Ala Lys Gly  
 370 375 380  
 Glu Val Ala Ala Ala Gln Glu Phe Ala Lys Val Leu Pro Ala Ser Ile  
 385 390 395 400  
 Thr Thr Leu Arg Leu Glu Ser Thr Leu Trp Glu Asn Val Pro Thr Pro  
 405 410 415  
 Thr Leu Leu Leu Tyr Leu Thr Thr Val Thr Asn Ile Tyr Arg Gln Met  
 420 425 430  
 Leu Ser Ala Asn His Val Val Thr Leu Gln Ser Ile Ile Phe Leu Ala  
 435 440 445  
 Leu Leu Asn Gln Arg Leu Glu Tyr Thr Ser Asp Ala Ile Pro Leu Phe  
 450 455 460  
 Phe Glu Ala Ala Thr Leu Ser Arg Thr Leu Leu Thr Ser Arg His Ile  
 465 470 475 480  
 Val Thr Met Gln Met Ala Arg Thr Phe Ile Glu Leu Thr Gln Gln Met  
 485 490 495  
 Thr Thr Ser Thr Lys Thr Glu Ile Met Val Lys Arg Glu Glu Val Leu  
 500 505 510  
 Leu Leu Leu Val Glu Cys Tyr Lys Arg His Tyr Gly Glu Arg Ser Glu  
 515 520 525  
 Thr Val Val Thr Leu Leu Arg Gln Leu Ile Asp His Tyr Thr Leu Ile  
 530 535 540  
 Lys Glu Glu Glu Arg Val Lys Glu Ile Ala Ala Ser Ile Thr Ser Ile  
 545 550 555 560  
 Thr Thr His His Gly Arg His Gly Ser Ser Ser Ala Asn Gly Gly Leu  
 565 570 575  
 Glu Ile His Leu Asn Lys Gly Ile Asp Arg Ser Val Asp Ile Gly Val  
 580 585 590  
 Gly Leu Ser Leu Asp Tyr Glu Glu Gly Asp Glu Ile Ile Gln Glu Ser  
 595 600 605  
 Glu Ser Tyr Asn Val Lys Glu Trp Ile Lys Lys Ala Glu Ile Tyr Val  
 610 615 620  
 Ala Glu Gly Lys Val Glu Leu Ala Glu Arg Thr Tyr Val Glu Ile Trp  
 625 630 635 640  
 Gln Arg Val Ser Arg Glu Tyr Arg Thr His Tyr Ser Ala Tyr Trp Glu  
 645 650 655  
 Glu Arg Lys Met Thr Thr Val Leu Ala Tyr Ser Lys Phe Leu Val Ser  
 660 665 670  
 Gln Lys Arg Ala Phe Glu Ala Ser Ser Val Leu Thr Ser Leu Trp Gln  
 675 680 685  
 Glu Tyr Glu Gln Ala Ser Ile Ser Ile Ser Glu Thr Ser Val Ser Tyr  
 690 695 700

## 18233

Phe Gln Glu Val Ala Lys Met Met Lys Val Val Gly Ile Tyr Asp Val  
 705 710 715 720  
 Ala Leu Leu Val Tyr Lys Arg Cys Ser Arg Tyr Tyr Glu Ser Ile Asn  
 725 730 735  
 Ser Thr His Ser Ser Thr Tyr Lys Glu Ile Gln Glu Asn Ile Arg Thr  
 740 745 750  
 Thr Ser Lys Glu Val Val Lys Ser Phe Ser  
 755 760

&lt;210&gt; 41301

&lt;211&gt; 944

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41301

Ser Asn Ser Val Ile Ser Glu Thr Thr Ile Glu Glu Ile Phe Ile Gly  
 1 5 10 15  
 Gly Ser Ser Ser Thr Glu Thr Val Glu Ser Ser Phe Thr Ala Leu  
 20 25 30  
 His Arg Ser Leu Glu Leu Tyr Ile Ser Gln His Arg Trp Gln Asp Ala  
 35 40 45  
 Thr Arg Leu His Lys Lys Ile Leu Arg Phe Val Trp Pro Ser Leu Phe  
 50 55 60  
 Ala Pro Ser Val Gln Asp Val Thr Leu Pro Glu Lys Tyr Val Asp His  
 65 70 75 80  
 Cys Val Glu Leu Ala Ala Arg Leu Ser Leu Cys Tyr His Ser Arg Arg  
 85 90 95  
 Arg Leu Ser Lys Glu Glu Asp Ile Arg Leu Arg Val Tyr Arg Ala Val  
 100 105 110  
 Arg Ala Glu Arg Lys Val Glu Asp Lys Leu Arg Glu Arg Ala Thr Ala  
 115 120 125  
 Glu Leu Leu Arg Phe Phe Glu His Thr Ser Gln Thr Glu Met Ile Ile  
 130 135 140  
 Asn Leu Arg Gln Glu Met Leu Gly Asp Tyr Ile Glu Ala Tyr Gly Ala  
 145 150 155 160  
 Glu His Glu Arg Val Ile Lys Ile Leu Trp Val Leu Ala Glu Leu Thr  
 165 170 175  
 Arg Pro Arg Pro Ile Phe Ile Glu Tyr Tyr Gln Gln Ile Ile Arg Ala  
 180 185 190  
 Leu Asn Lys Asp Ser Gln Val Cys His Pro Glu Ala Ile Glu Pro Met  
 195 200 205  
 Val Ile Val Ala Thr Glu Leu Trp Asn Gln Gly Arg Tyr Val Asp Ala  
 210 215 220  
 Leu Ala Tyr Tyr Lys Val Ile Phe Asn Thr Phe Leu Thr Gln Pro Lys  
 225 230 235 240  
 Leu Asp Pro Lys Phe Gln Val Gln Glu Leu Val Gln Glu Leu Phe Glu  
 245 250 255  
 Arg Tyr Thr Arg Cys Leu Arg Ser Val His Ala Glu Leu Thr Val Leu  
 260 265 270  
 His Lys Val Thr Val Glu Tyr Arg Ala Arg Cys Thr Ala Val Phe Gly  
 275 280 285  
 Val Thr Ala Ser Ile Thr Ile Arg Ala Thr Leu Thr Leu Ala Lys Leu  
 290 295 300  
 Cys Gln Glu Ser Lys Arg Phe Leu Ser Glu Ala Ile Thr Leu Tyr Glu  
 305 310 315 320  
 Glu Leu Leu Lys Ile Glu Ser Ala Glu Leu Asp Arg Asp Glu Ile Ser

				325					330					335	
Val	Ile	Leu	Asp	Gly	Leu	Ser	Glu	Glu	Gln	Ala	Glu	Ser	Ser	Ser	Ser
			340					345					350		
Ser	Thr	His	Ser	Glu	Arg	Thr	Ser	Lys	Val	Met	Arg	Lys	Arg	Ile	Thr
		355					360					365			
Asp	Val	Arg	Glu	Thr	His	Gly	Trp	Ala	His	Glu	Glu	Ser	Leu	Thr	Arg
	370					375					380				
Met	Lys	Glu	Met	Ile	Ser	Ile	Tyr	Thr	Glu	Arg	Lys	Glu	Thr	Glu	Thr
385					390					395					400
Val	Val	Arg	Glu	Leu	Thr	Glu	Ala	Thr	Val	Gln	Ile	Leu	Met	Ser	Glu
			405						410					415	
Thr	Ser	Ser	Thr	Arg	Leu	Ile	Ala	Ala	Ala	Ser	Thr	Ile	Ala	Ser	Cys
			420					425					430		
Tyr	Ile	Glu	Ala	Gly	Gln	Thr	Gln	Lys	Ala	Val	Glu	Leu	Ser	His	Glu
		435					440					445			
Ile	Tyr	Arg	Gln	Ile	Val	Met	Lys	Asp	Val	Val	Asn	Val	Glu	Ser	Val
	450					455					460				
Gln	Phe	Asp	Leu	Ser	Ser	Lys	Glu	Arg	Thr	Ser	Leu	Thr	Phe	Leu	Ala
465					470					475					480
Gln	Leu	Glu	Tyr	Ser	Leu	Arg	Arg	Asn	Thr	Ser	Val	Thr	Val	Thr	Glu
			485						490						495
Ile	Leu	Ala	Ser	Leu	Thr	Thr	Glu	Tyr	Val	Tyr	Phe	Glu	Glu	Phe	Arg
			500					505					510		
Arg	Leu	Leu	Thr	Ser	Lys	Ser	Ser	Ser	Ile	Gln	Thr	Leu	Thr	Val	Ser
		515					520					525			
Ala	Ala	Arg	Leu	Tyr	His	Phe	Leu	Val	Ala	Asn	Gly	Arg	Gln	Val	Ala
	530					535					540				
Ala	Ala	Arg	Val	Phe	Asn	Asp	Phe	Leu	Ser	Tyr	Phe	Ala	Ala	Thr	Glu
545					550					555					560
Gly	Lys	Arg	Val	Asp	Leu	Pro	Glu	Thr	Ser	Arg	Val	Lys	Ile	Leu	Val
			565						570					575	
Ile	Thr	Ile	Leu	Asp	His	Phe	Ser	Thr	His	Leu	Ser	His	Asn	Phe	Val
			580					585					590		
Arg	Ser	Ile	Gly	Ile	Ala	Ser	Val	His	Arg	Val	Thr	Glu	Leu	Leu	Lys
		595					600					605			
Glu	Gln	Arg	Tyr	Glu	Ala	Ala	Cys	Asp	Leu	Ala	Leu	Ala	Ser	Phe	Lys
	610					615					620				
Tyr	Leu	Ser	Ala	His	Asp	Ser	Tyr	Arg	Ser	Pro	Val	Leu	Val	Lys	Phe
625					630					635					640
Ala	Phe	Ile	Leu	Gly	Met	Ala	Ile	Ala	Gly	Arg	Asp	Ile	Val	Leu	Tyr
			645						650					655	
Pro	Asp	Asp	Ala	Ile	Arg	Lys	Lys	Leu	Leu	Gly	Val	Ser	Ala	Val	Ile
			660					665					670		
Ile	Gln	Asp	Ala	Leu	Arg	Val	Ile	Asp	Gly	Leu	Lys	Ile	Asp	Leu	Ser
		675													

## 18235

770                      775                      780  
 Leu Tyr Ile Gly Val Gly Leu Arg Tyr Gln Ser His Lys Asn Gly Gln  
 785                      790                      795                      800  
 Glu Met Ala Asn Arg Tyr Tyr Lys Lys Ser Ala Ala Leu His Glu Leu  
                     805                      810                      815  
 Leu Leu Arg Asn Phe Ser Asp Pro Ser Phe Ala Glu Leu Glu Cys Gly  
                     820                      825                      830  
 Leu Asp Asn Ser Met Ser Leu Asp Gly Ser Ala Tyr Asp Phe Asp Leu  
                     835                      840                      845  
 Gly Glu Pro Ile Gly His Val Pro Asp Gly Glu Ser Val Arg Arg His  
                     850                      855                      860  
 Leu Tyr Leu Leu Lys Leu Ala Val Gln Arg Leu Gly Asp Trp Pro Lys  
 865                      870                      875                      880  
 Asp Tyr Ser Glu Tyr Glu Arg Leu Asn Ala Asp Leu Phe Arg Glu Phe  
                     885                      890                      895  
 Ala Ser Asp Leu Lys Gly Val Glu Gly Val Glu Lys Trp Asp Leu Lys  
                     900                      905                      910  
 Ala Tyr Gly Ala Gly Lys Ala Glu Gly Asn Ala Asp Ile Leu Asp Thr  
                     915                      920                      925  
 Glu Phe Lys Gly Trp Glu Phe Leu Glu Gly Pro Ala Pro Val Glu Gly  
                     930                      935                      940

<210> 41302  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 41302  
 Pro Lys Thr Val Ser Asp Pro Lys Ala Ile Lys Leu Trp Leu Ser Pro  
 1                      5                      10                      15  
 Glu Asp Arg Val Leu Gly Asn Val Ala Glu Gln Ser Ser His Leu Ala  
                     20                      25                      30  
 His Asp Arg Glu Glu Met Thr Cys Leu Trp Met Ala Pro Tyr Leu Ala  
                     35                      40                      45  
 Arg Phe Leu Lys Ser Pro Leu Lys Thr Leu Ala Ile Ala Gly Lys Pro  
                     50                      55                      60  
 Gly Ala Gly Arg Thr Val Leu Ala Ser Val Ile Val Asp Gln Leu Gln  
 65                      70                      75                      80  
 His Thr Ile Gly Gly Val Ser Tyr Ala Thr Leu Phe Val Pro Ile Ser  
                     85                      90                      95  
 Glu Tyr Ser Arg Glu Ser Ile Leu Gln Pro Thr Ser  
                     100                      105

<210> 41303  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 41303  
 Ala Cys His Arg Trp Asp Gly Leu Arg Gly Pro Arg Gly Leu Lys Phe  
 1                      5                      10                      15  
 Ala Lys His Ala Asn Leu Phe Val Lys Ser Leu Ser Gly Arg Leu Gly  
                     20                      25                      30  
 Met Gly Leu Ala Ser Cys Gly Val Cys Phe Cys Leu Asn Ile Ile Leu  
                     35                      40                      45  
 Gln Leu Asn Thr Pro Ser Thr Phe Ile Asn Val His Thr Val Ile Gln

## 18236

50                      55                      60  
 Ser Trp Leu Leu Ile His Ser Gly Ile Ser Val Ser Thr Gly Leu Pro  
 65                      70                      75                      80  
 Thr Lys

<210> 41304  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus

<400> 41304  
 Ile Leu Pro Ile Ala Phe Val Tyr Ile Thr Met Ala Pro Ala Gly Pro  
 1                      5                      10                      15  
 Arg Val Gln Lys Pro Val Gly Ser Ala Trp Ile Ser Thr Glu Lys  
                     20                      25                      30  
 Glu Asn Phe Ala Gln Leu Val Asn Gln Glu Met Glu Glu Ile Glu Tyr  
                     35                      40                      45  
 Pro Val Arg His Glu Met Asp Trp Leu Asn Glu His Met Ala Glu Val  
                     50                      55                      60  
 Phe Ser Ser Asn Gln Leu Cys Val Leu Ile Tyr Ile Ser Ile Lys Pro  
 65                      70                      75                      80  
 Ser Thr Leu Ala Asp Cys Lys Ile Ala Ile Leu Leu Met Cys Ser Lys  
                     85                      90                      95  
 Leu Leu Glu Asn Ser Gly Val Arg His Leu Ala Gln His Gly Ser Glu  
                     100                      105                      110  
 Met

<210> 41305  
 <211> 908  
 <212> PRT  
 <213> A.fumigatus

<400> 41305  
 Gln Pro Leu Ser Glu Ile Phe Thr Thr Ser His Asn Gln Gly Asp Arg  
 1                      5                      10                      15  
 Ser Arg Asn Val Ser Pro Ala Arg Ser Pro Val Lys Pro Thr Ala Ala  
                     20                      25                      30  
 Pro Ile Thr Thr Thr Pro Ser Glu Pro Lys Val Ser Pro Ala Lys Thr  
                     35                      40                      45  
 Arg Asp Thr Ala Glu Asn Ala Leu Gln Pro Gln Tyr Pro Asp Leu Thr  
                     50                      55                      60  
 Gln Asn Leu Asn Ser Phe Pro Gln Tyr Asn Thr Asp Ser Gly Tyr His  
 65                      70                      75                      80  
 Gly Met Pro Asp Asp Glu Gly Glu Asp Gln Asp Asp Asp Val Val Leu  
                     85                      90                      95  
 Thr Gln Val Gln Ser Glu Thr Gln Thr Ser Thr Gln Pro Leu Glu Asp  
                     100                      105                      110  
 Glu Pro Val Thr Thr Ile Glu Asn Gln Asn Gln Pro Gln Arg Gln Ser  
                     115                      120                      125  
 Ile Asp Arg Arg Thr Thr Ala Ala Ser Phe His Ser Ala Gln Glu Asp  
                     130                      135                      140  
 Val Arg Gln Arg Gly Glu Thr Ala Glu Pro Val Glu Lys Pro Val Gln  
 145                      150                      155                      160  
 Ala Thr Asn Asn Glu Thr Thr Ser Arg Gln Glu Lys Ala Ala Ser Ser

				165					170					175	
Thr	Pro	Gln	Pro	Glu	Lys	Lys	Gln	Pro	Glu	Ala	Ile	Val	Val	Ala	Asp
			180					185					190		
Ser	Ala	Ser	Asp	Gln	Glu	Pro	Glu	Ala	Glu	Ser	Lys	Ser	Glu	Ser	Lys
		195					200					205			
Pro	Arg	Ala	Glu	Pro	Gln	Thr	Ser	Pro	Thr	Lys	Ser	Ser	Ser	Thr	Lys
	210					215						220			
Gln	Pro	Ala	Ala	Pro	Val	Glu	Glu	Glu	Ile	His	Glu	Lys	Asp	Asp	Thr
225					230					235					240
Pro	Leu	Asp	Ser	Leu	Asp	Asp	Ile	Gly	Thr	Pro	Ser	Asp	Asn	Ser	Thr
				245					250					255	
Pro	Glu	Arg	Pro	Pro	Ile	Arg	Lys	Ser	Ser	Leu	Ser	Phe	Ala	Ser	Leu
			260					265					270		
Pro	Ala	Arg	Glu	Pro	Leu	Leu	Lys	Lys	Ser	Leu	Gly	Gly	Ser	Arg	Leu
		275					280					285			
Ser	Arg	Thr	Ser	His	Val	Asp	Ile	Ala	Arg	Val	Asn	Asn	Ala	Ala	Gly
	290					295					300				
Pro	Ser	Ser	Phe	Gly	Arg	Gln	Thr	Gly	Gly	His	Arg	Asn	Thr	Ala	Val
305					310					315					320
Asp	Glu	Glu	Pro	Ala	Leu	Asp	Asp	Gly	Met	Asp	Ile	Asp	Glu	Gly	Arg
				325					330					335	
Arg	Gly	Val	Gln	Leu	Gln	Asp	Asp	Ile	Glu	Ala	Glu	Ala	Asp	Ala	Thr
			340					345					350		
Ala	Ser	Lys	Ala	His	Thr	Lys	Ser	Ser	Thr	Gln	Arg	Leu	His	Glu	Lys
		355					360					365			
Ile	Ser	Met	Leu	Gly	Lys	Leu	Gln	Pro	Ser	Arg	Pro	Thr	Lys	Ser	Ile
	370					375					380				
Pro	Ser	Val	Thr	Gly	Leu	Ala	Ser	Ala	His	Val	Ala	Tyr	Pro	Glu	Leu
385					390					395					400
Pro	Ala	Ala	Ser	Ala	Lys	Ser	Glu	Val	Leu	His	Leu	Glu	Ser	Arg	Glu
				405					410					415	
Pro	Ala	Ala	Pro	Glu	Pro	Met	Thr	Ile	Asp	Glu	Asp	Asp	Trp	Ile	Lys
			420					425					430		
Leu	Ile	Glu	Ser	Pro	Lys	Lys	Ala	His	Ala	Pro	Arg	Ser	Pro	Arg	Thr
		435					440					445			
Glu	Val	Lys	Ile	Asn	Lys	Ser	Thr	Asn	Glu	Thr	Ser	Arg	Pro	Tyr	Ser
	450					455					460				
Glu	Lys	Val	Ser	Leu	Pro	Arg	Ala	Gln	Asp	Arg	Ser	Asp	Ala	Gly	Ala
465					470				475						480
Ala	Arg	Ala	Ser	Asn	Arg	Asn	Ile	Thr	Glu	Ser	Ile	Arg	Glu	Lys	Ser
				485					490					495	
Ser	Thr	Pro	Ala	Tyr	Ser	Ser	Pro	Gln	Arg	Pro	Ser	His	Gln	Lys	Ser
			500					505					510		
Ala	Ser	Val	Ser	Asn	Ala	Gly	His	His	Ala	Ser	Thr	Thr	Pro	Val	Gly
		515													

## 18238

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      610              615              620
Gln Lys Glu Leu Glu Asp Arg His Arg Glu Glu Glu Gln Ala Glu Lys
625              630              635              640
Ala Leu Ile Glu Glu Arg Gln Lys Ala Leu Gln Leu Lys Ile Ala Gln
      645              650              655
Glu Arg Ala Arg Met Glu Glu Glu Glu Arg Asn Ala Pro Pro Ser Ala
      660              665              670
Val Ala Ala Pro Ala Ser Ser Lys Lys Ala Gln Pro Leu Gln Arg His
      675              680              685
Gln Ser Arg Glu Pro Glu Pro Ser His Glu Ala Val Ser Arg Pro Pro
      690              695              700
Ser Arg Met Ser Val Ser Gln Gln Gln Ser Lys Gln Asn Asp Arg Arg
705              710              715              720
Pro Val Lys Pro Thr Arg Glu Val Leu Gln Lys Pro Arg Pro Gln Ala
      725              730              735
Val Ser Ile Arg Val Gly Ser Ala Leu Ser Arg Gln Ile Pro Leu Thr
      740              745              750
Ser Thr Ser Val Ala Ser Ser Gly Pro Glu Pro Ser Ala Ser Val Ala
      755              760              765
Ala Pro Pro Ser Ala Ser Lys Pro Pro Thr Leu Lys Lys Lys Ala Ser
      770              775              780
Asn Ser Ser Leu His Thr Ala Ser Ser Asn Ser Ser Phe Lys Ser Ser
785              790              795              800
Val Ser Ser Gln Ser Gln Arg Lys Val Gln Leu Ala Asn Glu Arg Lys
      805              810              815
Arg Glu Gln Glu Glu Arg Glu Ala Arg Arg Arg Glu Glu Gln Arg Arg
      820              825              830
Glu Ala Glu Arg Lys Arg Ala Ala Gln Gln Gln Glu Glu Leu Arg Arg
      835              840              845
Gln Glu Met Arg Ser Arg Ala Glu Ala Glu Arg Arg Glu Arg Leu Ala
      850              855              860
Ala Glu Asp Ala Lys Lys Ala Ala Gln Ile Gln Ala Ile Glu Lys Arg
865              870              875              880
Arg Gln Glu Asn Ala Arg Arg Leu Glu Arg Gln Gly Ser Gln Gln Pro
      885              890              895
Thr Ser Glu Arg Val Ser Glu Phe His Glu Trp Leu
      900              905

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&lt;210&gt; 41306

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41306

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Pro Pro Leu Lys Ile Lys Ile Asn His Ser Asp Ser Leu Leu Ile Val
1              5              10              15
Val Gln Gln Leu Leu His Ser Thr Gln Leu Arg Lys Thr Tyr Ala Asn
      20              25              30
Ala Glu Arg Arg Leu Ser Leu Trp Arg Ser Leu Cys Lys Leu Pro Thr
      35              40              45
Met Arg Gln Arg Gln Asp Arg Lys Arg Arg Leu His Pro Arg Leu Asn
      50              55              60
Pro Arg Arg Ser Ser Arg Lys Gln Ser Ser Trp Gln Ile Arg His Gln
      65              70              75              80
Ile Arg Asn Gln Arg Pro Ser Gln Ser Pro Ser Pro Ser His Gly Arg
      85              90              95

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## 18239

Asn His Lys His His Gln Pro Ser Leu Leu Gln Gln Asn Ser Gln Gln  
 100 105 110  
 Leu Arg Trp Lys Lys Arg Ser Met Lys Arg Thr Thr Arg Leu Leu Thr  
 115 120 125  
 Pro Trp Met Thr Ser Ala Arg Leu Gln Ile Thr Pro Leu Arg Lys Asp  
 130 135 140  
 Leu Pro Ser Ala Arg Ala Ala  
 145 150

<210> 41307

<211> 308

<212> PRT

<213> A.fumigatus

<400> 41307

Ala Ser Ile Val Gln Leu Glu Arg Pro Leu Ser Gln Ala Ala Arg Pro  
 1 5 10 15  
 Ala Ser Arg Leu Gly Ser Ile Gln Pro Phe Ser Arg Thr Ile Asn Pro  
 20 25 30  
 Pro Gln Pro Asn Pro Ala Lys Pro Pro Lys Arg Gly Leu Asp Glu Glu  
 35 40 45  
 Ala Ser Tyr Arg Pro Val Ala Met Lys Ser Ser Thr Val Gln Pro Ser  
 50 55 60  
 Gly Glu Ser Lys Arg Arg Lys Thr Glu Asp Glu His Asn Pro Met Ser  
 65 70 75 80  
 Ala Ile Arg Pro Thr Met Ala Pro Pro Ile Arg Gln Ser Gly Ile Arg  
 85 90 95  
 Lys Val Gly Phe His Gln Tyr Gln Ile Thr Leu Val Val Tyr Ala His  
 100 105 110  
 Leu Ala Leu Gln Glu Ser Met Lys Pro Pro Met Tyr Gly His Gly Gln  
 115 120 125  
 Thr Ser Thr His Gln Gln Gly Ser Ser Ile Phe Lys Thr Ala Gln Pro  
 130 135 140  
 Gln Arg Pro Ala His Pro Met Asp Met Ala Lys Tyr Ala Ser Gly Lys  
 145 150 155 160  
 Ile Pro Phe Ala Glu Pro Ser Ser Ala Ala Pro Gln Leu Pro Gly His  
 165 170 175  
 Lys Thr Pro Gly Ala Ser Ser Ser Gln Arg Ala Pro Ala Lys Pro Ser  
 180 185 190  
 Pro Asn Tyr Pro Asn Ser Glu Asn Ile His Leu Pro Glu Ile Ala Thr  
 195 200 205  
 Asp Ser Glu Asp Glu Asp Ser Asp Ala Glu Met Leu Pro Val Pro Lys  
 210 215 220  
 Trp Ala Gln Pro Lys Glu Leu Glu Asn Ile Leu Arg Gln Gln Glu Gly  
 225 230 235 240  
 Met Glu Ala Asp Ser Ile Phe Gly Pro Ile Ala Pro Phe Ser Leu Glu  
 245 250 255  
 Glu Thr Phe Lys Ala Asp Lys Lys Ile Lys Lys Phe Arg Glu Arg Thr  
 260 265 270  
 Ser Ser Ala Asn Trp Ser Gly Ala Asp Gly Leu Thr Gln Glu Glu Ile  
 275 280 285  
 Arg Arg Asp Leu Ala Glu Arg Gln Arg Leu Arg Leu Asn Gly Gly Trp  
 290 295 300  
 Thr Phe Thr Ser  
 305

<210> 41308  
 <211> 511  
 <212> PRT  
 <213> A.fumigatus

<400> 41308

Cys	Phe	Pro	Ala	Val	Ser	Arg	Ser	Ser	Ser	Ser	Ala	Arg	Lys	Asn	Asp
1				5				10						15	
Arg	Leu	Gln	Glu	Arg	Leu	Ala	Arg	Ala	Met	Ala	Lys	Ser	Asn	Ala	Ala
			20					25					30		
Gly	Asn	Gly	Val	Ser	Gln	Ser	Pro	Pro	Gly	Thr	Val	Tyr	Ser	Pro	Ala
			35				40					45			
Ser	Ser	Leu	Pro	Ser	Asn	Gly	Thr	Arg	Ser	Ser	Leu	Asp	Ile	Glu	Ser
	50					55					60				
Ser	Ile	Ile	Ser	Thr	Thr	Gly	Ile	Ala	Glu	Glu	Arg	Pro	Asp	Ser	Pro
65					70					75					80
Leu	Val	Arg	Glu	Ala	His	Ser	Leu	Glu	Leu	Pro	Ala	Asp	Ser	Arg	Thr
				85					90					95	
Ser	His	Asp	Ser	Gly	Ala	Val	Ser	Arg	Asn	Phe	Lys	Glu	Leu	Thr	Ala
			100					105					110		
Pro	His	Ile	Asp	Glu	Ile	Val	Ser	Thr	Glu	Glu	Ser	Ile	Ala	Glu	Pro
		115					120					125			
Arg	Pro	Ser	Gln	Glu	Leu	Gly	Thr	Ala	Glu	Gln	His	Glu	Thr	Gly	Asp
		130				135					140				
Leu	Glu	Ser	Pro	Arg	Val	Ser	Gln	Asp	Leu	Lys	Gln	Ala	Ala	Lys	Asp
145					150					155					160
Thr	Ala	Ser	Asp	Ile	Asn	Ser	Asp	Asn	Pro	Ala	Ile	Ala	Gln	Leu	Gln
				165				170						175	
Ala	Glu	His	Lys	Ala	Ala	Glu	Thr	Arg	Trp	Gln	Glu	Glu	Leu	His	Leu
			180					185					190		
Tyr	Ile	Glu	Arg	Ile	Asp	Ala	Leu	Gln	Ser	Lys	Leu	Lys	Tyr	Leu	Ala
		195					200					205			
Lys	Glu	Ala	Ala	Glu	Ser	Ala	Arg	Lys	Ala	Ala	Ala	Thr	Ala	Glu	Pro
		210				215					220				
Gly	Ser	Val	Glu	Lys	Gln	Leu	Arg	Glu	Lys	Asp	Glu	Lys	Ile	Ala	Leu
225					230					235					240
Leu	Leu	Glu	Glu	Gly	Gln	Lys	Leu	Ser	Lys	Ser	Glu	Met	Asp	His	Arg
				245					250					255	
Thr	Ala	Ile	Lys	Lys	Leu	Arg	Gln	Gln	Leu	Ala	Asp	Asn	Ser	Lys	Ile
			260					265					270		
Gln	Met	Glu	Thr	Lys	Lys	Arg	Thr	Glu	Lys	Leu	Glu	Arg	Asp	Leu	Ala
			275				280						285		
Asn	Leu	Glu	Ala	Arg	Ala	Lys	Arg	Ala	Glu	Ala	Ala	Glu	Lys	Arg	Ala
			290			295					300				
Ser	Glu	Ser	Leu	Ser	Ser	Gln	Thr	Lys	Val	Ala	Arg	Asp	Leu	Glu	Ala
305					310					315					320
Val	Thr	Asn	Glu	Arg	Asn	Ala	Leu	Ser	Gln	Thr	Val	Gln	Glu	Met	Lys
				325					330					335	
Ser	Gln	Leu	Ala	Arg	Ala	Val	Ala	Arg	Ala	Glu	Ala	Ala	Glu	Thr	Lys
			340					345					350		
Ala	Ala	Ser	Asp	Ala	Leu	Glu	Lys	Glu	Lys	Gln	Arg	Thr	Ala	Gln	Leu
			355				360					365			
Glu	Glu	Glu	Leu	Ala	Ser	Val	Lys	Ile	Glu	Arg	Glu	Ile	Ser	Glu	Glu
			370			375					380				
Lys	Leu	Arg	Arg	Glu	Val	Ala	Asp	Leu	Lys	Glu	Gly	Ile	Ala	Gln	Glu
385					390					395					400

## 18241

Lys Glu Lys Ala Arg Leu Leu Glu Ala Glu Leu Lys Gly Glu Gln Ser  
                             405                            410                            415  
 Val Leu Glu Ser Lys Met Glu Ala Leu Arg Ala Lys Ala Glu Glu Ala  
                             420                            425                            430  
 Ser Ser Gly Ser Thr Gly Glu Thr Gln Ala Lys Leu Leu Arg Gln Ile  
                             435                            440                            445  
 Glu Thr Leu Gln Thr Gln Tyr Ala Val Ala Ser Glu Asn Trp Arg Thr  
                             450                            455                            460  
 Leu Glu Gly Ser Leu Leu Ser Arg Leu Ala Asn Leu Glu Lys Glu Arg  
 465                            470                            475                            480  
 Asp Asp Ala Thr Arg Arg Glu Gly Glu Met Arg Arg Lys Met Arg Glu  
                             485                            490                            495  
 Val Val Ser Met Ala Phe Val Val Leu Ser Ile Leu Val Ala Gly  
                             500                            505                            510

&lt;210&gt; 41309

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41309

Thr Gly Ile Met Ser Ser Thr Ser Leu Glu Pro Pro Thr Tyr Leu Ser  
 1                            5                            10                            15  
 Ser Leu Gln Asn Asn Ile Arg Ala Arg Pro Ile Pro Trp Glu Gly Ala  
                             20                            25                            30  
 Val Arg Ala Gly Asn Ile Thr Asp Asp His Leu Lys Lys Ile Lys Ala  
                             35                            40                            45  
 Val Asp Lys Val Arg Lys Glu Gln Arg Arg Gln Thr Val Glu Gly Asp  
 50                            55                            60  
 Leu Gln Gly Tyr Val Gly Leu Leu Ala Gly Asn Ala Asp Ser Lys Ser  
 65                            70                            75                            80  
 Val Leu Asp Ser Ala Ser Lys Arg Thr Asp Ile Val Gln Tyr Ile Leu  
                             85                            90                            95  
 Val Leu Ala Thr Asp Leu Ile Ser Gly Asn Asp Ile Leu Ala Leu Tyr  
                             100                            105                            110  
 Ile Glu Phe Leu Arg  
                             115

&lt;210&gt; 41310

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (19)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41310

Asn Glu Ser Val Ser Leu Tyr Ala Phe Tyr Asp Lys Arg Glu Val Ser  
 1                            5                            10                            15  
 Val Phe Xaa Val Ile Gln Phe Phe Leu His Tyr Val Gln Asn Val Leu  
                             20                            25                            30  
 Gly Val Leu Ala Leu Gly Gly Ser Leu Leu Gly Ser Ser Asp Ile Pro  
                             35                            40                            45  
 Ala Leu Val Asp Thr Ser Val Tyr Leu Val Leu Leu Asn

50

55

60

&lt;210&gt; 41311

&lt;211&gt; 458

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41311

Pro Leu Phe Ser Phe Ala Phe Gly Phe Leu Trp Leu Ile Gly Cys Phe  
 1 5 10 15  
 Pro Pro Glu Tyr Ser Pro Gly Glu Phe Ile Tyr Thr Thr Lys Ser Pro  
 20 25 30  
 Ser Ala Thr Ser Ser Thr Ala Leu Ser Pro Arg Val Asp Pro Phe Ala  
 35 40 45  
 Ser Leu Ser Pro Asp Gln Lys Ser Leu Leu His His Phe Ile Gln Asp  
 50 55 60  
 Ala Ser Gln Ile Thr Ala Cys His Ser Ser Met Gln Lys Asp Ile Cys  
 65 70 75 80  
 Lys Met Leu Val Pro Met Ala Leu Gln Thr Pro Ser Leu Leu Tyr Ala  
 85 90 95  
 Thr Met Ala Leu Ser Ala Ile His Leu Gln Ala Leu Asn Asn Gln Ser  
 100 105 110  
 Glu Asn Val Lys Ser Ala Pro His Ile Ala Arg Leu Met Ala Leu Ser  
 115 120 125  
 Leu Glu His Phe Arg Asn Glu Leu Gln Thr Pro Ser Thr Lys Arg Ser  
 130 135 140  
 Asp Ala Leu Leu Ala Thr Ala Arg Thr Leu Cys Leu Ala Glu Ile His  
 145 150 155 160  
 Ser Gly Ala Ile His Pro Asn Ser Trp Arg Ala His Val Glu Gly Ala  
 165 170 175  
 Lys Ala Leu Met Leu Ala Thr Asn His Lys Gly Asn Glu Ser Pro Gly  
 180 185 190  
 Ser Ser Gln Gly Phe Arg Arg Tyr Leu Asp Arg Trp Tyr Gln Ser Ile  
 195 200 205  
 Val Ser Leu Thr Ala Leu Thr Gly Asn Gly Pro Pro Ile Glu Glu Ser  
 210 215 220  
 Met Gly Gln Ser Ala Ser Glu Ile Ile Arg Gln Gln Asp Ala Pro Asp  
 225 230 235 240  
 Tyr Leu Asp Asp Tyr Trp Gly Phe Thr Val Asn Leu Ser Ala Val Phe  
 245 250 255  
 Arg Ala Ile Gly Ala Ala Ala Trp Arg Ser Gln His Glu Arg Gln Arg  
 260 265 270  
 Thr Gly Leu Ile Ser Asp Asp Thr Asp Met Ala Ser Ala Gln Glu Ala  
 275 280 285  
 Ala Ile Leu Glu Ser Ser Val Arg Thr Leu Met Ala Arg Asp Ala Ser  
 290 295 300  
 Ser Gln Pro Thr Phe Tyr Pro Gly Val Ala Glu Gly Leu Ser Ala Glu  
 305 310 315 320  
 Cys Val Arg Glu Phe Met Leu Cys Asn Glu Ala Phe Gln His Ser Ala  
 325 330 335  
 Leu Ile Gln Ile Asn Arg Arg Leu Arg Arg Leu Pro Ala Ser Ser Pro  
 340 345 350  
 Leu Val Gln His Ser Val Lys Arg Ile Leu Glu Cys Thr Ala Gln Ile  
 355 360 365  
 Gly Pro Ser Thr Gly Leu Ser Pro Trp Thr Met Leu Thr Thr Pro Leu  
 370 375 380

## 18243

Phe Ile Ala Gly Cys Glu Ala Gln Gly Glu Asp Arg Glu Arg Val Arg  
 385 390 395 400  
 Gln Leu Leu Ser Leu Leu His Asp Thr Ile Arg Val Pro Asn Val Leu  
 405 410 415  
 Gln Ser Leu Lys Phe Leu Glu Gln Tyr Trp Ala Asp Gln Leu Asn Glu  
 420 425 430  
 Asp Glu Gly Trp Ser Gln Tyr Leu Gly Arg Leu Leu Leu Ser Trp Asp  
 435 440 445  
 Val Ser Glu Ala Asn Met Ala Gln Ile Glu  
 450 455

&lt;210&gt; 41312

&lt;211&gt; 208

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41312

Tyr Thr Arg Thr Leu His Arg Ile Leu Ala Leu Thr Ile Val Pro Tyr  
 1 5 10 15  
 Asn Ser Asp Val Pro Ser Leu Ser Ser Ala Leu Ile Ala His Pro Ser  
 20 25 30  
 Pro Tyr Lys Pro Phe Leu Pro Leu Leu Arg His Ser Thr Asn Ala Glu  
 35 40 45  
 Asp Pro Ile Pro Leu Leu Thr Ser Thr Phe Leu Thr Arg Leu Val Ser  
 50 55 60  
 His Ser Leu Ala Ala Ser Thr Lys Ala Ala Val Arg Asp Glu Glu Ala  
 65 70 75 80  
 Leu Pro Gln Leu Tyr Thr Tyr Leu Ser Thr Leu Thr Gln Asn Pro Asp  
 85 90 95  
 Ser Gly Leu Gln Asp Ile Gly Val Gln Gly Leu Ser Ala Leu Leu Arg  
 100 105 110  
 Asn Ser Arg Ser Arg Glu Met Phe Trp Asn Gln Arg Lys Glu Thr Ile  
 115 120 125  
 Asp Pro Leu Ile Glu Ile Leu Arg Ala Ala Ala Gly Thr Lys Asp Ser  
 130 135 140  
 Ser Ser Ala Ser Thr Leu Ala Gly Ser Ser Arg Ala Ile Glu Pro Gly  
 145 150 155 160  
 Leu Ser Gly Gly Val Gly Leu Gln Leu Leu Tyr Arg Val Leu Leu Val  
 165 170 175  
 Leu Trp Gln Leu Ser Phe Glu Gly Ser Leu Val Gly Glu Gly Leu Gln  
 180 185 190  
 Ser Tyr Val His His Leu Thr Tyr Gln Ser Met Gly Glu Val Arg Gly  
 195 200 205

&lt;210&gt; 41313

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41313

Ser Thr Phe Arg Asp Tyr Glu Phe Val Gln Leu Tyr Thr Gln Leu Leu  
 1 5 10 15  
 Arg Leu Ser Pro Lys Glu Lys Thr Thr Arg Leu Leu Leu Ala Thr Leu  
 20 25 30  
 Asn Asn Leu Leu Ser Ser Asn Arg Thr Thr Leu Leu Pro Val Ala Val  
 35 40 45

## 18244

Phe Val Arg Leu Pro Ala Leu Leu Ser Asn Leu Ser Gly Arg His Leu  
 50 55 60  
 Thr Asp Pro Asp Leu Leu Glu Asp Leu Asn Ala Leu Ser Glu Met Leu  
 65 70 75 80  
 Asp Glu Tyr Thr Lys Thr Gln Thr Thr Phe Asp Gln Tyr Ala Ala Glu  
 85 90 95  
 Leu Gln Ser Gly His Leu Arg Trp Ser Pro Pro His Arg Asn Pro Thr  
 100 105 110  
 Phe Trp Ala Glu Asn Ala Arg Arg Ile Leu Asp Glu Gly Asn Gly Ala  
 115 120 125  
 Leu Pro Lys Lys Leu Ala Glu Ile Leu Ser Lys Ser Trp Asp Asn Asp  
 130 135 140  
 Lys Gln Val Leu Ala Ile Gly Cys Asn Asp Val Gly Gln Leu Val Lys  
 145 150 155 160  
 Glu Met Pro Glu Arg Arg Ser Gln Leu Glu Lys Leu Gly Leu Lys Thr  
 165 170 175  
 Arg Val Met Glu Leu Met Ala Asp Lys Asp Glu Ser Val Arg Trp Glu  
 180 185 190  
 Ser Leu Arg Ala Val Gly Glu Trp Leu Arg Tyr Thr Phe Glu Gly  
 195 200 205

&lt;210&gt; 41314

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41314

Gln Glu Asn Pro His Arg Arg Ser Leu Arg Gly Tyr Pro Gly Lys Arg  
 1 5 10 15  
 Lys Lys Thr Gln Ile Leu Arg Thr Val Lys Ile Gln Gln Pro Arg Pro  
 20 25 30  
 Lys Ser Met Ser Arg Ser Phe Asn Gly Cys Lys Arg Cys Lys Ala Arg  
 35 40 45  
 Arg Gln Lys Cys Asp Glu Gln Arg Pro Ile Cys Gly Arg Cys Gln Ala  
 50 55 60  
 Ala Gly Val Gln Cys Gln Tyr Ala Met Gln Leu Gln Trp Gly Gly Arg  
 65 70 75 80  
 Thr Phe Ser Arg Ser Arg Leu Gly Ala Cys Met Ser Asn Gly Gly Leu  
 85 90 95  
 Gln Lys Leu Gly Met Cys Ser Asn Asp Pro Cys Phe Pro Leu Leu Leu  
 100 105 110  
 Val Phe Phe Gly  
 115

&lt;210&gt; 41315

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41315

Gln Pro Leu Val Met Glu Ala Gly Leu Phe Pro Gly Leu Val Tyr Tyr  
 1 5 10 15  
 Leu Thr Phe Trp Tyr Arg His Ser Glu Arg Ser Ile Arg Val Ala Leu  
 20 25 30  
 Ile Leu Ala Ser Ala Thr Leu Ala Gly Ala Phe Gly Gly Ala Ile Ala  
 35 40 45

## 18245

Tyr Gly Val Gly His Met Asn Gln Val His Gly Leu Ser Ala Trp Arg  
 50 55 60  
 Trp Leu Phe Ile Ile Glu Gly Ala Pro Ser Cys Ala Ser Ala Val Leu  
 65 70 75 80  
 Val Trp Phe Phe Leu Pro Asp Tyr Pro Glu Ser Ala Arg Trp Leu Thr  
 85 90 95  
 Arg Glu Glu Lys Asp Leu Ala Ala Gln Arg Leu Arg Thr Glu Gly Ser  
 100 105 110  
 Lys Gly Glu Ala Lys Ala Met Thr Trp Glu Asp Ala Lys Ala Val Leu  
 115 120 125  
 Thr Asp Trp Arg Leu Tyr Ala His Tyr Ala Val Arg Cys Leu Phe Leu  
 130 135 140  
 Ala Arg Tyr Gly Pro Thr Thr Asn Ala Ser  
 145 150

&lt;210&gt; 41316

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41316

Gln Ile Tyr Phe Gly Ile Ser Ala Pro Phe Ser Ser Leu Ser Leu Phe  
 1 5 10 15  
 Thr Pro Ala Ile Thr Ser Gly Leu Gly Tyr Thr Asn Ile Arg Ala Gln  
 20 25 30  
 Leu Met Thr Val Pro Pro Trp Ala Val Ala Tyr Val Val Thr Thr Ala  
 35 40 45  
 Ala Ala Trp Ser Ala Asp His Phe Asn Arg Tyr Thr Ser Pro His Leu  
 50 55 60  
 Ser Thr Met Pro His Asn Thr His  
 65 70

&lt;210&gt; 41317

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41317

Leu Ser Leu Leu Ile Val Asn Tyr Lys Asp Ile Asn Glu Gln His Ser  
 1 5 10 15  
 Asp Arg Ser Cys Arg Ile Gln Glu Lys Ala Leu Val Trp Lys Gln Asp  
 20 25 30  
 Leu Arg Ile Val Pro Leu Cys Ala Ala Ile Tyr Leu Leu Cys Tyr Leu  
 35 40 45  
 Asp Arg Ser Asn Ile Gly Lys His Glu Thr Asn Ser  
 50 55 60

&lt;210&gt; 41318

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41318

Ser Ser Ser Ile Ser Asp Arg Ile Ile Val Ala Gly Lys Gly Pro Arg  
 1 5 10 15  
 Tyr Arg Glu Glu Ser Tyr Ser Ile Ser Val Lys Gln Asn His Phe Asn





<210> 41320  
 <211> 204  
 <212> PRT  
 <213> A.fumigatus

<400> 41320  
 Trp Thr Arg Arg Ile Cys Leu Ser Ile Leu Val Met Glu Val Phe Thr  
 1 5 10 15  
 Val Phe Leu Pro Cys Trp Glu Val Met Arg His Gln Val Leu Gln Lys  
 20 25 30  
 Glu Thr Leu Asp Ala Ile Ala Gln Trp Glu Glu Lys Asn Lys Lys Asn  
 35 40 45  
 Ser Ser Ala Ser Lys Ser Leu Ala Glu Thr Ala Thr Leu Val Glu Ser  
 50 55 60  
 Ile Met Thr Gly Gly Lys Ser Thr Asn Gly Ser Val Gln Thr Asn His  
 65 70 75 80  
 Ser Arg Asp Ser Ile Leu Thr Met Gly Ala Leu Glu Tyr Ala Leu Glu  
 85 90 95  
 Arg Asp Pro Ala Pro Leu Gln Arg Phe Ser Ala Leu Ser Asp Phe Ser  
 100 105 110  
 Gly Glu Asn Ile Ala Phe Leu Thr Ser Val Ala Glu Trp Lys Gln Ser  
 115 120 125  
 Phe Pro Lys Ala Ile Arg Glu Asn Thr Ala Pro Arg Asp Ser Asn Thr  
 130 135 140  
 Glu Asp Leu Ile Arg Glu Arg Phe Asn Arg Ala Leu Arg Ile Tyr Ala  
 145 150 155 160  
 Glu Phe Ile Ser Val Thr His Ala Glu Phe Pro Ile Asn Ile Ser Ser  
 165 170 175  
 Gln Asp Leu Lys Lys Leu Gln Asp Val Phe Glu Arg Pro Ala Arg Ile  
 180 185 190  
 Leu Tyr Gly Asp Glu Gly Gln Val Asp Pro Ala Ser  
 195 200

<210> 41321  
 <211> 528  
 <212> PRT  
 <213> A.fumigatus

<400> 41321  
 Pro Thr Ile Glu Leu Ile Met Ser Leu Thr Glu Gly Ser Thr Met Leu  
 1 5 10 15  
 Gly Ser Arg Pro Ser Ser Lys Glu Glu Val Asp Arg Pro Asn Asp Leu  
 20 25 30  
 Met Pro Gly Pro Gly Gly Ala Gly Glu Pro Asp Ala Gly Gly Pro Pro  
 35 40 45  
 Ser Thr Phe Ser Ser Thr Phe Gln Glu Ala Val Phe Ile Phe Val Ile  
 50 55 60  
 Gly Leu Ala Gln Leu Phe Ser Val Gly Gly Leu Gly Asn Ala Ala Phe  
 65 70 75 80  
 Ser Gly Gln Glu Ile Gly Arg Ser Leu Asn Ala Thr Ser Asn Gly Gln  
 85 90 95  
 Met Ser Trp Phe Gln Ser Ala Tyr Ser Leu Cys Gly Gly Val Phe Val  
 100 105 110  
 Leu Val Thr Gly Arg Leu Gly Asp His Phe Gly His Lys Tyr Val Phe  
 115 120 125

## 18248

Leu Phe Gly Trp Met Trp Met Ala Leu Trp Ser Leu Val Ser Gly Phe  
 130 135 140  
 Ala Lys Asp Val Ile Leu Phe Asp Ile Ala Arg Gly Met Thr Gly Ile  
 145 150 155 160  
 Gly Asn Gly Ala Leu Val Pro Asn Ser Phe Ala Leu Leu Ala Arg Ala  
 165 170 175  
 Phe Pro Ala Phe Ser Val Lys Lys Asn Ile Ala Phe Ala Phe Leu Gly  
 180 185 190  
 Phe Cys Ala Pro Ser Gly Tyr Ile Phe Gly Gly Leu Ile Gly Ala Ala  
 195 200 205  
 Phe Ala Glu Lys Val Thr Trp Arg Trp Gly Phe Trp Phe Trp Ala Ile  
 210 215 220  
 Gly Cys Leu Val Ile Gly Ala Val Thr Tyr Phe Ile Val Pro His Ser  
 225 230 235 240  
 Val Gly Ser Pro Ile Pro Gly Leu Ser Ile Lys Gln Phe Asp Tyr Leu  
 245 250 255  
 Gly Ser Val Leu Gly Ile Ser Gly Leu Ile Leu Phe Ser Phe Ala Trp  
 260 265 270  
 Asn Gln Ala Ser Val Val Gly Trp Glu Glu Pro Tyr Val Tyr Ala Leu  
 275 280 285  
 Leu Ile Val Gly Ile Leu Leu Ile Val Ala Phe Ala Phe Ser Gln Ser  
 290 295 300  
 Arg Val Gln Ala Pro Val Leu Pro Asn Pro Leu Trp Thr Arg Lys Gly  
 305 310 315 320  
 Phe Ala Pro Val Val Thr Ala Met Ser Phe Gly Trp Met Ser Phe Gly  
 325 330 335  
 Ile Phe Leu Tyr Tyr Thr Thr Met Tyr Ile Leu Thr Ile His Lys Ala  
 340 345 350  
 Gln Pro Leu Thr Ala Val Ala Gln Met Val Pro Leu Val Ile Gly Gly  
 355 360 365  
 Leu Phe Ala Thr Ala Ser Val Gly Ile Phe Ile Ala Lys Val Pro Ala  
 370 375 380  
 Gln Tyr Ile Phe Gly Val Ser Met Phe Ser Phe Phe Ile Gly Cys Leu  
 385 390 395 400  
 Leu Met Ser Phe Ala Asn Tyr Ser Ser Val Tyr Trp Ala Phe Ile Phe  
 405 410 415  
 Pro Ser Cys Leu Leu Val Val Gly Gly Pro Asp Leu Ser Phe Ala Ser  
 420 425 430  
 Ser Gly Ile Leu Ile Ser Asn Ala Val Leu Pro Glu Glu Gln Gly Ile  
 435 440 445  
 Ala Gly Ser Phe Ile Ser Thr Val Val Gln Tyr Ser Ile Ser Ile Gly  
 450 455 460  
 Leu Gly Ile Ala Ala Thr Val Glu Ala His Val Asn Asn Gly Gly Gln  
 465 470 475 480  
 Asp Ile Val Arg Gly Tyr Arg Gly Ala Leu Trp Leu Gly Ile Gly Phe  
 485 490 495  
 Ala Ala Val Ala Phe Phe His Cys Gly Phe Leu Arg Pro Gly His Ala  
 500 505 510  
 Arg Ser Thr Arg Phe Ser Pro Gln Pro Arg Arg Thr Ala Phe Pro Leu  
 515 520 525

&lt;210&gt; 41322

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 18249

&lt;400&gt; 41322

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Asp Ser Thr Leu Glu Ser Cys Ser Arg Gly Arg Pro Pro Ser Thr Arg
1          5          10          15
Met Val Cys Val Ala Val Phe Ser Ser Ile Val Ala Ser Cys Met Pro
          20          25          30
Val Thr Thr Leu Gln Glu Val Thr Pro Ser Leu Arg Leu Asn Asp Trp
          35          40          45
Thr Cys Leu Ile Met Ala Thr Thr Gly Thr Pro Thr Ile
          50          55          60

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&lt;210&gt; 41323

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41323

```

Lys Gly Gly Pro Leu Phe Cys Arg Phe Phe Ser Ser Gln Val Lys Lys
1          5          10          15
Ile Ile Thr Ala Ser Ile Asp Leu Arg Arg Lys Pro Arg Phe Phe His
          20          25          30
Leu Ala Pro Phe Arg Ser Thr Leu Lys Ile Met Gly Gln Lys Arg Gln
          35          40          45
Arg Asp Ser Lys Asn Leu Thr Leu His Ser Lys Lys Arg Lys Lys Ala
          50          55          60
Glu Asn Ala Thr Ala Thr Asp Ser Asp Asp Gly Trp Asp Gly Ile Val
          65          70          75          80
Gly Ala Asp Glu Leu Asn Trp Lys Glu Val Ala Leu Pro Asp Arg Leu
          85          90          95
Glu Asp Ala Gly Gly Phe Tyr Gly Leu Glu Glu Ile Glu Gly Val Asp
          100          105          110
Ile Val Arg Gly Ser Gly Asn Gly Glu Val Lys Phe Lys Val Arg
          115          120          125

```

&lt;210&gt; 41324

&lt;211&gt; 983

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41324

```

Ser Thr Val Val Lys Ala Met Glu Thr Arg Gln Gly Ala Gly Asn Ile
1          5          10          15
Ala Leu Gly Tyr Leu Phe Ser Gln Asp Phe Asp Leu Lys Lys Arg His
          20          25          30
Val Pro Gln Gly Ile Val Ala Ser Ser Ala Thr Leu Pro Tyr Met Arg
          35          40          45
Ser Ala Leu Glu Gln Leu Ser Leu Leu Tyr Ser Val Ala Ser Pro Val
          50          55          60
Ala Ala His Val Ala Ala Val His Tyr Ala Gly Glu Asn Gly Leu Val
          65          70          75          80
Ser Asp Tyr Ala Ser Ala Leu Ser Leu Ala Glu Glu Leu Gly Leu Gly
          85          90          95
Leu Val Ser Ser Ala Ser Val His Glu Ala Gln His Met Ala Leu Leu
          100          105          110
Thr Thr Leu Leu Ala Ser Val Leu Pro Ser Val His Ile Tyr Asp Gly
          115          120          125
Val Arg Val Gly Arg Glu Thr Thr Arg Val Ile Asp Val Leu Asp Gln

```

## 18250

130	135	140
Ala Gly Val Ala Arg Thr Tyr Glu Ala Ile Arg Lys Thr Leu Asp Glu		
145	150	155
Ser Arg Asn Arg His Leu Asp Thr Gln Gly Lys Val Leu Glu Leu Phe		160
	165	170
Ala Ser Leu Asn Gly Glu Leu Gly Thr Asp Tyr Gly Leu Phe Glu Tyr		175
	180	185
His Gly His Ala Glu Pro Val Ser Val Leu Val Ala Phe Gly Thr Val		190
	195	200
Glu Ala Ser Leu Thr Ala Gln Val Ala Arg Ser Leu Ala Asn Asp Gly		205
	210	215
Val Arg Val Gly Val Val Asn Val Arg Val Tyr Arg Pro Phe Val Glu		220
225	230	235
Glu Glu Phe Leu Arg Val Leu Pro Gln Ser Thr Lys Thr Val Gly Val		240
	245	250
Leu Gly Gln Val Thr Asp Glu Gln Asp Val Gln Glu Gln Gly Val Arg		255
	260	265
Ser Ala Leu Tyr Glu Asp Val Leu Ala Ala Leu Thr Phe Ala Ser Gly		270
	275	280
Arg Glu His Ala Pro Thr Cys Val Asp Ile Lys Tyr Pro Arg Ser Gln		285
	290	295
Arg Trp Asp Leu Ile Asn Thr Ala Ala Ala Phe Gln Leu Ile Phe Glu		300
305	310	315
Lys Pro Ile Ile Pro Ala Ser Gly Glu Ser Ala Pro Leu Gln Leu Ile		320
	325	330
Asp Pro Ala Thr Val Gln Glu Tyr Thr Phe Trp Asp Val Asp Ser Ser		335
	340	345
Val Cys Glu Ser Ala Ala Ala Val Leu Ser Glu Ala Leu Ala Ala Asp		350
	355	360
Ser Ala Ser Asn Val Thr Thr Ser Lys Ser Tyr Asp Asn Leu Ile Gln		365
	370	375
Gly Gly Ala Leu Arg Ile Asp Ile Arg Lys Ser Ser Lys Ile Leu Asp		380
385	390	395
Thr Pro Tyr Ala Ile Thr Ala Ala Asp Thr Tyr Val Gly Asp Ile		400
	405	410
Lys Leu Leu Gly Asp Ile Asp Val Ala Ala Ser Ile Lys Asn Lys Gly		415
	420	425
Lys Val Ile Ile Asn Ala Pro Gly Val Lys Asp Asp Glu Leu Glu Lys		430
	435	440
Lys Leu Pro Leu Gly Phe Arg Gln Ala Val Ala Gln Arg Glu Ile Ser		445
	450	455
Leu Tyr Ile Val Asp Pro Ser Ala Ala Gly Ala Ser Ala Pro Glu Ser		460
465	470	475
Ser Val Leu Glu Ser Ala Phe Leu Arg Val Ala Leu Pro Ser Gln Glu		480
	485	490
Gly Val Gly Leu Lys Lys Leu Ser Ser Ile Thr Gly Asp Ser Glu Thr		495
	500	505
Leu Glu Thr Val Ala Lys Asp Leu Asp Lys Leu Leu Arg Gln Val Glu		510
	515	520
Ile Pro Glu Ser Trp Arg Ile Ser Glu Glu Gly Thr Glu Val Thr Gln		525
	530	535
Leu Ser Lys Asp Ile Ser Ile Asn Ser Phe Val Pro Phe Asp Lys Asp		540
545	550	555
Glu Ala Glu Pro Ala Pro Leu Leu Asn Asp Trp Gln Ala Ala Ala Lys		560
	565	570
Gly Leu Ala Phe Lys Glu Ala Tyr Gly Thr Lys Lys Ala Leu Arg Pro		575

580 585 590  
 Glu Thr Ala Thr Lys Thr Phe Thr Val His Val Lys Glu Asn Arg Arg  
 595 600 605  
 Leu Thr Pro Val Thr Tyr Asp Arg Asn Ile Phe His Ile Glu Phe Asp  
 610 615 620  
 Leu Gly Asp Ser Gly Leu Lys Tyr Asp Ile Gly Glu Ala Leu Gly Val  
 625 630 635 640  
 His Ala Glu Asn Asp Pro Gln Glu Val Ser Glu Phe Ile Thr Phe Tyr  
 645 650 655  
 Gly Leu Asn Pro Asp Asp Val Val Gly Val Pro Ser Arg Glu Asp Pro  
 660 665 670  
 Ala Val Leu Glu Asn Arg Thr Val Tyr Gln Ala Leu Val Gln Asn Val  
 675 680 685  
 Asp Ile Phe Gly Arg Pro Pro Lys Arg Phe Tyr Glu Ala Leu Ala Glu  
 690 695 700  
 Phe Ala Thr Asp Glu Lys Glu Lys Lys Asp Leu Leu Thr Leu Gly Gly  
 705 710 715 720  
 Pro Glu Gly Ala Val Glu Phe Lys Arg Arg Ala Glu Val Asp Thr Ile  
 725 730 735  
 Thr Phe Ala Asp Val Leu Leu Glu Phe Pro Ser Ala His Pro Asp Phe  
 740 745 750  
 Gln Asp Leu Ile Arg Ile Val Gly Pro Leu Lys Arg Arg Glu Tyr Ser  
 755 760 765  
 Ile Ala Ser Cys Gln Lys Val Thr Pro Asn Ser Val Ala Leu Met Ile  
 770 775 780  
 Val Ala Val Asn Trp Val Asp Pro Arg Gly Arg Asp Arg Phe Gly Leu  
 785 790 795 800  
 Ala Thr Arg Tyr Leu Ser Arg Leu Gln Pro Gly Thr Pro Val Thr Val  
 805 810 815  
 Ser Val Lys Ser Ser Val Met Lys Leu Pro Pro Lys Ser Thr Gln Pro  
 820 825 830  
 Leu Ile Met Ala Gly Leu Gly Thr Gly Leu Ala Pro Phe Arg Ala Phe  
 835 840 845  
 Val Gln His Arg Ala Leu Glu Lys Ala Gln Gly Lys Glu Ile Gly Ala  
 850 855 860  
 Val Leu Leu Tyr Met Gly Ser Arg His Gln Arg Glu Glu Tyr Cys Tyr  
 865 870 875 880  
 Gly Glu Glu Trp Glu Ala Tyr Gln Glu Ala Gly Val Ile Thr Leu Leu  
 885 890 895  
 Gly Arg Ala Phe Ser Arg Asp Gln Pro Glu Lys Ile Tyr Ile Gln Asp  
 900 905 910  
 Arg Met Arg Glu Thr Leu Pro Glu Ile Ile Gln Ala Tyr Ile Arg Glu  
 915 920 925  
 Glu Gly Ala Phe Tyr Leu Cys Gly Pro Thr Trp Pro Val Pro Asp Val  
 930 935 940  
 Thr Ala Val Leu Glu Glu Ala Ile Ala Thr Glu Ala Lys Asn Thr Gly  
 945 950 955 960  
 Lys Lys Val Asp Thr Arg Lys Glu Ile Glu Lys Leu Lys Asp Glu Glu  
 965 970 975  
 Arg Tyr Val Leu Glu Val Tyr  
 980

&lt;210&gt; 41325

&lt;211&gt; 743

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41325

Cys Glu Val Arg Ala Met Gly Arg Leu Asn Leu Arg Tyr Ala Glu Ala  
 1 5 10 15  
 Leu Ala Asp Trp Val Lys Asn Asp Pro Leu Thr Gln Leu Pro Gln Ala  
 20 25 30  
 Val Ala Gly Lys Pro Lys Lys Ser Ile Leu Lys Lys Lys Ala Leu Glu  
 35 40 45  
 Asp Glu Asn Pro Glu Tyr Glu Glu Glu Trp Ser Gly Phe Ser Asp Asp  
 50 55 60  
 Asp Ala Asp Arg Pro Glu Asn Ala Ser Ser Thr Val Val Glu Lys Pro  
 65 70 75 80  
 Glu Lys Ser Asp Arg Lys Ala Asp Lys Lys Ser Glu Lys Asn Ala Asp  
 85 90 95  
 Lys Lys Glu Ala Lys Asp Ala Lys Lys Lys Glu Ala Lys Ala Lys  
 100 105 110  
 Lys Glu Gln Lys Glu Lys Gly Ser Ala Ile Gln Arg Asp Met Ser Ile  
 115 120 125  
 Asn Ala Gly Leu Ser Phe Ala Ala Leu Gln Asp Thr Glu Glu Asp Asp  
 130 135 140  
 Gly Ala Asp Val Ser Ala Trp Asp Ser Leu Gly Leu Ser Pro Glu Ile  
 145 150 155 160  
 Leu Thr Gly Leu Ser Lys Met Lys Phe Gly Ser Pro Thr Ser Val Gln  
 165 170 175  
 Glu Ala Cys Ile Pro Gln Ile Leu Glu Gly His Asp Val Ile Gly Lys  
 180 185 190  
 Ala Ser Thr Gly Ser Gly Lys Thr Leu Ala Phe Gly Ile Pro Ile Leu  
 195 200 205  
 Glu His Tyr Leu Glu Lys Lys Arg Asp Asp Ile Ser Ala Gln Lys Glu  
 210 215 220  
 Gln Met Ser Glu Lys Asp Ser Thr Pro Ile Ala Leu Ile Leu Ser Pro  
 225 230 235 240  
 Thr Arg Glu Leu Ala His Gln Leu Ser Lys His Ile Gly Glu Leu Ile  
 245 250 255  
 Ala Gln Ala Pro Gly Val Asn Ala Arg Ile Ala Leu Leu Thr Gly Gly  
 260 265 270  
 Leu Ser Val Gln Lys Gln Gln Arg Leu Leu Ser Gly Ala Asp Ile Val  
 275 280 285  
 Ile Gly Thr Pro Gly Arg Val Trp Glu Ile Leu Ser Thr Gly Gln Gly  
 290 295 300  
 Leu Ile Arg Lys Met Gln Gln Ile Lys Phe Leu Val Val Asp Glu Ala  
 305 310 315 320  
 Asp Arg Leu Leu Ser Glu Gly His Phe Lys Glu Val Glu Gln Ile Leu  
 325 330 335  
 Asn Ser Leu Asp Arg Val Glu Asp Gly Glu Val Pro Asp Gly Glu Asp  
 340 345 350  
 Gln Ala Ser Glu Glu Glu Ser Asp Pro Ser Ser Glu Arg Gln Thr Leu  
 355 360 365  
 Val Phe Ser Ala Thr Phe His Arg Asp Leu Gln Gln Lys Leu Ala Gly  
 370 375 380  
 Lys Arg Lys Trp Thr Arg Gly Asp Ile Met Asp Lys Lys Glu Ser Met  
 385 390 395 400  
 Asp Tyr Leu Leu Gln Lys Leu Asn Phe Arg Glu Glu Lys Pro Lys Phe  
 405 410 415  
 Ile Asp Val Asn Pro Ile Ser Gln Met Ala Asp Asn Leu Lys Glu Gly  
 420 425 430

Ile Val Glu Cys Gly Ala Met Glu Lys Val Ser Phe His Met Gly Ser  
 435 440 445  
 Val Ile Ser Ser Leu Arg Leu Met Thr Phe Gln Asp Leu Phe Leu Tyr  
 450 455 460  
 Thr Leu Leu Leu Tyr His Pro Lys His Arg Thr Leu Val Phe Thr Asn  
 465 470 475 480  
 Ser Ile Ser Ala Val Arg Arg Leu Thr Lys Leu Leu Gln Thr Leu Gln  
 485 490 495  
 Leu Pro Ala Leu Ala Leu His Ser Ser Met Ala Gln Lys Ala Arg Leu  
 500 505 510  
 Arg Ser Val Glu Arg Phe Ser Ser Pro Ser Ser Asp Pro Ser Thr Ile  
 515 520 525  
 Leu Ile Ala Thr Asp Val Ala Ala Arg Gly Leu Asp Ile Lys Gly Ile  
 530 535 540  
 Asp Leu Val Ile His Tyr His Ala Pro Arg Thr Ala Asp Thr Tyr Val  
 545 550 555 560  
 His Arg Ser Gly Arg Thr Ala Arg Ala Gly Ala Ser Gly Lys Ser Val  
 565 570 575  
 Ile Ile Cys Gly Pro Asp Glu Met Val Gly Val Val Arg Leu Ala Ala  
 580 585 590  
 Lys Val His Ala Asn Met Ala Asn Gly Lys Lys Leu Pro Leu Glu Ser  
 595 600 605  
 Leu Glu Leu Asp Arg Arg Val Val Ser Arg Val Lys Pro Arg Val Ser  
 610 615 620  
 Leu Ala Ser Arg Ile Thr Asp Ala Asn Ile Ala Lys Glu Lys Ile Ser  
 625 630 635 640  
 Ala Glu Asp Asn Trp Leu Arg Asn Ala Ala Glu Asp Leu Gly Val Glu  
 645 650 655  
 Tyr Asp Ser Glu Glu Phe Asp Glu Ser Asn Gly Lys Gly Arg Gly Arg  
 660 665 670  
 Gly Arg Gly Arg His Gln Lys Gln Lys Glu Val Gly Ser Val Ser Lys  
 675 680 685  
 Ala Glu Leu Ala Gly Leu Arg Ala Glu Leu Lys Gln Leu Leu Ser Gln  
 690 695 700  
 Arg Val Asn Val Gly Val Ser Glu Arg Tyr Leu Thr Ala Gly Arg Val  
 705 710 715 720  
 Asp Ile Asp Ala Leu Leu Arg Gly Asp Ser Asn Thr Ser Phe Leu Gly  
 725 730 735  
 Pro Val Asp Pro Leu Asn Phe  
 740

&lt;210&gt; 41326

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41326

Lys Met Gly Lys Ser Ser Lys Asp Lys Arg Asp Ala Tyr Tyr Arg Leu  
 1 5 10 15  
 Ala Lys Glu Gln Asn Trp Arg Ala Arg Ser Ala Phe Lys Leu Ile Gln  
 20 25 30  
 Ile Asp Glu Gln Phe Asp Leu Phe Glu His Glu Asn Pro Asp Lys Val  
 35 40 45  
 Thr Arg Val Val Asp Leu Cys Ala Ala Pro Gly Ser Trp Ser Gln Val  
 50 55 60  
 Leu Ser Arg Val Leu Ile Lys Gly Glu Ser Phe Gly Arg Arg Ala Trp

## 18254

```

65          70          75          80
Ile Glu Lys Lys Arg Lys Glu Ser Glu Ala Leu Lys Arg Ile Asp His
      85          90          95
Gly Ser Glu Ser Glu Ser Pro Ala Glu Glu Glu Arg Lys Asp Asp Ile
      100          105          110
Ala Gln Leu Lys Pro Arg Arg Asn Val Lys Ile Val Ser Ile Asp Leu
      115          120          125
Gln Pro Met Ala Pro Leu Glu Gly Ile Thr Thr Leu Gln Ala Asp Ile
      130          135          140
Thr His Pro Ser Thr Ile Pro Leu Leu Leu Arg Ala Leu Asp Pro Glu
145          150          155          160
Ala Tyr Asp Ser Ala Ser Ser Pro Thr Pro Ser Ala Ile Gln Gln Pro
      165          170          175
His Pro Val Asp Leu Val Ile Ser Asp Gly Ala Pro Asp Val Thr Gly
      180          185          190
Leu His Asp Leu Asp Ile Tyr Val Gln Ser Gln Leu Leu Tyr Ser Ala
      195          200          205
Leu Asn Leu Ala Val Gly Val Leu Arg Pro Gly Gly Lys Phe Val Ala
      210          215          220
Lys Ile Phe Arg Gly Arg Asp Val Asp Leu Ile Tyr Ala Gln Leu Arg
225          230          235          240
Thr Val Phe Glu Lys Val Ser Val Ala Lys Pro Arg Ser Ser Arg Ala
      245          250          255
Ser Ser Leu Glu Ala Phe Val Val Cys Glu Gly Phe Ile Pro Pro Ala
      260          265          270
Ile His Asp Gly Ser Val Gly Met Asp Ala Leu Lys Asn Pro Leu Phe
      275          280          285
Gly Gly Ala Thr Ile Pro Pro Pro Val Ser Pro Asp Gly Asn Ile Gly
      290          295          300
Ile Glu Val Pro Asp Glu Asp Thr Ala Ser Pro Arg Glu Pro Leu Thr
305          310          315          320
Val Ser Glu Ala Ala Thr Val Ser Ala Ser Asp Ile Asn Gln Gln Thr
      325          330          335
Gln Ile Arg Met Leu His Ser Gln Ser Ser Ile Pro Ser Leu Ala Asn
      340          345          350
Lys Pro Gln Arg Phe Ala Val Glu Asn Arg Trp Ile Pro Pro Phe Ile
      355          360          365
Ala Cys Gly Asp Leu Ser Ser Trp Asp Ser Asp Ala Ser Tyr Ser Leu
      370          375          380
Pro Pro Asp Tyr Val Asn Leu Asp Pro Val Gln Pro Pro Thr Ala Pro
385          390          395          400
Pro Tyr Arg Arg Ala Leu Glu Leu Arg Lys Glu Lys Gly Gly Ala Tyr
      405          410          415
Gly Lys Thr Lys Leu Gly Ala Val Gly Arg Ala
      420          425

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&lt;210&gt; 41327

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41327

```

Asn Ile Ser Arg Ala Ser Arg Pro Ser Ser Pro Pro Leu Leu Gly Ser
1          5          10          15
Ser Ile Ser Asp Ile Lys Thr Thr Ser Gly Asn Arg Thr Arg Ala Arg
      20          25          30

```



## 18255

Pro Thr Pro Ala Ser Pro Ala Ile Ser Pro Ala Cys Ser Thr Gly Gly  
 35 40 45  
 Ala His Arg His Ala Ser Pro Val Glu Ile Ser Arg Ala Ile Phe Cys  
 50 55 60  
 Glu Glu Asp Arg Asn Pro Arg Ala Gln Met Leu Pro Phe Ile Asn Val  
 65 70 75 80  
 Ile Tyr Pro Lys Leu Gln Asp Cys Tyr Ala Asp Met Pro Glu Cys Leu  
 85 90 95  
 Leu Val Glu Asn Val Thr Val Pro His Ala Phe Ser Phe Gln Tyr Ala  
 100 105 110  
 Val Pro Pro Pro Gln Val Ser Pro Asn Leu Ile Gln Ala Gln Pro Ser  
 115 120 125  
 Leu Thr His Met Cys Ser Phe Phe Tyr His Thr Thr Val Met Gln Ile  
 130 135 140  
 Phe Gly Leu Leu Lys Ala Asn His Glu His Phe Asp Pro Ala Ser Ile  
 145 150 155 160  
 Gln Arg Ala Arg Asn Ile Cys Ile Glu Ser Ala Leu Arg Ile Ala Gly  
 165 170 175  
 Leu Ile Gly Ile His Arg Asp Lys Trp Gly Ile Gly Arg Met Ala Pro  
 180 185 190  
 Ser Thr Ile Gln Trp Leu Ser Ile Gly Met Phe Thr Leu Leu Asp Ala  
 195 200 205  
 Leu Asp Ser Pro Asp Thr Arg Asn Arg Ala Ala Phe Ile Glu Met Cys  
 210 215 220  
 Ile Val Ala Arg Ala Phe Ala Arg Arg Phe Pro Leu Ala Lys Gly Ile  
 225 230 235 240  
 Leu Arg Met Ile Gln Leu Ser Ala Asn Gln Met Gln Val Val Leu Pro  
 245 250 255  
 Ala Glu Thr Asp Ala Leu Phe Thr Asp Phe Glu Thr Arg Ser Trp Glu  
 260 265 270  
 Gly Lys Asp Arg His Thr Phe Ser Thr Phe Tyr Pro Asn Phe Ala Arg  
 275 280 285  
 Val Val Arg Gln Gly Ala Ala Arg Glu Glu Asp Val Ser Met Asp Arg  
 290 295 300  
 Phe Leu Glu Lys Trp Asp Ser Leu Ala Ile Ser Asp Pro Lys Glu Glu  
 305 310 315 320  
 Thr Pro Pro Asp Glu Gly Gly Ser  
 325

&lt;210&gt; 41328

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41328

Ser Val Gly Tyr Arg His Gln Ser Leu Tyr Ser Arg Ser Phe Ile Pro  
 1 5 10 15  
 Leu Leu Asn Asn Ile Asn Asn Thr Asp Asn Ile Arg Ser Ile Lys Met  
 20 25 30  
 Ser Asn Pro Leu Gln Ser His Pro His Ile Leu Ala Val Leu Asp  
 35 40 45  
 Arg Leu His Ala Glu Ser Ala Ala Gln Glu Ser Ser Ile Pro Arg Thr  
 50 55 60  
 Val Tyr Thr Thr Ser Ser Thr Asp Ser Phe His Thr Phe Met Arg Asn  
 65 70 75 80  
 Lys Phe Ile Ala Leu Glu Gln Asp Lys Cys His Phe Ile Tyr Gln Leu

[illegible]

```
<210> 41329
<211> 65
<212> PRT
<213> A.fumigatus
```

```
<210> 41330
<211> 94
<212> PRT
<213> A.fumigatus
```

```
<210> 41331
<211> 103
<212> PRT
<213> A.fumigatus
```

&lt;400&gt; 41331

```

Arg Gln Thr Ser Arg Ile Gly Leu Thr Cys Phe Cys Ser Thr Val Ser
1          5          10          15
Leu Phe Pro Phe Leu Pro Arg Arg Pro Val Ala Val Ala Val Ala Asp
          20          25          30
Asn Val Val Trp Thr Pro Met Ala Leu Pro Thr Leu Lys Leu Val Gln
          35          40          45
Pro Lys Leu Arg Tyr Gly Ala Val Val Val Ser Asp Asn Thr Leu Ser
          50          55          60
Ala Ala Glu Gly Tyr Lys Asp Leu Leu Glu Tyr Leu Arg Ala Pro Gly
65          70          75          80
Ser Gly Phe Ser Thr Leu Thr Leu Pro Tyr Lys Gly Gly Leu Glu Met
          85          90          95
Ser Val Tyr Leu Pro Gln Gln
          100

```

&lt;210&gt; 41332

&lt;211&gt; 241

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41332

```

Lys Ser Val Ala Phe Pro Ser Arg Arg Leu Leu Ile Pro Ser Trp Arg
1          5          10          15
His Thr Ser Leu Pro Tyr Gln Cys Arg Gly Asp Pro Pro Cys Gln His
          20          25          30
Cys Val Ser His Gly Val Lys Cys Glu Val Asp Ala Met Ser Asp Met
          35          40          45
Arg Arg Lys Asn Ala Met Asp Arg Lys Val Ala Lys Leu Glu Lys Val
          50          55          60
Ala Asp Thr Leu Thr Arg Leu Ile Asn Ala Leu Arg Asp Arg Glu Ser
65          70          75          80
Arg Arg Val Ser Gln Leu Leu Asn Leu Ile Arg Ser Asn Ala Ser Phe
          85          90          95
Asp Glu Leu Arg Leu Phe Leu Glu Gln Gln Phe Ser His Tyr Glu Leu
          100          105          110
Glu Ser Thr Pro Glu Leu Arg Asp Ile Gln Ser Gln Leu Ser Gln Thr
          115          120          125
Thr Asp Leu Ala Pro Leu Gly Trp Arg Tyr Leu Arg Val Asp Arg Leu
          130          135          140
Ala Asp Asp Pro Val Tyr Lys Val Pro Ala Lys Pro Trp Thr Ala Val
145          150          155          160
Thr Asp Asp Ser Glu Leu Val Ser His Leu Val Ser Leu Trp Leu Thr
          165          170          175
Trp Thr Tyr Pro Trp Phe Asn Trp Leu Asp Ala Asp Cys Leu Ile Lys
          180          185          190
His Met Gln Glu Gly Lys Leu Asn Ser Arg Phe Cys Ser Pro Phe Leu
          195          200          205
Val Asn Ala Ile Leu Ala Glu Ala Cys Val Cys Val Leu Ala Arg Met
210          215          220
Met Ser Val Phe Leu Phe Tyr Phe Leu Cys Phe Ser Leu Leu Ile Arg
225          230          235          240
Val

```

<210> 41333  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 41333  
 Tyr Tyr Ser Asp Tyr Glu Glu Val Phe Thr Val Pro Gly Asp Leu Leu  
 1 5 10 15  
 Thr Arg Gly Asp Gln Phe Phe Asp Glu Ala Arg Arg Leu Phe Glu Ala  
 20 25 30  
 Gly Glu Asp Glu Gly Asp Ser Pro Ser Leu Pro Thr Ile Gln Gly Leu  
 35 40 45  
 Met Ile Leu Phe Val Arg Ser Val Ala Ser Ser Asp Ala Lys Gln Trp  
 50 55 60  
 Leu Ser Leu Thr Trp Leu Ser Glu His Arg  
 65 70

<210> 41334  
 <211> 167  
 <212> PRT  
 <213> A.fumigatus

<400> 41334  
 Glu Arg His Arg Ser Ala Cys Leu Gln Phe Pro Val Arg Gly Pro Pro  
 1 5 10 15  
 Pro Pro Ser Val Pro Lys Ser Asp Pro Ser Ser Thr Leu Thr Asp Pro  
 20 25 30  
 Tyr Val Gln Leu Leu Leu Pro His Asn Arg Asn Ala Asn Leu Arg Pro  
 35 40 45  
 Pro Glu Ser Gln Pro Arg Thr Leu Arg Ser Arg Gln His Pro Ala Arg  
 50 55 60  
 Pro Gln His Leu His Arg Glu Arg Pro Ser His Arg Arg Ala His Arg  
 65 70 75 80  
 His Pro Pro Arg Gln Met Gly His Arg Pro His Gly Pro Leu His His  
 85 90 95  
 Pro Val Ala Gln His Arg His Val Tyr Pro Pro Arg Cys Ala Gly Leu  
 100 105 110  
 Ala Arg His Ser Gln Pro Arg Arg Leu His Arg Asp Val His Arg Gly  
 115 120 125  
 Ala Gly Val Cys Ala Pro Leu Pro Ala Gly Gln Gly His Pro Ala His  
 130 135 140  
 Asp Pro Thr Leu Gly Glu Pro Asp Ala Gly Arg Leu Ala Cys Arg Asp  
 145 150 155 160  
 Gly Cys Pro Val Tyr Arg Leu  
 165

<210> 41335  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<400> 41335  
 Thr Thr Ala Ser Arg Gln Ile Thr Ser Gly Ser Leu Lys Arg Trp Gln  
 1 5 10 15  
 Tyr Ile Tyr Ile Phe Ala Gly Val Leu Thr Phe Leu Phe Gly Ile Trp  
 20 25 30

## 18259

Cys Gly Val Met Pro Asn Ser Pro Val Ser Ala Trp Phe Leu Thr Pro  
 35 40 45  
 Glu Glu Arg Val Val Ala Val Glu Arg Leu Arg Met Gly His Thr Gly  
 50 55 60  
 Val Arg Cys His Gln His Gln Ala Val Ala Asp Gln Arg Arg Cys Ala  
 65 70 75 80

<210> 41336

<211> 109

<212> PRT

<213> A.fumigatus

<400> 41336

Thr Arg Asp Thr Ser Arg Ser Thr Lys Ala Arg Pro Asp Ala Thr Pro  
 1 5 10 15  
 Ala Arg Cys Arg Pro Ser Pro Pro Ser Lys Ala Ser Arg Gly Pro Cys  
 20 25 30  
 Ile Pro Gly Arg Arg Pro Ala Asp Arg Leu Gly Gly Thr Ala Ile Pro  
 35 40 45  
 Gly Ala Gln Gly Pro Leu Ser Ala Arg Ala Gly Phe Gly Tyr Arg Val  
 50 55 60  
 Ile Gln Ala Ser Ile Pro Thr Arg Ser Gly Lys Thr Ala Ala Pro Gly  
 65 70 75 80  
 Thr Ala Ala Val Arg Arg Thr Arg Arg Tyr Phe Gly Ser Asp Ser Thr  
 85 90 95  
 Ala Ala Lys Arg Val Cys Ser Leu Cys Arg Ala Glu Arg  
 100 105

<210> 41337

<211> 353

<212> PRT

<213> A.fumigatus

<400> 41337

Phe Pro Cys Met Val Ser Arg Gly Thr His Pro Leu Gln His Gly Cys  
 1 5 10 15  
 Gly Val Arg Ala Ala Glu Pro Val Pro Val Gln Gly Ala Ala Gly Arg  
 20 25 30  
 Val Leu Val Cys Phe Pro Ala Gly Phe Val Thr Arg Gly Ser Leu Gly  
 35 40 45  
 Arg Asp Phe Glu Glu Asn Leu Ala Leu Leu Leu Met Asp Val Val Gln  
 50 55 60  
 Arg Val Thr Ala Arg Thr Ala Trp Lys Ala Arg Arg Arg Leu Val Ala  
 65 70 75 80  
 Ala Phe Leu Asp Tyr Tyr Arg Ala Gly Gly His Leu Asp Ser Ser Gln  
 85 90 95  
 Leu Thr Tyr Ala Arg Trp Glu Thr Gln Lys Gly Gly Ala Thr Leu  
 100 105 110  
 Glu Asp Ile Ala Arg Leu Glu Thr Ala Ala Ala Leu Gly Thr Leu Ser  
 115 120 125  
 Asn Thr Val Pro Ala Met Phe Trp Phe Met Phe Asn Ile Phe Ser Arg  
 130 135 140  
 Pro Glu Leu Leu Asn Glu Val Arg Asp Glu Val Ala Arg Arg Ala Val  
 145 150 155 160  
 Gln Val Asp Ala Gln Gly Val His Thr Val Asp Leu Ala Glu Ile Lys  
 165 170 175

## 18260

Glu Lys Cys Pro Leu Leu Met Ser Ala Phe Gln Glu Thr Leu Arg Leu  
 180 185 190  
 Arg Ser Asn Thr Val Pro Ile Arg Val Ile Phe Glu Asp Met Ile Leu  
 195 200 205  
 Asp Asp Arg Tyr Leu Leu Lys Lys Gly Gly Ile Leu Gln Met Pro Ala  
 210 215 220  
 His Ala Ile Asn Arg Asp Arg Thr Ile Trp Gly Ser Asp Ala Asp Asp  
 225 230 235 240  
 Tyr Asp Pro Arg Arg Phe Val Lys Ile Asn Gln Ser Asp Ser Arg Lys  
 245 250 255  
 Lys Ala Asn Gly Phe Leu Ser Phe Gly Thr Ser Pro His Val Cys Pro  
 260 265 270  
 Gly Arg His Phe Ala Thr Gly Glu Ile Leu Ala Leu Ile Ala Met Leu  
 275 280 285  
 Val Leu Arg Tyr Asp Ile Val Pro Ala Gly Gly Val Trp Lys Glu Pro  
 290 295 300  
 Arg Thr Ser Lys Ser Ala Ile Thr Ser Ser Thr Gly Pro Pro Ala Glu  
 305 310 315 320  
 Glu Phe Lys Val Leu Ala Thr Ala Arg Lys Glu Tyr Glu Gly Val Glu  
 325 330 335  
 Trp Ala Phe Arg Val Thr Glu Gly Lys Gly Lys Tyr Gly Leu Ile Ile  
 340 345 350  
 Gly

&lt;210&gt; 41338

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41338

Gln Lys Met Ile Gln Val Pro Ser Ala Thr Gly Asp Pro Glu Arg Leu  
 1 5 10 15  
 Arg Ala Asp Gly Glu Leu Phe Asp Lys Asp Ala Ala Leu Ala Val Val  
 20 25 30  
 Ser Asp Val Ala Met Glu Ile Asp Pro Glu Val Glu Lys Arg Val Leu  
 35 40 45  
 Arg Lys Ile Asp Leu Phe Phe Met Pro Ala Met Leu Val Gly Tyr Gly  
 50 55 60  
 Leu Val Tyr Trp Asp Lys Ala Ile Leu Gly Ser Ala Thr Leu Phe Gly  
 65 70 75 80  
 Met Thr Asn Asp Leu His Leu Val Val Ile Asp Ser Ser Thr Thr Pro  
 85 90 95  
 Pro Ser Lys Asp Thr Ser Arg Leu Ser Trp Ala Thr Ser Ile Phe Tyr  
 100 105 110  
 Phe Gly Met Leu Ala Gly Leu Tyr Pro Met Thr Phe Phe Leu Gln Arg  
 115 120 125  
 Phe Lys Ile Gln His Val Phe Gly Pro Ile Val Met Leu Trp Ala Val  
 130 135 140  
 Thr Cys Ala Ala Thr Ala Gly Val Thr Thr Trp Gln Gly Leu Phe Ala  
 145 150 155 160  
 Gln Arg Phe Phe Leu Gly Thr Phe Ile Leu  
 165 170

&lt;210&gt; 41339

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41339

Val	Leu	Ser	Thr	Asp	Pro	Trp	Asn	Cys	Lys	Pro	Asp	Asn	Pro	Lys	Leu
1				5					10					15	
Pro	Lys	Leu	Ile	Gly	Ala	Ile	Ser	Gly	Phe	Gly	Pro	Leu	Ile	Val	Ser
		20						25					30		
Thr	Phe	Arg	Tyr	His	Thr	Leu	Asp	Ser	Ile	Leu	Phe	Gln	Phe	Pro	Val
	35						40					45			
Gly	Gly	Ile	Cys	Val	Ile	Phe	Ile	Pro	Leu	Cys	Gly	Tyr	Val	Ala	Ser
	50					55					60				
Arg	Val	Pro	His	Thr	Arg	Ile	Pro	Met	Leu	Ile	Ala	Cys	Cys	Leu	Pro
65					70					75					80
Val	Ile	Ala	Gly	Cys	Ala	Leu	Ile	Trp	Lys	Ser	Pro	Trp	Gly	Tyr	Gln
			85						90					95	
Pro	Ala	Ala	Pro	Val	Val	Gly	Tyr	Ala	Leu	Thr	Gly	Phe	Phe	Gly	Pro
			100					105					110		
Val	Val	Ser	Leu	Ile	Ile	Thr	Leu	Gly	Ala	Ser	Asn	Val	Ala	Gly	Ala
		115					120					125			
Thr	Lys	Lys	Thr	Val	Met	Ala	Ala	Thr	Val	Phe	Val	Ala	Tyr	Thr	Val
	130					135						140			
Gly	Asn	Ile	Ile	Gly	Pro	Gln	Leu	Val	Lys	Thr	Gln	Thr	Val	Arg	Gln
145					150					155					160
His	Tyr	Pro	Glu	Leu	Trp	Thr	Gly	Leu	Ile	Ile	Cys	Tyr	Gly	Val	Thr
			165						170					175	
Ile	Ala	Ala	Ala	Gly	Val	Leu	Tyr	Gly	Ile	Leu	Arg	Arg	Glu	Asn	Arg
			180					185					190		
Arg	Arg	Glu	Ala	Met	Glu	Leu	Asp	Glu	Ser	Gln	Arg	Asp	Lys	Met	Ala
		195					200					205			
Phe	Asn	Asp	Leu	Thr	Asp	Lys	Glu	Asn	Pro	Phe	Phe	Arg	Tyr	Val	Leu
	210					215						220			

&lt;210&gt; 41340

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41340

Lys	Gly	Lys	Lys	Lys	Lys	Thr	Ile	Lys	Asp	Lys	Ser	Leu	Thr	Ser	Thr
1				5					10					15	
Gly	Phe	Val	Glu	Ser	Val	Val	Pro	Thr	Gly	Phe	Met	Thr	Ile	Val	Ser
		20						25					30		
Gly	Tyr	Tyr	Thr	Gln	Lys	Glu	Gln	Ser	Leu	Arg	Gln	Ala	Trp	Trp	Phe
	35					40						45			
Ser	Gly	Thr	Gly	Trp	Phe	Thr	Ile	Ile	Gly	Gly	Ala	Met	Asn	Tyr	Gly
	50				55						60				
Phe	Ala	Thr	Asp	His	Val	Arg	Leu	Ala	Glu	Ala	Leu	Ala	Val	His	Leu
65					70					75					80
His	Leu	Cys	Arg	Gly	Ala	Asp	Leu	Pro	Val	Trp	Asp	Leu	Val	Arg	Arg
			85						90					95	
Asp	Ala	Gln	Leu	Ala	Cys	Leu	Gly	Leu	Val	Pro	His	Thr	Gly	Arg	Ala
		100					105						110		
Arg	Arg	Cys	Arg	Arg	Ala	Pro	Ser	His	Gly	Pro	His	Gly	Arg	Ala	Leu
		115					120					125			
Pro	Pro	Thr	Ser	Ser	Cys	Arg	Arg	Ser	Lys	Thr	Leu	Arg	Leu	Ile	Ser

## 18262

130 135 140  
 Thr Cys Thr Ser Ser Pro Ser  
 145 150

<210> 41341  
 <211> 292  
 <212> PRT  
 <213> A.fumigatus

<400> 41341  
 Gln Ala Gly Lys Glu Arg Gly Gly Tyr Gly Ile Ala Gly Lys Asn Phe  
 1 5 10 15  
 Ser Gly Ile Val Gly Asp Val Leu Val Gly Pro Glu Arg Ala Pro Arg  
 20 25 30  
 Arg Arg Pro Pro Ala Asn Ser Asn Ala Ala Ile Arg Ser Leu Glu Trp  
 35 40 45  
 Pro His Ala Asp Arg Gly Ser Ala Trp Pro Glu Tyr Thr Ile Val His  
 50 55 60  
 Glu His Glu Thr Ala Leu Lys Pro Asp Thr Leu Pro Trp Glu Gln Ala  
 65 70 75 80  
 Ala Cys Leu Pro Leu Ser Gly Leu Thr Ala Phe Gln Ala Leu Phe Glu  
 85 90 95  
 His Ala Gly Leu Pro Phe Pro Ala Asp Ala Val Gly Gly Gly Ser Glu  
 100 105 110  
 Ala Arg Ile Gly Lys Arg Val Leu Ile Thr Gly Ser Ser Gly Gly Val  
 115 120 125  
 Gly Ile Tyr Leu Val Gln Leu Ala Ala Met Ala Gly Leu His Val Val  
 130 135 140  
 Ala Ala Ser Ser Ser Ala Glu Arg Asn Gly Gly Phe Leu Lys Gly Leu  
 145 150 155 160  
 Gly Ala Asp Glu Val Val Glu Tyr Ala Ala Leu Gly Glu Asn Val Asp  
 165 170 175  
 Gly Ser Phe Asp Leu Ile Val Asp Thr Val Gly Gly Lys Ile Leu Arg  
 180 185 190  
 Arg Cys Trp Ala Trp Val Ala Gly His Gly Thr Leu Ile Ser Val Asp  
 195 200 205  
 Ser Ala Ser Phe Asp Phe Val Asn Glu His Ser Lys Cys Gly Leu Asn  
 210 215 220  
 Lys Gly Lys Glu Asp Val Arg Ala Leu Phe Phe Ile Val Arg Ser Asp  
 225 230 235 240  
 Ala Glu Ala Leu Arg Lys Leu Ala Thr Leu Ala Asp Ser Gly Arg Leu  
 245 250 255  
 Lys Leu Phe Val Leu Gln Thr Tyr Asp Leu Ser Gln Ala Gln Ala Ala  
 260 265 270  
 Tyr Glu Gln Ala Ser Ser Lys Ala Ser Gly Tyr Gly Lys Val Val Ile  
 275 280 285  
 Gln Ile Gly Asp  
 290

<210> 41342  
 <211> 402  
 <212> PRT  
 <213> A.fumigatus

<400> 41342  
 Ser Val Gly Ser Ser Gly Leu Leu Gln Asp Ser Asn Thr Met Leu Arg



## 18263

```

1           5           10           15
Val Tyr Cys Leu Cys Trp Trp Leu Ala Val Cys Lys His Val Ser Gly
      20           25           30
Gln Val Gln Thr Phe Thr Pro Ala Ala Glu Thr Ala Ile Ala Tyr Ser
      35           40           45
Val Asn Val Pro Ala Ser Thr Ala Gly Ser Gly Ser Ser Gly Ser Gly
      50           55           60
Pro Ile Phe Ile Gln Met Arg Ser Thr Lys Glu Val Gln Trp Phe Ala
      65           70           75           80
Trp Gly Gln Gly Ala Val Met Gln Gly Ala Asn Ile Phe Val Val Tyr
      85           90           95
Ala Asp Gly Thr Gly Ile Thr Val Ser Pro Arg Leu Gly Val Glu His
      100          105          110
Val Glu Pro Leu His Asn Pro Gln Ala Arg Phe Ser Ile Leu Asn Gly
      115          120          125
Ser Gly Ile Ser Asn Gly Ile Leu Thr Ala Asn Ile Arg Cys Asp Ser
      130          135          140
Cys Ile Thr Trp Pro Gly Gly His Glu Asp Val Thr Ser Thr Ser Ser
      145          150          155          160
Pro Trp Ile Trp Ala Val Lys His Gly Pro Met Leu Asp Ser Asp Ser
      165          170          175
Val Ser Ala Thr Ile Thr Ile His Asp Phe Ser Gly Val Ala Thr Val
      180          185          190
Asn Met Lys Gln Ala Thr Gly Gly Ser Ser Glu Asn Pro Phe Val Gly
      195          200          205
Gly Ser Met Ser Ser Ser Ser Ser Ser Ala Ser Ala Ala Leu Thr Ile
      210          215          220
Asn Ser Glu Ser Val Arg Lys Lys Arg Ile Ala His Ala Val Leu Met
      225          230          235          240
Ile Val Thr Phe Val Leu Leu Phe Pro Leu Ile Ala Leu Gly Ile Pro
      245          250          255
Leu Phe Pro Ser Ala Arg Thr Val Val Ile His Ala Ser Leu Gln Leu
      260          265          270
Cys Thr Leu Ala Leu Val Leu Ala Gly Phe Gly Leu Gly Ile Ser Met
      275          280          285
Ala Arg Ser Leu Asn Phe Val Gly Ser Tyr His Pro Ile Ile Gly Ile
      290          295          300
Ile Val Val Ala Ser Leu Val Leu Phe Gln Pro Ala Met Gly Leu Val
      305          310          315          320
Gln His Trp Tyr Phe Arg Arg Thr Gly Lys Lys Ser Leu Ala Ala Tyr
      325          330          335
Ala His Arg Trp Leu Gly Arg Thr Ala Ile Thr Leu Gly Met Ile Asn
      340          345          350
Ala Gly Leu Gly Phe Arg Leu Thr Gly Ile Gly Thr Ser Val Ala Pro
      355          360          365
Thr Gly Ala Val Ile Ala Tyr Gly Val Val Ala Gly Leu Val Trp Val
      370          375          380
Gly Tyr Val Leu Thr Val Ser Phe Leu Ser Tyr Arg Lys Arg His Ser
      385          390          395          400
Arg Ala

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&lt;210&gt; 41343

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41343

```

Thr Glu Thr Asn Ser His Ser Arg Pro Arg Ser Thr Leu Ser Val Val
1          5          10          15
Tyr Ala Tyr Lys Leu Val Asn Cys Pro Gly Lys Thr Ile Val Gly Leu
          20          25          30
Arg Val Glu Phe Pro Pro Asn Ala Ser Thr Pro Pro His Arg His Gly
          35          40          45
Gly Ala Ser Val Ser Ala Tyr Val Leu Arg Gly Thr Val Leu Asn Lys
          50          55          60
Met Asn Asp Asp Pro Met Gln Val Ile Glu Thr Gly Gly Thr Trp Tyr
65          70          75          80
Glu Ala Pro Gly Cys His His Arg Ile Ser Asp Asn Ala Ser Ala Ala
          85          90          95
Glu Pro Ala Thr Leu Met Val Ser Met Val Leu Asp Ser Asp Val Tyr
          100          105          110
Asp Arg Asp Gly Val Asp Ala Leu Ile Gln Ile Asp Glu Glu Tyr Arg
          115          120          125
Glu Ile Glu Pro Arg Lys
          130

```

&lt;210&gt; 41344

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41344

```

Ala Ser Gln Thr Ile Asn His Phe Ser Thr Met Lys Ala Phe Asn Ile
1          5          10          15
Leu Ser Phe Ser Leu Leu Leu Thr Ile Ala Ser Ala Ala Val Pro
          20          25          30
Asp Val Asp Gly Thr Ile Thr Lys Asp Ala Gly Asn Asn Lys Arg Ala
          35          40          45
Arg Phe Cys Gly Gln Ile Cys Leu Asn Asn Thr Gly Cys Gly Gly Lys
          50          55          60
Cys Pro Lys Cys Asp Met Lys Ser Leu Thr Cys Lys Lys Ala
65          70          75

```

&lt;210&gt; 41345

&lt;211&gt; 318

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41345

```

Cys Gly Val Asn Asp Phe Thr Phe Thr Asp Leu Thr Lys Pro Thr His
1          5          10          15
Asp Arg Leu Val Lys Ile Phe Ser Tyr Leu Ile Asn Phe Val Arg Phe
          20          25          30
Arg Glu Ser Gln Thr Gln Val Ile Asp Glu His Phe Asn Lys Thr Glu
          35          40          45
Lys Thr Lys Ala Arg Ile Asp Thr Leu Phe Met Glu Asn Gln Glu Met
          50          55          60
Glu Gln Arg Leu Glu Glu Met Arg Arg Ser Leu Lys Ala Asn Glu Ala
65          70          75          80
Gln Val Lys Glu Lys Val Arg Arg Asn Asp Glu Leu Lys Ala Arg Leu
          85          90          95

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## 18265

Leu Glu Leu Arg Arg Asn Gln Glu Arg Ile Ala Glu Thr Leu Glu Arg  
 100 105 110  
 Val Lys Ala Asp Lys Ala Arg Arg Gln Ala Gln Leu Glu Glu Lys Thr  
 115 120 125  
 Glu Arg Ser Val Arg Thr Arg Gln Glu Val Glu Lys Leu Arg Pro Tyr  
 130 135 140  
 Ala Met Gln Ser Pro Val Ser Leu Gln Ser Ala Leu Thr Glu Leu Ser  
 145 150 155 160  
 Glu Asn Leu Leu Arg Glu Lys Ala Gln Ile Asp Ala Met Glu Lys Arg  
 165 170 175  
 Ala Arg Ala Leu Gln Thr Ser Ser Asp Thr Phe Thr Val Val Gly Asn  
 180 185 190  
 Asp Val Gln Ala Cys Ile Lys Leu Leu Glu Asp Ile Ser Val Glu Leu  
 195 200 205  
 Gln Lys Glu Glu Glu Glu Glu Ser Arg Ala Ser Arg Asn Lys Glu Ala  
 210 215 220  
 Ile Ser Glu Arg Gly Asn Asn Val Arg Glu Val Glu Gln Thr Glu Lys  
 225 230 235 240  
 Leu Leu Gln Arg Gln Leu Ala Arg Trp Asn Glu Arg Ile Glu Ala Leu  
 245 250 255  
 Arg Lys Asn Ala Gln Glu Lys Ala Glu Val Ala Gln Ala Arg Met Asp  
 260 265 270  
 Glu Leu Arg Asp Val Gln Lys Lys Leu Arg Glu Glu Arg Ala Glu Lys  
 275 280 285  
 Gln Arg Asp Met Glu Arg Arg Arg Ile Arg Ile Glu Gln Thr Glu Lys  
 290 295 300  
 Lys Val Arg Leu Arg Ala Arg Gln His Val Val Leu Leu Cys  
 305 310 315

&lt;210&gt; 41346

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41346

Pro Asp Lys Glu Ile Ala Gly Cys Ile Asn Asp Ile Gly Ile Pro Phe  
 1 5 10 15  
 Thr Ala Ala Asp Leu Ile Lys Pro Asn Pro Gln Gln Ile Gln Met Val  
 20 25 30  
 Phe Glu Trp Phe Ala Glu Leu Leu Met Asn Thr Thr Lys Glu Thr Val  
 35 40 45  
 Glu Pro Ala Met Arg Ala Ala Ala Glu Asp Ile Cys Gly Asp Tyr Pro  
 50 55 60  
 Asp Ile Val Pro Leu Glu Thr Arg Asn Leu Met Gly Phe Phe Ile Ser  
 65 70 75 80  
 Leu Arg Arg Leu Met Met Glu Val Cys Arg Met Ser Val  
 85 90

&lt;210&gt; 41347

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41347

Pro Leu Ala Gly Ser Ile Val Ala Thr Tyr Asn Glu Leu Leu Arg Ser  
 1 5 10 15

## 18266

```

Asp Pro Asp Leu Thr Met Pro Ile Ala Ala Ile Glu Ala Leu Val Leu
      20                      25                      30
Leu Leu Thr His Ser Pro Ser Ser Thr Ile Ser Glu Thr Leu Asp Leu
      35                      40                      45
Leu Glu Lys Ser Thr Ala His Leu Lys Lys Ser Ile Pro Asn Pro Ile
      50                      55                      60
Gly Leu Ser Ala Gly Thr Asp Leu Phe Gln Arg Tyr Leu Ile Thr Thr
      65                      70                      75                      80
Leu Gln Arg Pro Gly Gln Leu Gly Pro Ala Gly Asp Phe Asn Ala Ile
      85                      90                      95
Arg Ala His Leu Leu Ser Asn Gly Arg Leu Phe Ile Arg Arg Ala Lys
      100                     105                     110
Glu Ser Arg Asp Lys Ile Ala Ala Phe Gly Arg Gly Phe Ile Arg Asp
      115                     120                     125
Gly Cys Thr Val Leu Thr Asn Gly Gly Ser Arg Val Val Ala Ser Leu
      130                     135                     140
Leu Gln Lys Ala Ala Asp Glu Lys Gly Gly Pro Ser Ala Val Arg Phe
      145                     150                     155                     160
Arg Val Ile Tyr Val Leu Ser Ser Ala Asn Gly Asp Val Glu Asn Thr
      165                     170                     175
Arg Ala Glu Pro Glu Gly Met Glu Thr Val Arg Ala Leu Arg Ala Lys
      180                     185                     190
Gly Val Pro Val Ala Thr Ile Ser Glu Ser Ala Val Ala Tyr Ser Leu
      195                     200                     205
Gly Lys Ala Asp Met Val Ile Val Gly Ala Glu Gly Val Val Glu Asn
      210                     215                     220
Gly Gly Ile Val Ser Arg Met Gly Thr Tyr Gln Ile Gly Ser Ser Cys
      225                     230                     235                     240
Lys Gly Asn Gly Lys Thr Phe Val Arg Gly Cys Arg Glu Pro Gln Val
      245                     250                     255
Cys Pro Ile Leu Pro Ser Trp Thr Val
      260                     265

```

&lt;210&gt; 41348

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41348

```

Val Pro Lys Val Trp Ser Arg Met Glu Glu Leu Ser Arg Gly Trp Glu
1      5      10      15
His Ile Arg Leu Gly Leu Leu Ala Lys Ala Met Gly Lys Pro Leu Tyr
      20      25      30
Val Val Ala Glu Ser His Lys Phe Val Arg Ser Tyr Pro Leu Gly Gln
      35      40      45
Tyr Asp Leu Pro Ile Glu Gln His Val Ile Asn Phe Lys Thr Glu Glu
      50      55      60
Asp Ile Ala Asp Glu Ala Lys Gln Gln Ser Ala Glu Ser Gln Lys Thr
      65      70      75      80
Thr Glu Val Asp Ser Leu Glu Ala Asn Pro Gly Ser Lys Gly Gly Gly
      85      90      95
Arg Ser Asp Val Val Asp Phe Thr Pro Pro His Leu Ile Ser Ala Leu
      100     105     110
Ile Thr Asp Ser Gly Val Leu Thr Pro Ser Ala Val Ser Glu Glu Leu
      115     120     125
Ile Lys Ile Trp Phe

```

130

<210> 41349  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 41349  
 Trp Asp Gly Glu Pro Pro Tyr Leu His Gln Ser Ser Pro Glu Arg Ser  
 1 5 10 15  
 Asp Thr Phe Ser Val Arg Asp Ile Leu Trp Thr Lys Ser Ser Thr Glu  
 20 25 30  
 Ala Val Met Lys Asp Leu Ser Ile Pro Leu Phe Ala Ile Leu Arg Tyr  
 35 40 45  
 Leu Pro Gly Phe Gly Thr Leu Glu Arg Asp Gly Glu Trp  
 50 55 60

<210> 41350  
 <211> 186  
 <212> PRT  
 <213> A.fumigatus

<400> 41350  
 Tyr Ile His Gln Leu Ile Asp Val His Arg Ala Val Ser Arg Leu Ser  
 1 5 10 15  
 Thr Ile Ala Leu Arg His Pro Leu Thr Gln Met Leu Leu Asp Asp Ala  
 20 25 30  
 Gly Leu Leu Asn Gly Leu Gln Ala Val Thr Ser Trp Asn Glu Phe Phe  
 35 40 45  
 Asp His Pro Lys Gly Thr Ile Leu Gly Leu Tyr Ala Ala Ser Leu Tyr  
 50 55 60  
 Leu Pro Ser Ile Val Thr Ala Tyr Leu Gly Asp Phe Leu Ser Gln Arg  
 65 70 75 80  
 Phe Gly Arg Arg Ile Thr Leu Ala Leu Gly Ser Phe Ile Val Leu Ala  
 85 90 95  
 Gly Gly Phe Ile Asn Ala Phe Ala Ser Ser Ala Gly Met Trp Val Ala  
 100 105 110  
 Gly Asn Leu Ser Val Pro Leu Trp Cys Leu Trp Tyr Tyr Val Leu Lys  
 115 120 125  
 Leu Glu Ser Cys Ser Gly Arg Ala Ile Ile Gly Gly Gly Gly Gly Leu  
 130 135 140  
 Ala Lys Val Ala Ala Pro Ala Leu Ile Gln Glu Ile Ala His Pro Arg  
 145 150 155 160  
 Leu Arg Pro Met Leu Ala Ser Cys Tyr Tyr Pro Phe Phe Tyr Phe Gly  
 165 170 175  
 Ala Leu Leu Ser Ala Leu Leu Cys Cys Glu  
 180 185

<210> 41351  
 <211> 199  
 <212> PRT  
 <213> A.fumigatus

<400> 41351  
 Leu Arg Ser Arg Leu Arg Arg Ala Arg Ser Gly Asn Glu Ser Phe Pro  
 1 5 10 15

## 18268

Arg Leu Ser Tyr Gln Ser Leu Thr Phe Asn Gln Val Tyr Lys Phe Arg  
 20 25 30  
 Leu Leu His Asp Ser Arg Lys Pro Pro Leu Ala Pro Gly Gln Asp Ser  
 35 40 45  
 Gln Pro Leu Gln Leu Ile Gly Met Lys Leu Gly Ser Phe Pro Ala Val  
 50 55 60  
 Asn Glu Asp Gln Thr Ile Asp Glu Ala Val Glu Leu Ala Lys Glu Ser  
 65 70 75 80  
 Asp Ile Ala Leu Leu Met Val Gly Leu Asp Gln Asp Trp Glu Ser Glu  
 85 90 95  
 Ser Tyr Asp Arg Pro Asp Leu Ser Leu Pro Leu Arg Met Asn Asp Leu  
 100 105 110  
 Ile Arg Arg Val Ala Thr Glu Ala Pro Asp Thr Lys Lys Val Val Ile  
 115 120 125  
 Leu Gln Ala Gly Ser Ala Val Ser Met Pro Trp Leu Glu His Val Asp  
 130 135 140  
 Ala Val Leu Trp Pro Trp Tyr Gly Gly Asn Glu Ala Gly Asn Ala Ile  
 145 150 155 160  
 Ala Asp Val Val Tyr Gly Thr Val Asn Pro Ser Gly Arg Leu Pro Ile  
 165 170 175  
 Thr Leu Pro Lys Thr Gly Ala Trp Thr Leu Arg Gln Thr Ser Thr Leu  
 180 185 190  
 Ser Arg Ala Arg Thr Lys Thr  
 195

&lt;210&gt; 41352

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41352

Tyr Glu Glu Gly Ile Trp Val Gly Tyr Arg His Phe Asn Ala Arg Gly  
 1 5 10 15  
 Ile Glu Pro Leu Tyr Pro Phe Gly His Gly Leu Ser Tyr Thr Thr Phe  
 20 25 30  
 Asp Tyr Ser Asp Leu Thr Val Gly Pro Ser Ala Ser Ser Ser Pro Asp  
 35 40 45  
 Ser Trp Arg Ile Ser Val Ser Ala Arg Val Thr Asn Thr Gly Thr Val  
 50 55 60  
 Pro Gly Ala His Ser Val His Phe Tyr Thr Ser Pro Pro Pro Pro Thr  
 65 70 75 80  
 Met Thr Ser Leu Thr His Pro Ala Val Thr Leu Gln Ala Phe Ala Lys  
 85 90 95  
 Thr Ala Val Leu Arg Pro Gly Gln Ser Glu Arg Val Thr Val Glu Met  
 100 105 110  
 Asp Lys Cys Lys Tyr Thr Gly Pro  
 115 120

&lt;210&gt; 41353

&lt;211&gt; 462

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41353

Ala Pro Ala Val Val Leu Pro Asn Ala Thr Gly Leu Ala Ala Thr Phe  
 1 5 10 15

Ser Pro Thr Leu Pro Ala Glu Ala Gly Arg Leu Leu Ala Ala Glu Thr  
 20 25 30  
 Lys Ala Arg Gly Ala Val Gly Leu Leu Ala Pro Thr Ile Asn Ile Cys  
 35 40 45  
 Arg Ser Pro Leu Gly Gly Arg Thr Phe Glu Ser Phe Gly Glu Asp Pro  
 50 55 60  
 Thr Leu Ser Gly Ile Met Ala Ala Lys Tyr Val Ser Ala Leu Gln Asp  
 65 70 75 80  
 Glu Gly Ile Ser Ala Ala Ile Lys His Phe Val Ala Asn Asp Gln Glu  
 85 90 95  
 His Glu Arg Met Gly Gln Asp Ser Ile Ile Ala Pro Arg Ala Leu Arg  
 100 105 110  
 Glu Ile Tyr Leu Arg Pro Phe His Ile Ala Gln Ala Leu Ala Lys Pro  
 115 120 125  
 Trp Ser Tyr Met Thr Ser Tyr Asn Lys Leu Asn Gly Thr His Cys Ser  
 130 135 140  
 Glu His Glu Trp Leu Leu Ser Gly Leu Leu Arg Thr Glu Trp Gly Phe  
 145 150 155 160  
 Asp Gly Leu Val Met Ser Asp Trp Met Gly Thr Tyr Ser Val Ala Glu  
 165 170 175  
 Ala Ile Asn Ala Gly Leu Asp Leu Glu Met Pro Gly Lys Pro Arg Trp  
 180 185 190  
 Arg Gln Leu Ser Leu Val Arg Gln Leu Met Asn Ala His Lys Ile Ser  
 195 200 205  
 Pro Val Thr Ile Asp Glu Arg Val Arg Thr Ile Leu Lys Trp Val Gln  
 210 215 220  
 Lys Leu Val Val Leu Asn Pro Asp Thr Val Tyr Gly Arg Asp Asp Ser  
 225 230 235 240  
 Ile Glu Trp Thr Arg Thr Glu Asp Gln Ala Ala Asp Ala Ala Leu Ile  
 245 250 255  
 Arg Arg Ile Gly Asn Glu Ala Ile Val Met Leu Lys Asn Glu Ser Ser  
 260 265 270  
 Val Leu Pro Val Arg Arg Gly Lys Val Ala Val Ile Gly Pro His Ala  
 275 280 285  
 Lys Thr Ala Val Ile Thr Gly Gly Ser Ala Arg Leu Arg Pro Ala  
 290 295 300  
 Trp Cys Val Thr Pro Trp Gln Gly Leu Val Asp Asn Lys Pro Asp Gln  
 305 310 315 320  
 Val Asp Leu Arg Tyr Ala Leu Gly Cys Lys Gly Ala Lys Phe Leu Pro  
 325 330 335  
 Val Phe Gly Glu Glu Phe Thr Ser Met Asp Gly Thr Thr Arg Gly Phe  
 340 345 350  
 Asp Met Leu His Tyr Ala Ile Val Asp Gly Lys Gln Ala Ser Gln Pro  
 355 360 365  
 Ala Val Ser Glu Val Trp Thr Asn Ser Asp Ile Met Leu Ala Asp Phe  
 370 375 380  
 Ser His Pro Asp Leu Gly Asp Asp Tyr Phe Thr Glu Ile Arg Ala Leu  
 385 390 395 400  
 Phe Thr Ala Pro Ile Thr Gly Glu Trp Gln Phe Glu Ile Ser Val Thr  
 405 410 415  
 Gly Gln Ala Trp Val Tyr Ile Asp Asp Arg Leu Leu Ala Asp Leu Ser  
 420 425 430  
 Lys Glu Gln Lys Arg Thr Ser Ser Phe Phe Gly Asn Gly Gly Asn Gly  
 435 440 445  
 Thr Val Ile Thr Phe Ser Val Thr Lys Gly Lys Val Trp Lys  
 450 455 460

<210> 41354  
 <211> 1231  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (71)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 41354

Thr	Thr	Leu	Gly	Arg	Thr	His	Met	Lys	His	Thr	Thr	Thr	Gln	Ser	Leu
1				5					10					15	
Ala	Ala	Ile	Asn	Ser	Phe	Ser	Gln	Asp	Pro	Thr	Asn	Gln	Met	Ser	Leu
			20					25					30		
Arg	Pro	Leu	Arg	Ala	Leu	Gln	Asn	Pro	Thr	Ser	Met	Arg	Gly	Tyr	Ala
		35					40					45			
Leu	Ile	Phe	Gln	Ala	Tyr	Leu	Ala	Phe	Leu	Leu	Asn	Ser	Phe	Arg	His
	50					55					60				
Leu	Thr	Gly	Gly	Gly	Pro	Xaa	Ser	Tyr	Leu	Gly	Leu	Tyr	Thr	Leu	Asn
65					70					75					80
Asp	Pro	Glu	Arg	Tyr	Asp	Leu	Glu	Ala	Leu	Glu	Ala	Phe	Leu	Leu	Arg
			85						90					95	
Ala	Ser	Lys	Pro	Glu	Ala	Ser	Ile	Ser	Ser	Asp	Ser	Asp	Ser	Pro	Asp
			100					105					110		
Ser	Asp	Asp	Ser	Ala	His	Ala	Ser	Pro	Ser	Gln	Gln	Met	Pro	Glu	Ala
		115					120					125			
Asp	Pro	Asp	Asp	Asp	Leu	Asp	Tyr	Asp	Leu	Asp	Ser	Asp	Glu	Glu	Asp
		130				135					140				
Glu	Ala	Leu	Pro	Gln	Ala	Pro	Gln	Leu	Pro	Asn	Glu	Ser	Leu	Asp	Glu
145					150					155					160
Gln	Leu	Val	Gln	Lys	Gly	Val	Ser	Leu	Ile	Met	Asn	Leu	Thr	Leu	Gln
			165						170					175	
Leu	Ala	Arg	Arg	Gln	Val	Ile	His	Gln	Arg	Glu	Val	Pro	Leu	Tyr	Ala
			180					185					190		
Phe	Leu	Ala	Cys	Phe	Ser	Arg	Asn	Tyr	Ser	His	Asp	Cys	Phe	Lys	Thr
		195					200					205			
Leu	Ser	Leu	Ile	Gly	His	Ser	Tyr	Ser	Ala	Ile	Ile	Lys	Ser	His	Gln
		210				215					220				
Phe	Ile	Leu	Leu	His	Trp	Leu	His	Thr	Glu	Pro	Phe	Thr	Ile	Pro	Glu
225				230						235					240
Arg	Gln	Pro	Glu	Ser	Met	Ala	Val	Phe	Ile	Arg	Asn	Trp	Met	Thr	Asn
			245					250						255	
His	Phe	Thr	Gly	Gln	Ser	Ala	Ser	Pro	Leu	Gly	His	Val	Leu	Val	Leu
		260					265						270		
Arg	Met	Leu	Ala	Leu	Tyr	Leu	Ile	Arg	Thr	Ser	Ala	Ser	Leu	Gly	Arg
		275					280					285			
Ile	His	Pro	Val	Ala	Pro	His	Thr	Leu	Lys	Tyr	Gly	Gln	Val	Thr	Ile
		290				295					300				
Ser	Gln	Gly	His	Leu	Arg	His	Phe	Leu	Ala	Gln	Arg	Val	Gln	Gln	Leu
305				310						315					320
Ala	Leu	Ala	Leu	Ser	Asn	Asp	Leu	Phe	Leu	Glu	Phe	Ser	Tyr	Phe	Arg
			325						330					335	
Glu	Ile	Gln	His	Thr	Leu	Asp	Leu	Asp	Arg	Ala	Ala	Gln	His	Glu	Asp
			340					345					350		



## 18271

Ile	Ser	Gln	Gln	Ala	Asn	Ser	Trp	Ser	Phe	Leu	Gln	Ala	Tyr	Leu	Asp
		355					360					365			
Gln	Gly	Ala	His	Asp	Asp	Leu	Leu	Gln	Lys	Val	Leu	Pro	Asp	Ser	Asp
	370					375					380				
Trp	Phe	Ile	Gln	Val	Asp	Gly	Pro	Ser	Gly	Pro	Thr	Leu	Lys	Leu	Val
385					390					395					400
Arg	Ala	Arg	Ala	Lys	Ala	Phe	Leu	Asp	Ser	Ser	Ser	Ala	Trp	Leu	Lys
				405					410					415	
Gln	Leu	Leu	Ala	Ile	Cys	His	Met	Thr	Ser	Gly	Ala	Pro	Ala	Arg	Gly
			420					425					430		
Thr	Glu	Ile	Asn	Gln	Val	Ile	Trp	Gln	Asn	Thr	Pro	Ile	Asn	Pro	Arg
		435					440					445			
Asn	Leu	Phe	Leu	Asp	Pro	Val	Ser	Lys	Leu	Phe	Leu	Ile	Arg	Leu	Ala
	450					455					460				
Tyr	Ser	Lys	Thr	Phe	Arg	His	Thr	Gly	Gln	Glu	Lys	Glu	Ala	Val	Arg
465					470					475					480
Ala	Leu	Pro	Gln	Ser	Leu	Ser	Tyr	Leu	Val	Leu	Ala	Tyr	Leu	Ala	Tyr
				485					490					495	
Ile	Arg	Pro	Phe	Glu	Glu	Ala	Leu	Leu	Ile	Lys	Leu	Asn	Gln	Lys	Leu
			500					505					510		
Pro	Glu	Ala	His	Phe	Leu	Leu	Phe	Cys	Asp	His	Arg	Thr	Cys	Lys	Pro
		515					520					525			
Leu	Ser	Ser	Lys	Val	Leu	Ser	Arg	Thr	Leu	Lys	Asn	Met	Thr	Ser	Glu
	530					535					540				
Ser	Leu	Ala	Gln	Pro	Ile	Ser	Leu	Ser	Pro	Trp	Arg	His	Leu	Met	Gln
545					550					555					560
Gly	Phe	Ile	Arg	His	Gly	Leu	Gly	Leu	His	Asp	Pro	Leu	Ala	Glu	Leu
				565					570					575	
Gly	Asn	Asp	Asp	Leu	Asp	Asp	Glu	Ala	Leu	Gly	Ala	Asp	Gln	Met	His
			580				585						590		
His	Ser	Arg	Glu	Thr	Gly	Leu	Arg	Ile	Tyr	Gly	Arg	Val	Ile	Ala	Ser
		595					600					605			
Phe	Gln	Gly	Val	Arg	Ala	Asp	Ile	Gln	Ile	Ala	Leu	Val	Thr	Phe	Ser
	610					615					620				
Gln	Arg	Trp	His	Ala	Tyr	Leu	Gly	Leu	Ala	Pro	Asp	Gln	Leu	Ile	Ile
625					630					635					640
His	Ser	Leu	Phe	Tyr	Asn	Arg	Glu	Val	Trp	Gln	Pro	Gln	Ala	Asp	Tyr
				645					650					655	
Ser	Pro	Asn	Ser	Pro	Gln	Pro	Gln	Pro	Thr	Arg	Gly	Met	Glu	Phe	Pro
		660					665						670		
Leu	Asp	Gln	Pro	Ile	Ile	Gln	Phe	His	Tyr	Pro	Gln	Lys	Pro	Lys	Ala
	675						680					685			
Ser	Pro	Pro	Ala	Arg	Lys	Val	Ser	Ile	Gly	Gln	Phe	Asn	Glu	Phe	Ile
	690					695					700				
Ser	Leu	Tyr	Gly	Leu	Pro	Gln	Ala	Ser	Asp	Gln	Ala	Leu	Arg	Gln	Gln
705					710					715					720
Asp	Leu	Tyr	Leu	Asp	Leu	Asp	Leu	Asp	Gln	Gly	Gln	Leu	Ala	Arg	Gln
				725					730					735	
Leu	Asp	Leu	Ser	Arg	Ser	Asn	Leu	Ala	Ser	His	Gln	Gln	Leu	Asp	Glu
			740				745						750		
Gly	Leu	Leu	Asp	His	Met	Leu	Lys	Glu	Phe	Met	Gln	Asp	Asp	Gln	Val
		755					760					765			
Thr	Phe	Arg	Ser	Pro	Glu	Gln	Arg	Gln	Ala	Phe	His	Leu	Ile	Val	Lys
	770					775					780				
Gln	Val	Pro	Tyr	Leu	Phe	Leu	Val	Leu	Pro	Thr	Ala	Ala	Gly	Lys	Thr
785					790					795					800

## 18272

Thr Leu Phe Leu Phe Gly Ala Ser Leu Thr Thr Ser Gln Val Thr Ile  
 805 810 815  
 Val Ile Val Pro Leu Ile Ser Leu Lys Leu Asp Leu Ser Thr Lys Ala  
 820 825 830  
 Ala Ala Leu Gly Leu Gln Pro Thr Ile Trp Glu Pro Gly Gln Val Met  
 835 840 845  
 Pro Leu Ala Ser Ser Arg Val Ile Leu Val Gln Ile Glu His Leu Asp  
 850 855 860  
 His Pro Arg Phe Asn Glu Leu Ala Asp Glu Leu Ile Thr Gln Lys Arg  
 865 870 875 880  
 Leu Ala Arg Ile Ile Trp Asp Glu Cys His Leu Ile Pro Leu Ala Lys  
 885 890 895  
 Ser Tyr Arg Pro Ile Met Leu Arg Ala Trp His Ala Leu Ala Leu Pro  
 900 905 910  
 Val Pro Met Val Phe Ser Ser Ala Thr Leu Pro His His Leu Gln Ala  
 915 920 925  
 Glu Leu Val Asp Met Met Lys Leu Gly Ser Leu Pro Glu Val Pro Ile  
 930 935 940  
 Val Arg Ala Asp Leu Thr Leu Pro Asn Met Ala Tyr Met Val Glu Lys  
 945 950 955 960  
 Val Pro Asp Arg Leu Pro Glu Ser Glu Tyr Ala Pro Tyr Leu Arg Gln  
 965 970 975  
 Phe Ile Lys Thr Phe Glu Met Lys His Gly Pro Phe Gly Ser Ser Thr  
 980 985 990  
 Thr Ala Gln Ala Ser Ala Gln Ala Thr Ala Ser Ala Arg Thr Arg Ala  
 995 1000 1005  
 Asn Val Ile Ile Phe Cys Arg Thr Lys Arg Leu Val Asp Ala Leu Ser  
 1010 1015 1020  
 Asp Gln Met Asp Pro Glu Ala Ala Arg Phe His Ser Asp Leu Ser Asp  
 1025 1030 1035 1040  
 Gln Ala Lys Leu Asp Gln Leu Asp Gln Phe Gln Ser Ser Arg Tyr Ile  
 1045 1050 1055  
 Leu Val Ala Thr Gly Ala Ile Gly Ala Gly Phe Asp Phe His Asp Ile  
 1060 1065 1070  
 Asp Leu Val Ile His Phe Leu Pro Gly Glu Tyr Glu Met Thr Ser Phe  
 1075 1080 1085  
 Met Gln Glu Ser Gly Arg Ala Gly Arg Ser Pro Asp Gln Pro Gly Trp  
 1090 1095 1100  
 Ser Tyr Cys Leu Val Arg Ala Tyr Gln Leu Arg Ala Arg Pro Asn Gln  
 1105 1110 1115 1120  
 Glu Gly Lys Ala Leu Lys Val Ser Thr Phe Leu Asp Tyr Leu Gly Glu  
 1125 1130 1135  
 Gln Val Cys Arg Arg Arg Ile Ile Ser Arg Val Phe Asp Ser Arg Ala  
 1140 1145 1150  
 Ile Glu Ser Cys Asp Pro Ser Trp Ala Leu Cys Asp Leu Cys Asp His  
 1155 1160 1165  
 Arg Gln Ser Arg Leu Gly Leu Val Arg Gln Val Val Arg Gln Glu Glu  
 1170 1175 1180  
 Gly Gln Asn Leu Ile Gln Met Asn Ile Phe Ala Trp Ala Val Arg Phe  
 1185 1190 1195 1200  
 Trp His Glu Arg Tyr Cys Leu Ile Cys Phe Ile Ser Gly Lys Leu Ser  
 1205 1210 1215  
 Ile Leu Ser Ile Lys Ser Ile Asp Leu Leu Ile Leu Leu Ile Tyr  
 1220 1225 1230

&lt;210&gt; 41355

<211> 153  
 <212> PRT  
 <213> A.fumigatus

<400> 41355

```

Asn Ser Ser Arg Met Met Gln Ser Asn Pro Gln Arg Thr Asp Pro Tyr
1          5          10          15
Lys Pro Pro Ser Leu Ile Pro Gln Thr Glu Lys Glu Asp Asp Gln Leu
          20          25          30
Ile Lys Ile Ile Ala Pro Leu Phe Tyr Ser Met Thr Thr Leu Ala Pro
          35          40          45
Thr Ala Phe Arg Val Ser Met Ile Phe Ser Ala Ser Ser Leu Gly Thr
          50          55          60
Asp Ser Phe Ile Ile Leu Gly Thr Asp Ser Thr Asn Phe Leu Leu Ser
65          70          75          80
Thr Arg Glu Arg Pro Ser Arg Pro Leu Ile Ser Leu Met Thr Leu Ala
          85          90          95
Leu Glu Ala Ala Ser Thr Val Ser Ser Phe Arg Leu Lys Arg Val Phe
          100          105          110
Ser Cys Ala Ala Gly Ala Ala Ser Ser Ser Ser Ala Ala Ala Gly Ala
          115          120          125
Ala Ala Ala Pro Pro Pro Gly Pro Ala Ala Thr Ala Lys Pro Pro Thr
          130          135          140
Gly Arg Ser Gly Ile Phe Arg Arg Asp
145          150

```

<210> 41356  
 <211> 461  
 <212> PRT  
 <213> A.fumigatus

<400> 41356

```

Arg Val Arg Cys Leu Val Leu Pro Phe Ser His Thr Val Phe Gln Gly
1          5          10          15
Leu Ser Asn Val Pro Arg Phe Arg Ala His Phe Val His Leu Leu Thr
          20          25          30
Glu Ile Val Leu Ser Asp Leu Glu Val Asp Arg Leu Lys Glu Leu Arg
          35          40          45
Ser Gln Glu Glu Leu Cys Lys Ala Leu Arg Thr Val Val Ala Ser Lys
          50          55          60
Gln Phe Gly Thr Glu Asp Leu Leu Ser Ser Leu Val Ala Glu Ala Val
65          70          75          80
Leu Ala Val Leu Pro Lys Asn Pro Val Asn Phe Asn Val Asp Asn Val
          85          90          95
Arg Val Val Lys Ile Met Gly Gly Ser Leu Glu Gln Ser Arg Val Ile
          100          105          110
Lys Gly Met Val Phe Gly Arg Glu Pro Glu Gly Thr Ile Lys Lys Ala
          115          120          125
Arg Lys Ala Lys Val Gly Val Phe Ser Cys Pro Ile Asp Ile Ser Gln
          130          135          140
Thr Glu Thr Lys Gly Thr Val Leu Leu Lys Asn Ala Gln Asp Met Leu
145          150          155          160
Asn Phe Ser Lys Gly Glu Glu Asp Arg Leu Glu Ala Thr Ile Lys Glu
          165          170          175
Leu Tyr Asp Ser Gly Leu Arg Val Val Val Ala Gly Ser Ser Val Gly
          180          185          190

```

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Asp Leu Ala Leu His Tyr Leu Asn Arg Phe Asn Ile Leu Val Ile Lys
   195                               200                               205
Ile Leu Ser Lys Phe Glu Leu Arg Arg Leu Cys Arg Val Val Gly Ala
   210                               215                               220
Thr Pro Leu Ala Arg Leu Gly Ala Pro Met Pro Asp Glu Met Gly Ser
  225                               230                               235                               240
Val Asp Val Val Glu Thr Thr Glu Ile Gly Gly Asp Arg Val Thr Val
                               245                               250                               255
Phe Arg Gln Glu Glu Ala Asn Ala Val Thr Arg Thr Ala Thr Ile Val
   260                               265                               270
Leu Arg Gly Ala Thr Gln Asn His Leu Asp Asp Val Glu Arg Ala Ile
   275                               280                               285
Asp Asp Gly Val Asn Ala Val Lys Ala Ile Thr Lys Asp Pro Arg Leu
   290                               295                               300
Val Pro Gly Ala Gly Ala Thr Glu Ile Gln Leu Val Glu Lys Ile Ser
  305                               310                               315                               320
Ala Phe Ala Asp Lys Thr Pro Gly Leu Pro Gln Tyr Ala Ile Arg Lys
   325                               330                               335
Tyr Ala Glu Ala Phe Glu Val Ile Pro Arg Thr Leu Ala Glu Ser Ala
   340                               345                               350
Gly Leu Asp Ala Thr Glu Val Leu Ser Arg Leu Tyr Thr Ala His His
   355                               360                               365
Arg Thr Thr Lys Ala Ser Glu Ser Glu Glu Ser Glu Glu Gly Ser Ser
   370                               375                               380
Glu Glu Glu Glu Ala Tyr Trp Thr Thr Gly Val Asp Leu Gln Ala Gly
  385                               390                               395                               400
Ser Ser Thr Gly Thr Leu Asp Ala Val Asp Glu Gly Ile Leu Asp Leu
   405                               410                               415
Leu Ala Ser Lys Ser Trp Ala Ile Arg Leu Ala Ser Glu Ser Ala Arg
   420                               425                               430
Thr Val Leu Ser Val Asp Gln Ile Ile Val Ala Arg Gln Ala Gly Gly
   435                               440                               445
Pro Lys Pro Pro Gly Pro Asn Pro Asn Trp Asp Glu Asp
   450                               455                               460

```

&lt;210&gt; 41357

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41357

```

Pro Ser Ser Thr His Ile Asp Pro Asp Leu Ile Phe Gln Ile Gly Tyr
1                               5                               10                               15
Ile Val Ser Gly Gly Asn Pro Ser Phe Arg Glu Trp Leu Leu Ala Ser
   20                               25                               30
Thr Thr His Ala Gly Ala Arg Val Pro Leu Leu Met Ser Ala Ala Arg
   35                               40                               45
Tyr Leu Asn Ser Leu Gly Asn Thr Ala Pro Val Arg Thr Pro Ala Leu
   50                               55                               60
Glu Lys Val Glu His Leu Ala Leu His Asp Arg Asp Pro Arg Ala Met
   65                               70                               75                               80
Thr Leu His Ala Lys Val Leu Gly Leu Arg Lys Arg Tyr Thr Asp Ala
   85                               90                               95
Leu Arg Leu Ile Glu Gln Val Met Ala Leu Ile Tyr Pro Ser Lys Val
   100                               105                               110
Pro Val Ala Lys Asp Gly Gly Phe Gly Met Ala Arg Ile Glu Pro Pro

```

## 18275

```

      115              120              125
Trp Arg Val Tyr Ala Trp Leu Asn Asp Lys Ala Gln Ala Gln Ala Asn
      130              135              140
Ala Asp Thr Lys Thr Gly Glu Val Gly Thr Lys Thr Asp Asp Leu Leu
145              150              155              160
Arg Ser Ala Ala Leu Asp Tyr Gln Asp Pro Glu Ser Leu Val Gln Tyr
      165              170              175
Ala Thr Ala Arg Met Arg Ala Gly Asp Leu Ala Met Tyr Glu Asp Cys
      180              185              190
Met Ser Arg Gly Arg Asp Gly Arg Glu Gly Arg Gly Val Pro Ser Thr
      195              200              205
Arg Glu Leu Leu Leu Ser His Phe Ala Gly Thr Val Pro Ala Ala Arg
      210              215              220
Gly Ala Arg Asp Arg Gly Gln Asp Gln Cys Pro Arg Gly Ser Ser Arg
225              230              235              240
Lys Ala Ser Leu Lys Arg Ile Leu Ala Asn Glu
      245              250

```

<210> 41358  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41358
Arg Leu Leu Ser Gln Met Thr Gly Arg Arg Arg Phe Asn Cys Val Ser
1              5              10              15
Ser His Gln Glu Leu Arg Met Gly Gln Gln Ser Tyr Glu Glu Val Leu
      20              25              30
Arg Ser Thr Arg Gly Lys Ile Leu Pro Glu Asn His Pro Leu Thr Ile
      35              40              45
Met Val Asn Gly Val Leu Arg Arg Leu Ile Pro Gln Ala Pro Ile Glu
      50              55              60
Gly Ala Asp Trp Arg Val His Val Ile Lys Asp Asp Gly Met Val Asn
65              70              75              80
Ala Phe Val Leu Pro Gly Tyr Ala Tyr Pro Leu Thr Ser Arg Pro Ala
      85              90              95
Val Val Cys His
      100

```

<210> 41359  
 <211> 112  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41359
Ser Arg Leu Asn Ile Pro Asp Leu Pro Val Gly Gly Phe Ala Val Ala
1              5              10              15
Ala Gly Pro Gly Gly Gly Ala Ala Ala Pro Ala Ala Ala Glu Glu
      20              25              30
Glu Glu Ala Ala Pro Ala Ala Gln Glu Lys Thr Leu Phe Asn Leu Lys
      35              40              45
Leu Glu Thr Val Asp Ala Ala Ser Lys Ala Lys Val Ile Lys Glu Ile
      50              55              60
Lys Gly Leu Leu Gly Leu Ser Leu Val Asp Ser Lys Lys Phe Val Glu
65              70              75              80
Ser Val Pro Lys Met Met Lys Glu Ser Val Pro Lys Glu Glu Ala Glu

```

[illegible]

```
<210> 41360
<211> 103
<212> PRT
<213> A.fumigatus
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```
<210> 41361
<211> 169
<212> PRT
<213> A.fumigatus
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<210> 41362  
<211> 255

18277

<212> PRT

<213> A.fumigatus

<400> 41362

```

Pro Pro Ala Leu Arg Gly Ile Leu Arg Ala Pro Cys Gly Glu Asp Ser
1      5      10      15
Leu Ala Arg Ser Ala Gly Val Arg Ile Arg Val Val Ala Arg Phe Val
20      25      30
Phe Phe Val Ser Gly Leu Ala Val Ser Asp Leu Ala Leu Pro Ser Ser
35      40      45
Ser Ser Pro Cys Leu Ala Phe Phe Ala Gly Gly Asp Ser Ser Ser Ser
50      55      60
Glu Ser Leu Ser Ser Ile Ser Ala Ser Leu Ser Thr Ser Ile His Pro
65      70      75      80
Pro Glu Ser Ser Leu Ser Ser Ser Ser Ser Met Phe His Arg Ser Gln
85      90      95
Ala Ala Ser Ser Ser Ala Ser Ser Thr Ser Ser Ser Ser Ala Ser Glu
100     105     110
Gly Arg Pro Phe Ser Ile Leu Arg Phe Arg Arg Ser Ser Ser Phe His
115     120     125
Phe Ser Arg Ser Ser Arg Pro Ser Ile Ser Pro Val Cys Cys Ser Pro
130     135     140
Lys Arg Arg Ser Phe Phe Ser Pro Ala Arg Lys Leu Ile Glu Ala Ser
145     150     155     160
Leu Pro Arg Ser Arg Leu Leu Ser Ile Ser Ala Pro Thr Ser Leu Tyr
165     170     175
Arg Leu Ser Asn Pro Leu Ala Ala Met Thr Thr Pro Leu Ser Leu Leu
180     185     190
Phe Leu Tyr Ile Thr Arg Ser Cys Asn Lys Val Ser Phe Ile Ala Lys
195     200     205
Gly Cys Arg Ala Gln Ile Ser Arg Met Ala Leu Arg Pro Ala Val Ala
210     215     220
Thr Ser Asp Ala Ala Ala Ser Glu Thr Asn Ser Phe Ala Ile Phe Cys
225     230     235     240
Thr Arg Gly Ser Arg Thr Ser Gly Gly Thr Lys Ser Cys Asp Ala
245     250     255

```

<210> 41363

<211> 374

<212> PRT

<213> A.fumigatus

<400> 41363

```

Glu Leu Pro Leu Ser Val His Ser His Gln Gly Leu Thr Leu His Ser
1      5      10      15
Tyr Gln Lys Arg Arg Thr Leu Leu Leu Ser Gln Phe Leu Gly Pro Asn
20      25      30
Lys Pro Leu Glu Ile Asn Ala Ser Ser Glu Asn Pro Ser Ser Pro Ile
35      40      45
Ser Ser Ala Asn Ile Ala Pro Pro Ala Ile Leu Ser Val Arg Pro Pro
50      55      60
Thr Ala Asp Ser Ala Ser Gln Asn Ala Ser Ser Gln Ser Phe Ala Gln
65      70      75      80
Asn Asn Val Pro Gly Asn Gly Ser Phe Gly Tyr Asp Arg Arg Val Ser
85      90      95
Met Gly Thr Gln Gly Ser Ile Gln Asp Asp Ser Ala Phe Gln Tyr Asn

```

```

      100      105      110
Arg Asp Ser Met Ala Leu Gln Pro Pro Glu Arg Met Pro Ser Ser Thr
      115      120      125
Ser Tyr Asp Ser Leu Phe Leu Pro Lys Pro Gln Ala Pro Pro Ile Ala
      130      135      140
Gln Glu Asp Ser Arg Thr Ala Thr Leu Leu Ser Gln Asn Tyr Ala Phe
145      150      155      160
Asn Pro Gly Ala Ser Asp His Val Asp Glu Ser Ala Gly Ala Tyr Asp
      165      170      175
Met Thr Pro Gly Ala Val Thr Arg Gln Ser Thr Met Leu Asp Ser Gln
      180      185      190
Gln Ala Tyr Phe Ser Asp Phe Ala Gly Gln Gln Gln Gly Asp Tyr Arg
      195      200      205
Asp Ser Tyr Gly Gly Gly Phe His Arg Tyr Ser Gln Ser Asp Thr Phe
      210      215      220
Ser Pro Thr Ala Asn Met Ala Pro Pro Leu Ile Pro Ala Ser Glu Leu
225      230      235      240
Pro His Gly Ala Thr Ile Asn His Leu Leu Pro Leu Glu Pro Arg Asp
      245      250      255
Ile Pro Phe Ala Val His Asp Pro His Asp Lys Asn Thr Leu Met Ser
      260      265      270
Thr Phe Asp Asn Ile Pro Ala Val Leu Arg His Arg Ala Arg Val His
      275      280      285
Pro Lys Gln Pro Ala Tyr Trp Val Leu Asp Gln Lys Gly Lys Glu Ile
      290      295      300
Ala Ser Ile Thr Trp Glu Lys Leu Ala Ser Arg Ala Glu Lys Val Ala
305      310      315      320
Gln Val Val Arg Asp Lys Ser Asn Leu Tyr Arg Gly Asp Arg Val Ala
      325      330      335
Leu Ile Tyr Arg Asp Ser Glu Ile Ile Glu Phe Ala Val Ala Leu Met
      340      345      350
Gly Cys Phe Ile Ala Gly Val Val Ala Val Pro Ile Asn Asn Leu Glu
      355      360      365
Asp Tyr Gln Ser Leu Asn
      370

```

&lt;210&gt; 41364

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41364

```

Arg Arg Cys Leu Ile Pro Lys Ser Leu Arg Leu Arg Arg Ala Ala Lys
1      5      10      15
Gly Lys Thr Tyr Leu Val Gly Leu Gly Ser Asn Phe Asp Gly Arg His
      20      25      30
Ser Thr Arg Thr Lys Met Glu Ile Ser Ala His Thr Arg Leu Gly Ile
      35      40      45
Asp Ala Leu Asp Arg Ile Gly Leu Thr Asp Ala Asn Leu Leu Thr Arg
50      55      60
Ile Tyr Lys Tyr Ser Asp Tyr Ile Gln Ile Arg Asn Pro Val Tyr Ile
65      70      75      80
Pro His Thr Ala Gly Arg Tyr Ala Ala Lys Arg Phe Arg Lys Ala Gln
      85      90      95
Cys Pro Ile Ile Glu Arg Leu Thr Asn Ser Leu Met Met Asn Gly Arg
      100      105      110

```



## 18279

Asn Asn Gly Lys Lys Leu Met Ala Val Arg Ile Val Ala His Ala Phe  
 115 120 125  
 Glu Ile Val Arg Ala Phe Ser Ala Arg Thr Trp Asn Ser Ala Arg Gln  
 130 135 140  
 Arg Leu Pro Gly Thr Asn Tyr  
 145 150

<210> 41365

<211> 155

<212> PRT

<213> A.fumigatus

<400> 41365

Thr Val Ala Thr Thr Ala Arg Ser Ser Trp Leu Ser Ala Ser Ser Pro  
 1 5 10 15  
 Thr Leu Ser Arg Ser Tyr Val His Phe Pro Arg Glu Pro Gly Thr Gln  
 20 25 30  
 Pro Gly Asn Val Cys Gln Gly Gln Ile Thr Asp Ala Ser Ser Leu Phe  
 35 40 45  
 Ser Gln Ile His Ile Met Thr Asp Gln Asn Pro Leu Gln Val Ala Val  
 50 55 60  
 Asp Ala Ile Val Asn Cys Gly Pro Arg Glu Asp Ser Thr Arg Ile Gly  
 65 70 75 80  
 Ser Ala Gly Thr Val Arg Arg Gln Ala Val Asp Val Ser Pro Leu Arg  
 85 90 95  
 Arg Val Asn Gln Ala Ile Ala Leu Leu Thr Ile Gly Ala Arg Glu Ala  
 100 105 110  
 Ser Phe Arg Asn Ile Lys Ser Ile Ala Glu Cys Leu Ala Glu Glu Leu  
 115 120 125  
 Ile Asn Ala Ala Lys Gly Ser Ser Asn Ser Tyr Ala Ile Lys Lys Lys  
 130 135 140  
 Asp Glu Leu Glu Arg Val Ala Lys Ser Asn Arg  
 145 150 155

<210> 41366

<211> 103

<212> PRT

<213> A.fumigatus

<400> 41366

His Glu Ser Ala Val Phe Arg Ser Tyr Ile Glu Asp Phe Arg Ala Gln  
 1 5 10 15  
 His Tyr Gln Tyr Glu Ser His Arg Glu Ile Phe Met Ala Ala Pro Thr  
 20 25 30  
 Ala Ala Thr Asp Thr Gly Ile Ile Ser Leu Arg Glu Leu Ile Asp Phe  
 35 40 45  
 Ile Ala His Val Ala Asp Cys Tyr Pro Thr Ile Thr Lys Glu Phe Pro  
 50 55 60  
 Gln Gln Leu Met Asp Ile Leu Thr Gln His His Leu Val Leu Glu Pro  
 65 70 75 80  
 Glu Leu Arg Glu Lys Ile Val Gly Ser Leu Val Leu Leu Arg Lys Lys  
 85 90 95  
 Glu Leu Leu Asp Ser Ala Thr  
 100

<210> 41367

<211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 41367

Arg	Phe	Thr	Gln	Arg	His	Arg	Pro	Ser	Pro	Ser	Arg	Ile	Pro	Pro	Ser
1				5					10					15	
Thr	Thr	Gly	Ala	Tyr	Gly	Val	Thr	Met	Ser	Asp	His	Gly	Glu	Val	Glu
		20						25					30		
Val	Glu	Asn	Pro	Ser	Gly	Ala	Phe	Gln	Ala	Leu	Pro	Lys	Asp	Ala	Leu
		35					40					45			
Ala	Glu	Met	Gly	Thr	Ile	Lys	Leu	Phe	Asn	Lys	Trp	Ser	Tyr	Glu	Asp
	50					55					60				
Val	Glu	Ile	Arg	Asp	Ile	Ser	Leu	Thr							
65					70										

<210> 41368

<211> 504

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (16), (21), (34), (36), (45)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41368

Ala	Ala	Thr	Asp	Ile	Val	Pro	Tyr	Ser	Asp	His	Asn	Thr	Gln	Ala	Xaa
1				5					10					15	
Leu	Ser	Gly	Pro	Xaa	Ile	Phe	Gln	Lys	Ile	Leu	Met	Asp	Leu	Arg	Ser
		20						25					30		
Ser	Xaa	Ala	Xaa	Thr	Thr	Asn	His	Lys	Leu	Asn	Arg	Xaa	Met	Gln	Thr
		35					40					45			
Val	Leu	Phe	Asn	Leu	Val	Thr	Ser	Asp	Arg	Thr	Ser	Ser	Lys	Gly	Leu
	50					55					60				
Trp	Ala	Ile	Lys	Leu	Thr	Arg	Glu	Leu	Trp	Lys	Arg	Gln	Ile	Trp	Thr
65				70					75					80	
Asp	Ala	Lys	Ala	Val	Glu	Val	Met	Lys	Glu	Ala	Cys	Leu	Ser	Glu	Asn
			85						90					95	
Glu	Lys	Val	Ile	Val	Gly	Gly	Val	Arg	Phe	Phe	Leu	Gly	Gly	Asp	Lys
		100						105					110		
Glu	Arg	Glu	Glu	Met	Glu	Asp	Glu	Ser	Ser	Asp	Glu	Glu	Thr	Ile	Asp
		115					120					125			
Leu	Ala	Arg	Val	Lys	His	Gln	Val	Gly	Ile	Asn	Lys	Lys	Thr	Arg	Lys
	130					135					140				
Lys	Ser	Arg	Ala	Val	Glu	Lys	Ala	Lys	Ala	Ile	Val	Lys	Lys	Arg	Glu
145				150						155					160
Arg	Lys	Lys	Asn	Gln	Pro	His	Pro	Leu	Asn	Phe	Ser	Ala	Leu	His	Leu
			165						170					175	
Leu	His	Asp	Pro	Gln	Gly	Phe	Ala	Glu	Ala	Leu	Phe	Ala	Lys	His	Leu
		180						185					190		
Gln	Asn	Thr	Lys	Ser	Asn	Leu	Asn	Leu	Glu	Gln	Lys	Leu	Leu	Val	Leu
		195					200					205			
Gln	Leu	Val	Ser	Arg	Leu	Val	Gly	Leu	His	Arg	Leu	His	Ile	Met	His
	210					215					220				
Leu	Tyr	Ser	Tyr	Phe	Gln	Lys	Tyr	Leu	Thr	Pro	Arg	Gln	Ala	Ser	Val

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.45	0.50	0	1	-0.05	3.0	0.99
Education	12.5	2.5	8	16	0.20	3.5	0.97
Income	45000	15000	20000	80000	0.30	3.8	0.96
Health	0.75	0.25	0	1	-0.10	3.1	0.99
Stress	0.60	0.20	0	1	-0.05	3.0	0.99
Workload	0.85	0.15	0	1	-0.05	3.0	0.99
Job Satisfaction	0.55	0.25	0	1	-0.05	3.0	0.99
Organizational Commitment	0.65	0.20	0	1	-0.05	3.0	0.99
Turnover Intent	0.15	0.35	0	1	0.10	3.3	0.98
Work-Life Balance	0.40	0.30	0	1	-0.05	3.0	0.99
Employee Engagement	0.70	0.20	0	1	-0.05	3.0	0.99
Team Cohesion	0.60	0.25	0	1	-0.05	3.0	0.99
Communication	0.50	0.30	0	1	-0.05	3.0	0.99
Conflict Resolution	0.45	0.35	0	1	-0.05	3.0	0.99
Leadership	0.55	0.25	0	1	-0.05	3.0	0.99
Organizational Culture	0.60	0.20	0	1	-0.05	3.0	0.99
Employee Well-being	0.70	0.20	0	1	-0.05	3.0	0.99
Work Environment	0.65	0.25	0	1	-0.05	3.0	0.99
Job Design	0.50	0.30	0	1	-0.05	3.0	0.99
Supervisor Support	0.60	0.25	0	1	-0.05	3.0	0.99
Peer Support	0.55	0.30	0	1	-0.05	3.0	0.99
Organizational Support	0.65	0.20	0	1	-0.05	3.0	0.99
Employee Retention	0.75	0.20	0	1	-0.05	3.0	0.99
Organizational Effectiveness	0.60	0.25	0	1	-0.05	3.0	0.99
Employee Productivity	0.70	0.20	0	1	-0.05	3.0	0.99
Organizational Innovation	0.55	0.30	0	1	-0.05	3.0	0.99
Employee Development	0.60	0.25	0	1	-0.05	3.0	0.99
Organizational Learning	0.50	0.30	0	1	-0.05	3.0	0.99
Employee Motivation	0.65	0.20	0	1	-0.05	3.0	0.99
Organizational Commitment	0.60	0.25	0	1	-0.05	3.0	0.99
Employee Engagement	0.70	0.20	0	1	-0.05	3.0	0.99
Team Cohesion	0.60	0.25	0	1	-0.05	3.0	0.99
Communication	0.50	0.30	0	1	-0.05	3.0	0.99
Conflict Resolution	0.45	0.35	0	1	-0.05	3.0	0.99
Leadership	0.55	0.25	0	1	-0.05	3.0	0.99
Organizational Culture	0.60	0.20	0	1	-0.05	3.0	0.99
Employee Well-being	0.70	0.20	0	1	-0.05	3.0	0.99
Work Environment	0.65	0.25	0	1	-0.05	3.0	0.99
Job Design	0.50	0.30	0	1	-0.05	3.0	0.99
Supervisor Support	0.60	0.25	0	1	-0.05	3.0	0.99
Peer Support	0.55	0.30	0	1	-0.05	3.0	0.99
Organizational Support	0.65	0.20	0	1	-0.05	3.0	0.99
Employee Retention	0.75	0.20	0	1	-0.05	3.0	0.99
Organizational Effectiveness	0.60	0.25	0	1	-0.05	3.0	0.99
Employee Productivity	0.70	0.20	0	1	-0.05	3.0	0.99
Organizational Innovation	0.55	0.30	0	1	-0.05	3.0	0.99
Employee Development	0.60	0.25	0	1	-0.05	3.0	0.99
Organizational Learning	0.50	0.30	0	1	-0.05	3.0	0.99
Employee Motivation	0.65	0.20	0	1	-0.05	3.0	0.99
Organizational Commitment	0.60	0.25	0	1	-0.05	3.0	0.99

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	1.2	0.4	1	2	0.05	3.0	0.99
Education	12.5	2.1	9	16	0.25	3.5	0.97
Income	4500	1500	1000	10000	0.35	3.8	0.96
Marital Status	1.8	0.4	1	2	0.05	3.0	0.99
Occupation	2.5	1.2	1	5	0.20	3.4	0.98
Health Status	1.5	0.5	1	2	0.05	3.0	0.99
Stress Level	3.2	1.8	1	5	0.30	3.7	0.97
Life Satisfaction	4.1	1.5	1	5	0.25	3.6	0.98
Resilience	3.8	1.2	1	5	0.20	3.5	0.98
Emotional Stability	4.5	1.0	1	5	0.15	3.3	0.99
Psychological Well-being	4.2	1.1	1	5	0.18	3.4	0.98
Quality of Life	4.0	1.2	1	5	0.22	3.6	0.97
Life Purpose	3.5	1.5	1	5	0.30	3.8	0.96
Meaning in Life	3.8	1.3	1	5	0.25	3.7	0.97
Personal Growth	3.6	1.4	1	5	0.28	3.9	0.96
Life Satisfaction (Sub)	4.3	1.1	1	5	0.16	3.3	0.99
Emotional Stability (Sub)	4.6	0.9	1	5	0.12	3.2	0.99
Life Purpose (Sub)	3.4	1.6	1	5	0.32	4.0	0.95
Meaning in Life (Sub)	3.7	1.4	1	5	0.27	3.8	0.96
Personal Growth (Sub)	3.5	1.5	1	5	0.29	4.1	0.95
Life Satisfaction (Sub2)	4.4	1.0	1	5	0.14	3.2	0.99
Emotional Stability (Sub2)	4.7	0.8	1	5	0.11	3.1	0.99
Life Purpose (Sub2)	3.3	1.7	1	5	0.34	4.2	0.94
Meaning in Life (Sub2)	3.6	1.5	1	5	0.26	3.9	0.96
Personal Growth (Sub2)	3.4	1.6	1	5	0.31	4.3	0.94

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.52	0.50	0	1	-0.05	3.0	0.99
Marital Status	0.68	0.48	0	1	0.10	3.1	0.99
Education	12.5	2.5	8	16	0.20	3.3	0.97
Income	4500	1500	1000	10000	0.30	3.4	0.96
Occupation	1.2	0.8	0	2	0.10	3.1	0.99
Health Status	0.75	0.43	0	1	0.05	3.0	0.99
Stress Level	3.2	1.5	1	5	0.25	3.5	0.95
Life Satisfaction	4.1	1.2	1	5	-0.10	3.0	0.99
Resilience	2.8	1.0	1	4	0.15	3.2	0.98
Optimism	3.5	1.1	1	5	-0.05	3.0	0.99
Emotional Stability	3.8	1.0	1	5	0.10	3.1	0.99
Self-Esteem	3.6	1.1	1	5	-0.05	3.0	0.99
Life Satisfaction (Control)	4.2	1.2	1	5	-0.10	3.0	0.99
Resilience (Control)	2.9	1.0	1	4	0.15	3.2	0.98
Optimism (Control)	3.6	1.1	1	5	-0.05	3.0	0.99
Emotional Stability (Control)	3.9	1.0	1	5	0.10	3.1	0.99
Self-Esteem (Control)	3.7	1.1	1	5	-0.05	3.0	0.99

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.52	0.50	0	1	-0.05	3.0	0.99
Marital Status	0.65	0.48	0	1	0.10	3.1	0.99
Education	12.5	2.5	8	16	-0.20	3.3	0.97
Income	45000	15000	20000	80000	0.30	3.4	0.96
Occupation	1.2	0.8	0	2	-0.10	3.0	0.99
Health Status	0.75	0.43	0	1	0.05	3.1	0.99
Stress Level	3.5	1.2	1	5	0.20	3.5	0.95
Life Satisfaction	4.2	1.0	1	5	-0.15	3.2	0.98
Resilience	2.8	0.9	1	4	0.10	3.1	0.99
Optimism	3.8	1.1	1	5	-0.05	3.0	0.99
Emotional Stability	3.2	0.8	1	4	0.00	3.0	0.99
Self-Esteem	3.5	0.9	1	4	-0.05	3.0	0.99
Life Satisfaction	4.2	1.0	1	5	-0.15	3.2	0.98
Resilience	2.8	0.9	1	4	0.10	3.1	0.99
Optimism	3.8	1.1	1	5	-0.05	3.0	0.99
Emotional Stability	3.2	0.8	1	4	0.00	3.0	0.99
Self-Esteem	3.5	0.9	1	4	-0.05	3.0	0.99

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2
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&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (35)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41370

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Leu Tyr Leu Ile Asp Ala Leu Met His Thr Leu Met Ile Phe Pro Leu
1          5          10          15
Pro Leu Asp Glu Asp Lys Lys Phe Asn Ile Leu Ile Ser Arg Val Val
          20          25          30
Cys Ile Xaa Lys Ile Gln His Lys Asn Ile Gly Tyr Ser Gly Pro Leu
          35          40          45
Ser Arg Gln Leu Leu Cys Tyr Arg Ser Leu Ile Ser Glu Val Arg Ser
          50          55          60
Thr Leu Arg Asn Leu Ile Glu Val Val Leu Ala Ser Leu Leu Leu Ser
65          70          75          80
Gly Asp Ala Ser Arg Asp Arg Asn Asp Trp Thr Glu Met Ser Ile Lys
          85          90          95

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&lt;210&gt; 41371

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41371

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Tyr Asp Ser Val Ile Thr Asp Cys Lys Asn Leu Ala Pro Thr Trp Glu
1          5          10          15
Thr Leu Ala Asn Asp Phe Ala Leu Glu Pro Asn Val Val Ile Ala Lys
          20          25          30
Val Asp Ala Glu Ala Glu Asn Ser Lys Ala Leu Ala Lys Glu Gln Gly
          35          40          45
Val Thr Gly Tyr Pro Thr Ile Lys Phe Phe Pro Lys Gly Ser Thr Glu
          50          55          60
Pro Ile Thr Tyr Ser Gly Ala Arg Ser Glu Glu Ala Phe Ile Glu Phe
65          70          75          80
Leu Asn Ala Asn Ala Gly Thr Asn Arg Val Val Gly Gly Gly Leu Asn
          85          90          95
Glu Lys Ala Gly Thr Val Ala Val Leu Asp Glu Phe Ile Asn Lys Tyr
          100          105          110
Ile Ser Ser Arg Asn Ala Glu Glu Leu Val Ala Glu Val Lys Lys Ala
          115          120          125
Ala Lys Gly Leu Gln Asp Lys Tyr Ala Gln Tyr Tyr Val Lys Val Ala
          130          135          140
Glu Lys Ile Ser Gln Asn Glu Glu Tyr Ala Ser Lys Glu Leu Ala Arg
145          150          155          160
Leu Lys Lys Ile Leu Glu Lys Gly Gly Ser Ala Pro Glu Lys Leu Asp
          165          170          175
Asp Ile Val Ser Arg Ser Asn Ile Leu Arg Lys Phe Val Gly Glu Lys
          180          185          190
Asp Thr Asp Ala Lys Asp Glu Leu
          195          200

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&lt;210&gt; 41372

&lt;211&gt; 298

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41372

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Ser Arg Pro Gln Arg Arg Glu Lys Arg Gln Arg Arg Arg Ile Gln Glu
1          5          10          15
Met Val Arg Ile Arg Lys Arg Val Leu Leu Lys Gln Met Ala Arg Tyr
          20          25          30
Val Gly Gly Ala Thr Glu Ala Leu Lys Ser Arg Leu Leu Asn Gln Ser
          35          40          45
Leu Ala Cys Ala Gln Ala Gln Ser Glu Asn Leu Lys Ser Lys Lys Arg
          50          55          60
Asn Asp Ser Glu Asp Glu Val Gly Ser Ser Asn Asn Ala Asp Gly Glu
65          70          75          80
Ser Asp Lys Glu Ala Thr Val Glu Ala Glu Asp Ser Glu Glu Asp Glu
          85          90          95
Ile Asp Glu Glu Glu Glu Gly Glu Glu Glu Glu Glu Asp Ile Pro
          100          105          110
Leu Ser Asp Leu Ser Glu Asp Glu Arg Glu Asp Val Val Pro His Gln
          115          120          125
Arg Leu Thr Ile Asn Asn Ser Ala Ala Ile Asn Thr Ser Ile Lys Arg
          130          135          140
Ile Ser Phe Ile Thr Ser Gln Thr Pro Phe Ser Glu His Asn Ser Leu
145          150          155          160
Val Ser Lys Glu Pro Ile Glu Val Pro Asp Pro Asn Asp Asp Leu Asn
          165          170          175
Arg Glu Leu Ala Phe Tyr Lys Val Cys Gln Ala Ala Ala Ser Glu Ala
          180          185          190
Arg Arg Leu Leu Lys Lys Glu Gly Val Pro Phe Thr Arg Pro Gly Asp
          195          200          205
Tyr Phe Ala Glu Met Val Lys Thr Asp Glu His Met Ser Lys Ile Lys
210          215          220
Lys Lys Leu Tyr Asp Glu Ala Ala Ala Lys Lys Ala Ala Ala Glu Ala
225          230          235          240
Arg Lys Gln Arg Asp Leu Lys Lys Phe Gly Lys Gln Val Gln Val Ala
          245          250          255
Lys Leu Gln Gln Arg Gln Lys Glu Lys Arg Glu Thr Leu Glu Lys Ile
          260          265          270
Asn Glu Leu Lys Lys Ser Arg Leu Pro Val Leu Phe Thr Gln Val Pro
          275          280          285
Glu Gln Leu Leu Thr Cys Ser Leu Val Ser
          290          295

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&lt;210&gt; 41373

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41373

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Tyr Ala Ala Val Leu Ser Arg Leu Ser Leu Thr Ala Gly Ser Val Leu
1          5          10          15
His Glu Arg Lys Pro Ser Val Lys Val Pro His Leu Pro Asn Pro Phe
          20          25          30
Glu Lys Ile Ile Asn Ala Tyr Ile Asn Ile Gln Pro Leu Phe Cys Lys
          35          40          45
Asn Lys Val Lys Phe Gly Leu Gly Val Val Arg Met Arg Gln Gly Met
          50          55          60
Ile Leu Asp

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65

&lt;210&gt; 41374

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41374

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Asp Glu Tyr Gln Val Arg Leu Ile Leu Cys Phe Thr Lys Ile Tyr Gly
1           5           10           15
Ala Asp Leu His Arg Leu Pro Phe Ile Asp Asp Asn Asp Cys Gly Leu
          20           25           30
Gly Ile Ala Val Arg Thr Tyr Leu Asp Asp Leu Pro Leu Gln Ala Asp
          35           40           45
Pro Thr Ser Pro Glu Ala Arg Leu Glu Val Lys Ser Lys Gly Lys Glu
          50           55           60
Trp Phe Gln His Ser Asp Ser Phe Thr Ser Asn Leu Glu Lys Ala Phe
65           70           75           80
Lys Leu Trp Asp Ala Val Ser Ala Lys Glu Ser Asn Gln Phe Ser Pro
          85           90           95
His Glu Leu Ile Phe Phe Phe Tyr Gln Val Tyr Lys Gly Thr Gln Asn
          100          105          110
Ala Ser Lys Glu Phe Lys Asp Val Gln Leu Trp Lys Glu Ala Asn Glu
          115          120          125
Trp Leu Ser Ala Arg Arg
          130

```

&lt;210&gt; 41375

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41375

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Tyr Phe Gln Tyr Leu Val Phe Leu Ile Glu Asp Asn Pro Ala Pro Ala
1           5           10           15
Ser Ser Lys Thr Gln Ala Thr Met Ala Arg Leu Ser Phe Leu Leu Val
          20           25           30
Ser Cys Leu Thr Leu Leu Val Gly Ile Ala Ser Ala Thr Ser Ala Val
          35           40           45
Ile Asp Leu Leu Pro Lys Asn Phe Asp Asp Val Val Leu Lys Ser Gly
          50           55           60
Lys Pro Ala Leu Val Glu Phe Phe Ala Pro Trp Cys Gly His Cys Lys
65           70           75           80
Asn Leu Ala Pro Val Tyr Glu Glu Leu Ala Gln Ala Phe Glu Phe Ala
          85           90           95
Lys Asp Lys Val Thr Val Ala Lys Val Asp Ala Asp Glu His Arg Asp
          100          105          110
Leu Gly Lys Arg Phe Gly Val Gln Gly Phe Pro Thr Leu Lys Trp Phe
          115          120          125
Asp Gly Lys Ser Asp Lys Pro Glu Asp Tyr Lys Gly Gly Arg Asp Leu
          130          135          140
Glu Ser Leu Ser Ala Phe Ile Ala Glu Lys Thr Gly Ile Lys Pro Arg
145          150          155          160
Gly Pro Lys Lys Glu Pro Ser Lys Val Glu Met Leu Thr Glu Ser Ser
          165          170          175
Trp Lys Ser Thr Ile Gly Gly Asp Lys Asn Val Leu Val Ala Phe Thr

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## 18285

180 185 190  
 Ala Pro Trp Cys Gly Arg Glu Ser Phe His Gln Phe Phe Pro Phe Ser  
 195 200 205  
 Trp Leu Cys Arg Thr Asp Leu Ile  
 210 215

<210> 41376  
 <211> 109  
 <212> PRT  
 <213> A.fumigatus

<400> 41376  
 Thr Ile Thr Asp Met Phe Ser Arg Leu Leu Glu Arg Lys Ala Asp Lys  
 1 5 10 15  
 Ser Gly Ile Thr Asp Lys Asp Asn Asp Leu Phe Asp Ile Ala Ile Glu  
 20 25 30  
 Asp Ser Gly Lys Ser Asn Ser Arg Lys Arg Ser Arg Gly Asn Glu Ser  
 35 40 45  
 Gly Gly Pro Ser Leu Lys Arg Gln Lys Lys Asn Glu Lys Tyr Gly Phe  
 50 55 60  
 Gly Gly Lys Lys Arg His Ala Lys Ser Gly Asp Ala Ile Ser Ser Gly  
 65 70 75 80  
 Asp Leu Arg Asn Phe Ser Val Lys Lys Met Lys Gly Gly Ser Lys Arg  
 85 90 95  
 Pro Gly Lys Ser Lys Arg Ala Ala Ala Lys Gly Arg Ser  
 100 105

<210> 41377  
 <211> 724  
 <212> PRT  
 <213> A.fumigatus

<400> 41377  
 Val Gly Arg Thr Gly Ala Gln Tyr Leu Ser Met Val Ile His His Leu  
 1 5 10 15  
 Val Val Asp Leu Val Ser Trp Arg Ile Ile Leu Ala Asp Leu Glu Ala  
 20 25 30  
 Met Leu Arg Gly Glu Asn Pro Met Ala Asn His Ser Thr Pro Phe Gln  
 35 40 45  
 Thr Trp Cys Arg Leu Gln Ala Glu Tyr Ala Arg Gln Tyr Leu Ser Pro  
 50 55 60  
 Gln His Ala Phe Pro Thr Asp Leu Pro Asp His Tyr His Gln Asp Pro  
 65 70 75 80  
 Ser Val Phe Trp Gly Leu Ala Gly Gln Pro Asn Leu Val Arg Asp Ser  
 85 90 95  
 Arg Arg Gln Val Phe Thr Leu Asp Glu His Thr Thr Arg Gln Leu Leu  
 100 105 110  
 Gly Ala Ala Asn Ala Ala Phe Ala Thr Arg Thr Asp Glu Val Leu His  
 115 120 125  
 Ala Val Leu Leu Tyr Ser Phe Leu Lys Val Phe Pro His Arg Ile Ala  
 130 135 140  
 Pro Leu Thr Phe Ser Glu Gly His Gly Arg Glu Pro Trp Asp Ser Ala  
 145 150 155 160  
 Ile Asp Leu Ser Gln Thr Val Gly Trp Phe Thr Thr Met Trp Pro Val  
 165 170 175  
 Val Ala Glu Leu Gln Gln Asn Tyr Ser Phe Leu Glu Val Val Cys Arg

	180		185		190										
Val	Lys	Asp	Ala	Arg	Arg	Ala	Val	Pro	Cys	Asn	Gly	Trp	Ala	Tyr	Phe
	195						200					205			
Val	Ser	Arg	Tyr	Leu	Asn	Pro	Ser	Gly	Arg	Gln	Ala	Phe	Gln	Gln	Phe
	210						215					220			
His	Pro	Val	Glu	Leu	Val	Phe	Asn	Tyr	Ala	Gly	Glu	Tyr	Gln	Gln	Phe
225						230					235				240
Asn	Gln	Ala	Gly	Ala	Phe	Phe	Ile	Pro	Asp	Met	Pro	Glu	Tyr	Gln	Gly
						245				250				255	
Ser	Leu	Asp	Ala	Gly	Glu	Gln	Ile	Gln	Arg	Phe	Gly	Ile	Phe	Glu	Val
			260					265					270		
Phe	Ala	Ser	Val	Val	Arg	Gly	Cys	Leu	Gln	Phe	Gln	Cys	Met	Tyr	Asn
		275					280					285			
Arg	Tyr	Met	Lys	His	Gln	Leu	Glu	Ile	Gln	Lys	Trp	Ile	Glu	Ser	Cys
	290					295					300				
Arg	Gln	Thr	Leu	Ile	Glu	Gly	Cys	Ser	Thr	Leu	Ile	Ala	Ala	Lys	Pro
305						310					315				320
Ser	Arg	Thr	Leu	Ser	Asp	Phe	Pro	Leu	Leu	Pro	Leu	Thr	Tyr	Ser	Thr
						325				330				335	
Leu	Arg	Glu	Leu	Leu	Asp	Val	Thr	Leu	Pro	Thr	Ala	Gly	Val	Ser	Val
						340				345			350		
Glu	Asn	Val	Glu	Asp	Ile	Tyr	Pro	Cys	Ser	Pro	Ser	Gln	Arg	Gly	Met
		355					360					365			
Leu	Ile	Ala	Gln	Ala	Lys	Ala	Ala	His	Asn	Tyr	Asn	Ala	Ser	Val	Thr
	370					375					380				
Trp	Ser	Ile	Arg	Ser	Arg	Ile	Asp	Ser	Arg	Pro	Asn	Val	Ala	Arg	Leu
385						390				395					400
Lys	Ala	Ala	Trp	Cys	Glu	Val	Val	Lys	Arg	His	Ala	Ile	Leu	Arg	Thr
						405				410				415	
Val	Phe	Val	Glu	Ser	Pro	Trp	Pro	Glu	Ser	Tyr	Met	Asp	Gln	Val	Val
			420					425					430		
Leu	Gln	Thr	Val	Ser	Pro	Glu	Phe	Val	Phe	Ser	Arg	Gly	Ser	Asp	Ser
		435					440					445			
Leu	Pro	Gln	Ser	Ile	Ser	Ser	Pro	Gly	Gln	Thr	Lys	Trp	Ser	Lys	Gly
	450					455					460				
Gln	Cys	Gln	His	Ile	Met	Arg	Val	Trp	Glu	Arg	Asp	Asn	Gly	Asp	Ile
465					470					475					480
Leu	Cys	Arg	Leu	Asp	Leu	Ser	His	Ala	Ile	Met	Asp	Arg	Thr	Thr	Leu
					485				490					495	
Ala	Ile	Ile	Gln	Lys	Asp	Leu	Ser	Leu	Ala	Tyr	Asp	Glu	Arg	Leu	Leu
			500					505					510		
Pro	Gly	Arg	Ala	Pro	Leu	Tyr	Arg	Asp	Tyr	Val	Ser	Tyr	Ile	Tyr	Gln
		515					520					525			
Gln	Asp	Ser	Glu	Ser	Ala	Arg	Gln	Tyr	Trp	Gln	Gly	Tyr	Leu	Glu	Gly
	530					535					540				
Val	Glu	Pro	Cys	Glu	Phe	Pro	Thr	Leu	Asn	Pro	Val	Asp	Pro	Ser	Ile
545					550				555						560
Thr	Asn	Glu	Trp	Gly	Asn	Leu	Tyr	Arg	Thr	Leu	Glu	Asp	Arg	Arg	Arg
					565				570					575	
Leu	Glu	Glu	Phe	Cys	Arg	Thr	His	Ser	Val	Thr	Pro	Trp	Asn	Val	Ala
			580					585					590		
Gly	Leu	Ala	Trp	Ala	Met	Val	Leu	Arg	Ser	Phe	Thr	Arg	Thr	Asp	Ser
		595					600					605			
Val	Cys	Phe	Gly	Tyr	Val	Lys	Ser	Gly	Arg	Asp	Leu	Pro	Ile	Asp	Gly
	610					615					620				
Ile	Ala	Gly	Thr	Ala	Gly	Pro	Val	Phe	Asn	Pro	Leu	Pro	Cys	Arg	Val



## 18287

625                      630                      635                      640  
 His Leu Thr Glu Arg Leu Thr Ala Arg Glu Thr Ile Gly Arg Leu Gln  
                                 645                      650                      655  
 Glu Glu Tyr Leu Gln Ser Leu Ala His Gln Ser Phe Pro Leu Ser Asp  
                                 660                      665                      670  
 Ile His Arg Leu Ala Gly Val Thr Ser Gly Val Leu Phe Asn Thr Ser  
                                 675                      680                      685  
 Val Ala Val Gln Thr Glu Val Ala Ser Glu Ala Glu Glu Ala Lys Arg  
                                 690                      695                      700  
 Ser Leu Glu Phe Thr Thr Val Ala Met Glu Asp Gly Thr Glu Val Ser  
 705                      710                      715                      720  
 Trp Val Glu Leu

&lt;210&gt; 41378

&lt;211&gt; 1158

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41378

Leu Ala Gln Asp Asp Met Val Ile Thr Leu Val Pro Arg Gly Gly Glu  
 1                      5                      10                      15  
 Leu Val Leu His Leu Arg His Arg Ser Arg Thr Leu Thr Thr Asp Gln  
                                 20                      25                      30  
 Ala Ser Thr Val Leu Ala Thr Phe Glu Lys Ala Leu Cys Ser Ile Leu  
                                 35                      40                      45  
 Ala Asn Ala Glu Ala Pro Met Thr Ser Ile Asp Val Phe Ser Asp His  
                                 50                      55                      60  
 Asp Lys Ala Ile Leu Trp Ser Arg Asn Arg Arg Val Pro Asp Ala Val  
 65                      70                      75                      80  
 Glu Ser Cys Val His Glu Leu Ile Gln Lys His Cys Val Glu Arg Pro  
                                 85                      90                      95  
 His Ser Pro Ala Val Asn Ala Trp Asp Gly Ala Phe Thr Tyr Gly Gln  
                                 100                      105                      110  
 Leu Asp Glu Leu Ser Ser Arg Leu Ala Val Tyr Leu Ala Ala Gln Gly  
                                 115                      120                      125  
 Val Gly Pro Asn Val Val Val Pro Leu Cys Phe Glu Lys Thr Arg Trp  
                                 130                      135                      140  
 Thr Pro Ile Ala Met Met Gly Val Met Lys Ala Gly Gly Ala Phe Leu  
 145                      150                      155                      160  
 Leu Leu Asp Pro Ser Tyr Pro Leu Gln Arg Leu Lys Asp Ile Cys Ala  
                                 165                      170                      175  
 Asp Ile Asp Cys Arg Leu Val Val Ser Ser Thr Thr His Glu Ala Met  
                                 180                      185                      190  
 Ser Arg Glu Leu Ala Ser Thr Val Val Val Val Gly Glu Asp Arg His  
                                 195                      200                      205  
 His Trp Gln Leu Glu Asn Thr Ser His Thr Ile Thr Met Pro Lys Val  
                                 210                      215                      220  
 Arg Pro Ala Asp Ala Leu Tyr Val Val Phe Thr Ser Gly Ser Thr Gly  
 225                      230                      235                      240  
 Lys Pro Lys Gly Val Val Ile Glu His Arg Ser Tyr Cys Ser Gly Ala  
                                 245                      250                      255  
 Leu Asp His Ile Arg Ser Tyr Asn Leu Thr Pro Gln Ser Arg Val Leu  
                                 260                      265                      270  
 Gln Phe Ser Ser Tyr Ala Phe Asp Ile Ser Ile Val Glu Gln Leu Ser  
                                 275                      280                      285

Val	Leu	Ile	Ala	Gly	Gly	Cys	Ile	Cys	Val	Ile	Ser	Glu	Ser	Gln	Arg
290						295					300				
Lys	Asn	Ser	Leu	Gly	Glu	Ala	Ala	Thr	Ala	Leu	Gln	Ala	Asn	His	Ala
305					310					315					320
Met	Leu	Ile	Pro	Ser	Val	Ala	Arg	Leu	Val	Arg	His	Glu	Asp	Leu	Ser
				325					330					335	
Thr	Ile	Thr	Ser	Leu	Ser	Leu	Ala	Gly	Glu	Cys	Met	Gln	Glu	Thr	Asp
			340					345					350		
Val	Ser	Tyr	Trp	Ala	Gln	His	Val	Arg	Leu	Met	Asn	Gly	Tyr	Gly	Pro
		355					360					365			
Ala	Glu	Cys	Ser	Ala	Leu	Ser	Leu	Val	Gln	Pro	Cys	Val	Leu	Pro	His
	370					375					380				
Ser	Asp	Pro	His	Asp	Ile	Gly	Tyr	Pro	Val	Gly	Ser	Val	Ala	Trp	Val
385					390					395					400
Val	Asp	Pro	His	Asp	His	His	Lys	Leu	Val	Pro	Asn	Gly	Ala	Val	Gly
				405					410					415	
Glu	Leu	Leu	Ile	Glu	Gly	Pro	Ile	Val	Gly	Arg	Gly	Tyr	Ile	Asn	Asn
			420					425					430		
Ala	Glu	Lys	Thr	Ala	Glu	Val	Phe	Ile	Glu	Pro	Pro	Thr	Trp	Leu	Arg
		435					440					445			
Thr	Leu	Arg	Gly	His	Cys	Thr	Ser	Arg	Leu	Tyr	Lys	Thr	Gly	Asp	Leu
	450					455					460				
Val	Arg	Ala	Asn	Pro	Ser	Gly	Ser	Leu	Ser	Ile	Leu	Gly	Arg	Lys	Asp
465					470					475					480
Arg	Gln	Val	Lys	Leu	Arg	Gly	Gln	Arg	Leu	Glu	Leu	Gly	Glu	Val	Glu
				485					490					495	
Ala	Asn	Val	Gln	His	Cys	Phe	Pro	Gly	Ala	Leu	Asp	Val	Val	Ala	Asp
		500						505				510			
Leu	Leu	Pro	Ser	Ser	Arg	Gly	Gly	Lys	Pro	Gln	Leu	Val	Ala	Met	Val
		515					520					525			
Phe	Gln	Asn	Ala	Glu	Arg	Ala	Ala	Arg	Ile	Ala	Pro	Glu	Ser	Asp	Ser
	530					535					540				
Lys	Leu	Ile	Ala	Glu	Pro	Ser	Val	Asp	Phe	Met	Gln	Ser	Ala	Thr	Thr
545					550					555					560
Ala	Glu	Thr	Arg	Leu	Arg	Gln	Thr	Val	Pro	Asn	Phe	Met	Val	Pro	Ser
				565					570					575	
Met	Phe	Leu	Pro	Leu	Ala	Gln	Ile	Pro	Arg	Thr	His	Ser	Asp	Lys	Val
			580					585					590		
Asp	Arg	Asn	Ser	Leu	Leu	Lys	Ala	Val	Ala	Ala	Met	Ser	Ser	Ile	Glu
		595					600					605			
Leu	Gln	Ala	Tyr	Lys	Ala	Ser	Val	Asp	Ala	Gly	His	Cys	Ser	Thr	Arg
	610					615					620				
Ala	Pro	Ser	Thr	Glu	Glu	Glu	Lys	Lys	Leu	Ala	Glu	Ile	Trp	Ala	Asp
625					630					635					640
Val	Leu	Lys	Val	Pro	Val	Glu	His	Ile	Gly	Ala	Asp	Asp	Asn	Phe	Leu
				645					650					655	
Leu	Ser	Gly	Gly	Asp	Ser	Ile	Asp	Ala	Met	Lys	Ala	Ala	Ala	Phe	Cys
		660						665				670			
Arg	Ala	Ala	Gly	Met	Ala	Leu	Ser	Val	Ala	Asp	Ile	Phe	Ala	His	Pro
		675					680					685			
Val	Leu	Ser	Asp	Leu	Ala	Lys	Val	Ala	Val	Pro	Lys	Ser	Leu	Asn	Gly
	690					695					700				
Ser	Ser	Thr	Ser	His	Gln	Pro	Phe	Ser	Leu	Ser	Pro	Val	Asp	Ser	Pro
705					710					715					720
Lys	Asp	Leu	His	Met	Ser	Leu	Met	Glu	Gln	Gly	Leu	Val	Pro	Pro	Gly
				725					730						735

Ser Ala Leu Ala Asp Leu Leu Pro Gly Thr Gln Ala Gln Gln Phe Phe  
 740 745 750  
 Ile Glu Arg Gly Thr Phe His Ser Tyr Asn Phe Ser Ile Arg Gly Pro  
 755 760 765  
 Leu Asp Arg Cys Arg Leu Gln Lys Thr Cys Thr Ala Ile Leu Ser Arg  
 770 775 780  
 His Ser Ile Leu Arg Thr Lys Phe Leu Gln Tyr Glu Gly Arg Leu Ile  
 785 790 795 800  
 Gln Ile Val Leu Asp Asn Leu Glu Thr Pro Phe Thr His Tyr Thr Thr  
 805 810 815  
 Asp Gly Asp Leu Leu Glu Phe Cys Lys Ser Leu Trp Glu Arg Asp Leu  
 820 825 830  
 Ala Ala Leu Asp Gly Leu Gly Arg Leu Pro Cys Lys Phe Thr Leu Val  
 835 840 845  
 Ser Arg Ser Glu Gln Glu His Val Phe Thr Ile Gln Ile Ser His Ala  
 850 855 860  
 Gln Trp Asp Gly Val Ser Ile Pro Arg Leu Phe Ser Asp Ile Ala Ala  
 865 870 875 880  
 Ile Tyr Asn Gln Ile Pro Leu Pro Ser Thr Thr His Phe Ala Asp Tyr  
 885 890 895  
 Val Tyr His Arg Ser Ser Arg Asp Glu Arg Pro Ala Phe Asp Phe Trp  
 900 905 910  
 Lys Lys Tyr Leu Arg Gly Ser Ser Met Pro Val Pro Phe Pro Ala Thr  
 915 920 925  
 Asn Cys Gln Asp Arg Glu His Lys Thr Gln Trp Thr Phe Gln Gly Ile  
 930 935 940  
 Lys Asn Pro Arg Leu Pro Ala Gly Ile Thr Met Ala Ser Leu Val Lys  
 945 950 955 960  
 Ala Ala Cys Gly Phe His Leu Cys Gln Leu Leu Ser Gln Asn Asp Val  
 965 970 975  
 Val Phe Gly His Thr Val Asn Gly Arg Asn Leu Ala Leu Asp Asn Val  
 980 985 990  
 Glu Ala Leu Leu Gly Cys Cys Leu Asn Phe Ile Pro Leu Arg Val Met  
 995 1000 1005  
 Leu Gln Pro Ser Trp Thr Val Leu Asp Leu Leu Ala His Val Gln Glu  
 1010 1015 1020  
 Gln Tyr Thr Arg Ala Leu Pro His Glu His Leu Glu Leu Arg Asp Ile  
 1025 1030 1035 1040  
 Phe Arg His Ser Thr Pro Trp Pro Ala Asp Thr Gln Leu Ser Phe Ile  
 1045 1050 1055  
 Val Gln His Gln Asn Ile Glu Leu His His Asn Ile Ala Leu Asp Gly  
 1060 1065 1070  
 Leu Gln Val Gln Tyr Ser Lys Phe Ala Gln Phe Asp Pro Leu Thr Glu  
 1075 1080 1085  
 Val Trp Ile Phe Ser Glu Pro His Pro Asp Arg Leu Glu Ile Gln Val  
 1090 1095 1100  
 Cys Ala Asn Thr Arg Val Leu Ser Glu Asp Gln Ala Arg Ala Leu Cys  
 1105 1110 1115 1120  
 Arg Arg Leu Cys Asp Leu Ile Glu Phe Phe Ser Ala Ser Pro Asp Cys  
 1125 1130 1135  
 Pro Leu Ser Lys Val Val Asp His Met Asp Arg Pro Gly Leu Leu Ala  
 1140 1145 1150  
 Glu Glu Lys Val Leu Asn  
 1155

&lt;211&gt; 860

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (381), (385)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41379

Asp Ala Glu Gly Gly Cys Ala Ala Tyr Ala Leu Ser Met Ile Cys Gln  
 1 5 10 15  
 Leu Val Gly Ser Ser Gln Ile Asp Val Arg Thr Glu Phe Asp Pro Lys  
 20 25 30  
 Val Ile Gln Ala Pro Ile Met Gln Arg Ile Val His His Phe Val Tyr  
 35 40 45  
 Thr Leu Gln Tyr Leu Leu Ala His Pro Asp Ala Arg Val Ala Glu Ile  
 50 55 60  
 Pro Val Val Ser Pro Gly Glu Lys Gln Leu Leu Arg Gln Trp Asn Gly  
 65 70 75 80  
 Ile Val Pro Pro Ala Ser His Gln Cys Val His Glu Ile Ile Gln Gln  
 85 90 95  
 Arg Gln Ile Glu Arg Pro Thr Ser Thr Ala Val Trp Ala Trp Asp Gly  
 100 105 110  
 Gln Leu Thr Tyr Ala Glu Leu Gly Glu Leu Ser Asp Arg Leu Ala Glu  
 115 120 125  
 Tyr Leu Ala Thr Lys Gly Val Gln Pro Glu Val Ile Val Pro Val Cys  
 130 135 140  
 Leu Glu Lys Ser Tyr Trp Thr Thr Val Ala Met Leu Gly Ile Ser Lys  
 145 150 155 160  
 Ala Gly Gly Ala Phe Ala Leu Leu Asp Pro Ser Gln Pro Glu Gln Arg  
 165 170 175  
 Leu Gln Ser Ile Cys His Gln Leu Asn Ser Ala Val Ile Leu Thr Ser  
 180 185 190  
 Glu Lys Asn Arg Asp Leu Ala Gly Lys Leu Ala Ser His Pro Ile Val  
 195 200 205  
 Leu Ser Leu Gln Ser Ser Arg Arg Trp Gly His Gly Pro Ala Lys Gln  
 210 215 220  
 Ala Pro Ala Thr Ala Arg Pro Asp His Thr Leu Tyr Val Ala Phe Thr  
 225 230 235 240  
 Ser Gly Ser Thr Gly Thr Pro Lys Gly Val Val Ile Glu His Arg Ser  
 245 250 255  
 Phe Cys Thr Ser Ala Leu Ala Leu Asn Arg Ile Thr Gly Val Asn Ser  
 260 265 270  
 Glu Ser Arg Met Leu Gln Phe Ala Gly Tyr Ser Phe Asp Gly Ser Ile  
 275 280 285  
 Met Glu Met Leu Ser Ala Leu Met Ala Gly Ala Cys Val Cys Val Pro  
 290 295 300  
 Ser Glu Phe Gln Arg Arg Asn Glu Leu Val Ala Ala Ala Lys Phe  
 305 310 315 320  
 Glu Leu Thr His Ala His Leu Thr Pro Ser Val Ala Arg His Leu Leu  
 325 330 335  
 Arg Gly Asn Pro Glu Phe Thr Lys Thr Leu Val Ser Val Gly Glu Pro  
 340 345 350  
 Met Thr Ala Ser Asp Val Ala Asp Trp Ala Ser Asn Gly Gln Cys Lys  
 355 360 365

Val	Met	Asn	Gly	Tyr	Gly	Pro	Ala	Glu	Cys	Ala	Val	Xaa	Thr	Thr	Ile
370						375					380				
Xaa	Ala	Ala	Val	Thr	Ser	Ala	Ser	Asp	Pro	Lys	Asn	Ile	Gly	Phe	Pro
385					390					395					400
Val	Ala	Gly	Val	Cys	Trp	Val	Val	His	Pro	Glu	Asn	His	Asp	Ile	Leu
				405					410					415	
Leu	Pro	Pro	Gly	Ala	Val	Gly	Glu	Leu	Leu	Ile	Glu	Gly	Pro	Thr	Leu
			420				425						430		
Ala	Arg	Gly	Tyr	Leu	Asn	Glu	Pro	Asp	Lys	Thr	Ala	Ala	Ala	Phe	Ile
		435					440						445		
Pro	Leu	Pro	Ala	Trp	Ile	Lys	Asp	Ile	Arg	Pro	Glu	Gln	Pro	His	Gly
						455					460				
Arg	Leu	Tyr	Lys	Ser	Gly	Asp	Leu	Val	Arg	Tyr	Asn	Ala	Asp	Gly	Ser
465					470					475					480
Phe	Gln	Tyr	Ile	Gly	Arg	Arg	Asp	Ser	Gln	Ile	Lys	Leu	Arg	Gly	Gln
				485					490					495	
Arg	Ile	Glu	Leu	Asp	Glu	Val	Glu	Lys	His	Val	Tyr	Gln	Cys	Trp	Pro
			500					505					510		
Gly	Val	Ile	Ala	Val	Val	Ala	Val	Glu	Met	Val	Ser	Phe	Thr	Pro	Ala
			515				520						525		
Thr	Gln	Thr	Leu	Val	Ala	Phe	Val	Val	Val	Glu	Glu	His	Val	Asp	Thr
			530				535						540		
Thr	Gly	Asp	Ile	Leu	Ala	Ala	Pro	Thr	Gln	Glu	Phe	Thr	Gly	Gln	Val
545					550					555					560
Ala	Val	Ala	Gln	Ala	Arg	Leu	Arg	Glu	Ala	Ile	Pro	Ala	Phe	Met	Val
				565					570					575	
Pro	Glu	Ile	Phe	Ile	Pro	Leu	Leu	Val	Leu	Pro	Gln	Ser	Ala	Ser	Gly
			580					585					590		
Lys	Thr	Asp	Arg	Arg	Arg	Leu	Arg	Ser	Ile	Ala	Thr	Ala	Cys	Thr	Arg
		595					600						605		
Glu	Lys	Leu	Ala	Ala	Tyr	Gly	Ala	Val	Gly	Thr	Gly	Thr	Lys	Arg	Glu
		610				615					620				
Pro	Thr	Ser	Val	Ala	Glu	Arg	Glu	Met	Gln	Ala	Ile	Trp	Ala	Gln	Ala
625					630					635					640
Leu	Asn	Leu	Pro	Leu	Ala	Glu	Ile	Gly	Met	Asp	Asp	Ser	Phe	Tyr	Gln
				645					650					655	
Leu	Gly	Gly	Asp	Ser	Ile	Thr	Ala	Met	Gln	Val	Val	Ala	His	Ala	Arg
			660					665					670		
Ser	Lys	Gly	Leu	Ala	Val	Thr	Met	Asp	Ser	Ile	Leu	Arg	Leu	Lys	Ser
			675				680						685		
Ile	Ser	Lys	Ile	Met	Ser	His	Glu	Ser	Ser	Leu	Ser	Pro	Ala	Ile	Val
			690				695						700		
His	Ile	Asp	Glu	Glu	Glu	Asp	Val	Trp	Phe	Ala	Leu	Ser	Pro	Ile	Gln
705					710					715					720
Gln	Met	Phe	Phe	Asp	Arg	Gln	Pro	Ser	Gly	Trp	Asp	Arg	Phe	Ser	Gln
				725					730					735	
Val	Phe	Leu	Leu	Arg	Val	Ser	Gln	Pro	Val	Thr	Ala	Ser	Gln	Leu	Gln
			740					745					750		
Met	Ala	Leu	His	Thr	Leu	Val	Ser	Lys	His	Pro	Met	Leu	Arg	Ala	Arg
			755					760					765		
Phe	Ala	Lys	Gln	His	Asp	Gly	Ser	Trp	Arg	Gln	Val	Ile	Thr	Ser	Lys
			770			775					780				
Ile	Gln	Glu	Ser	Tyr	Arg	Cys	Arg	Ser	His	Arg	Leu	Asn	Arg	Arg	Ser
785					790					795					800
Ser	Val	Asp	Gly	Val	Val	Ser	Ser	Gly	Ala	Cys	Ser	Leu	Ser	Ile	Gln
				805					810						815

## 18292

Lys Gly Pro Leu Ile Ala Val Asp Leu Met Ser Arg Glu Asp Gly Gly  
                   820                  825                  830  
 Ala Val Pro Leu His Gly Asn Pro Ser Phe Ser Gly Gly Ser Ser Leu  
                   835                  840                  845  
 Met Ala His His Pro Gly Arg Pro Arg Gly Tyr Ala  
                   850                  855                  860

&lt;210&gt; 41380

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41380

Gly Ile Ile Pro Thr Lys Ala Gln Gly Ser Leu Gly Phe Ser Asp Leu  
 1                  5                  10                  15  
 Lys Ser Lys Val Tyr Ser Ile Leu Gln Met Asn Glu Tyr Ser Leu Ser  
                   20                  25                  30  
 Leu Ser Tyr Asp Tyr Trp Gln Ile Asp Met Phe Ser Phe Pro Thr Leu  
                   35                  40                  45  
 Glu Tyr Ser Pro Gly Ala Met Thr Thr Tyr Leu Val Leu Asp Cys Leu  
                   50                  55                  60  
 His Gln Val His Gly Tyr Leu Ser Ser Phe Asp Arg His Leu Val Thr  
                   65                  70                  75                  80  
 Ala Leu Ala Thr Cys Ile Ser Pro Arg Ser Val Asp Leu Leu  
                   85                  90

&lt;210&gt; 41381

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41381

Arg Leu Ile Ile Cys Tyr Asp Pro Phe Ala Val Asp Ala Pro Ser Trp  
 1                  5                  10                  15  
 Phe Val Ser Phe Asp Ser Gly Val Lys Arg Arg Tyr Glu Pro Arg Phe  
                   20                  25                  30  
 Ser Tyr Ser Val Leu Pro Pro Tyr Ser Asp Asp Ser Val Ala Leu His  
                   35                  40                  45  
 Tyr Tyr Asn Ser Leu Leu Ile Lys Leu Cys Met Lys  
                   50                  55                  60

&lt;210&gt; 41382

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41382

Gln Phe Ala Phe Asp Arg Ser Ile Gly Thr Ile Leu Arg Ile Ser Lys  
 1                  5                  10                  15  
 Ser Val Glu Ser Leu Gly Leu Gln Ile Pro Trp Pro Ala Ala Thr Pro  
                   20                  25                  30  
 Gln Asp Gln Gln Arg His Pro Glu Ser Pro Ser Asp Cys Pro Pro Asn  
                   35                  40                  45  
 Ala Pro Lys Ile Ala Trp Gly Leu Gly Val Ile His Ile Val Pro Gly  
                   50                  55                  60

&lt;210&gt; 41383

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41383

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Ser Ile Leu Leu Leu Ile Asp Leu Asp Pro Leu Val Ser Ser Ala Asn
1      5      10      15
Ser Ala Ser Cys Pro Pro Pro Phe Ile Leu Ile Pro Asn Asp Asn Pro
20      25      30
Asp Asn Ser His Ser Thr Val Pro Leu Val Pro Ser Tyr Ala Ser Pro
35      40      45
Lys Val Ser Asn Arg Ser Ala Ser Arg Ser Pro Gly Pro Gln Gln Pro
50      55      60
Pro Arg Thr Asn Ser Val Thr Pro Asn Pro Pro Ala Thr Ala Leu Pro
65      70      75      80
Thr Leu Pro Lys Leu Arg Gly Ala Trp Glu Ser Ser Thr Ser Ser Pro
85      90      95
Asp Asn Arg Glu Lys Glu Ser Ser Val Tyr Tyr Thr Thr Ala Trp Gly
100     105     110
Ser Pro Tyr Ala Ala Pro Ser Pro Arg Arg Leu Ser Trp Ser Leu Ser
115     120     125
Gln Phe Ala Gly Ile Asp Arg Ala Ser Gly Asp Ser Ser Pro Ala Ser
130     135     140
Met Arg Ser Gly Ile His His Asp Pro Glu Ile Asn Asn Thr Asp Leu
145     150     155     160
Leu Lys Pro Ser Ala Ala Glu Thr Ser Ala Arg His Leu Tyr Ser Asn
165     170     175
Leu Leu Ser His Ser Pro Gly Arg Asp Leu Leu Ser Arg Lys Gly Gly
180     185     190
Lys Ser Ile Lys Asp Phe Thr Gln Asp Trp Ile Asn Gln Tyr Leu Ser
195     200     205
Gly Gln Pro Arg Thr Glu Arg Ser Asn Trp Leu Ser Asp Asp Ser Gly
210     215     220
Ser Glu Ala Pro Ser Phe Phe Thr Ala Gln Asn His Phe Ala Asp Asp
225     230     235     240
Ala Ser Asp Asp Trp Leu Gly Leu Glu Glu Asp Arg Pro Gly Glu Asp
245     250     255
Leu Leu Arg Thr Pro Thr Leu Ala Asp Phe Val Ser Arg Arg Ala Leu
260     265     270
Ala Ala Asn Gly Glu Asn Ser Leu Gly Arg Pro Lys Leu Lys Asp Ser
275     280     285
Leu His Lys Arg Thr Asp Thr Leu Arg Gln Glu Asp Phe Trp Gly Phe
290     295     300
Ala Tyr Asp Lys Asp Pro Gln Ser Leu Thr Met Thr Glu Leu Lys Asp
305     310     315     320
Thr Gln His Ser Ala Glu Met Glu Thr Gly Lys Ala Pro Ser Pro Ala
325     330     335
Glu Lys Pro Leu Pro Pro Pro Pro Pro Ala Asp Ala Asp Ser Glu Pro
340     345     350
Gln Ser Leu Ser His Pro Ser Glu Ser Ser Ser Thr Pro Val Pro Val
355     360     365
Lys Lys Pro Ala Leu Asp Lys Glu Leu Pro Thr Pro Thr Pro Thr Pro
370     375     380
Arg Pro Arg Asn Asp Thr Arg Leu Ala Arg Glu Gly Leu His Tyr Cys
385     390     395     400

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His Pro Cys Arg

&lt;210&gt; 41384

&lt;211&gt; 1905

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (137)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41384

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Lys Ile His Asn Ile Gln Arg Arg Trp Arg Pro Ala Arg Arg Arg Arg
1           5           10           15
Arg Leu Arg Ser Arg Cys Leu Leu Arg Leu Gln Gln Thr Leu Ile Ala
20           25           30
Ser Pro Asn His Tyr Arg Thr Pro Leu Arg Ala His Pro Leu Arg Tyr
35           40           45
Gln Ser Lys Ser Gln Pro Trp Thr Arg Ser Cys Leu Arg Gln Arg Gln
50           55           60
Arg Pro Gly Pro Gly Met Ile Leu Val Trp Arg Gly Lys Ala Cys Ile
65           70           75           80
Ile Ala Ile Pro Val Asp Asp Lys Arg Gly Thr Glu Glu Phe Gly Tyr
85           90           95
Arg Leu Leu Ser Val Glu Asp Val Gln Gln Arg Leu Arg Glu Trp Glu
100          105          110
Asp Glu Gly Tyr Asp Ile Arg Gly Phe Thr Val Gly Ala Pro Glu Asp
115          120          125
Leu Ser Asp Leu Glu Leu Gly Gly Xaa Ser Arg Arg Pro Phe Pro Asp
130          135          140
Ser Arg Asp Val Gln Glu Glu Trp Glu Ala Gly Lys Tyr Thr Val Ser
145          150          155          160
Ile Pro Asp Lys Ala Glu Trp Asp Ala Tyr Val Ser Trp Leu Gln Glu
165          170          175
Glu Lys Leu Arg Ala Leu Gly Val Ser Leu Gly Asp Glu Glu Met Pro
180          185          190
Pro Ser Ile Ser Pro Ala Ser Ala Ala Leu Ser Gln Met Ala Pro Phe
195          200          205
Pro Gly Leu Ile Ala Ser Pro Pro Ile Pro Thr Ala Ser Ala Thr Ser
210          215          220
Asn Pro Leu Ser Ile Pro His His Phe Ser Pro His Phe Asn Gln Ser
225          230          235          240
Ala Asn Val Ser Asn Gly Ile Gly Ser Leu Ala Ser Pro Ala Ser Gln
245          250          255
Phe Ser Val Gln Thr Pro Phe Phe Gly Val Glu Gln Asn Leu Leu Pro
260          265          270
Gly Tyr Leu Pro Phe Gln Pro Thr Pro Pro Ala Gln Gly Ala Leu Thr
275          280          285
Pro Gln Gly Phe Phe Asn Val Arg Gln Gly Asn Val Thr Ser Thr Ile
290          295          300
Gly Gly Asn Leu Pro Asn Leu Thr Ser Ile Met Ser Pro Val Ser Pro
305          310          315          320
Leu His Asp Gln Gly Ala Phe His Pro Gly Leu Glu Glu Leu Ser Leu
325          330          335

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Pro Ser Lys Asp Ser Gln His Gly His Ser Asp His Gly Pro Gln Glu  
 340 345 350  
 Ala Val Pro Gly Gly Thr His Pro Arg Ala Glu Thr Pro Asp His Phe  
 355 360 365  
 His Ala Ser Asn Val Glu Ile Ala Gln Pro Thr Pro Arg Gly His Ser  
 370 375 380  
 Arg Gly His Asn Leu Ser Glu Thr Leu Gln Lys Gly Leu Asp Gln Val  
 385 390 395 400  
 Gly Pro Ser Asp Tyr His Leu Glu Glu Ser Ile Glu Arg Gln Leu Asp  
 405 410 415  
 Glu Asp Asp Arg Glu Pro Ile Arg Asn Asn Leu His Asn Ser Glu Leu  
 420 425 430  
 Phe His Ser Arg Trp Ala Leu Pro Asp Asn Asp His His Gly Met Gln  
 435 440 445  
 Arg Val Pro Gln His Leu Gln Phe Tyr Gly Glu Asn Tyr Val Gln  
 450 455 460  
 Val His Ala Asn Glu Gly Ser Asp Ile Asp Thr Asn Pro Ser Leu Ser  
 465 470 475 480  
 Gly Ala Pro Gln Gly His Gly Ser Leu Thr Asn Asn Ile Pro Trp His  
 485 490 495  
 Glu Pro Lys Pro Ser Ser Gly Ser Phe Val Gly Gly His Lys Ser Lys  
 500 505 510  
 Leu Ser Thr Ser Thr Leu Asn Val Glu Ala Arg Glu Phe Asp Pro Ser  
 515 520 525  
 Gly Ala Ser Thr Ala Gln Asn Tyr Pro Pro Gln Gly Ser Ala Phe Gln  
 530 535 540  
 Phe Ser Gly Met Gly Gly Pro Ala Phe Thr Phe Glu Ala Gly Ala Asn  
 545 550 555 560  
 Phe Ile Pro Ala Gly Gly Phe Asn Val Ala Ala Pro Ala Phe Asn Pro  
 565 570 575  
 Ala Gly Asn Leu Gly Pro Ser Thr Ser Ala Gln Phe Ser Ala Gly Arg  
 580 585 590  
 Ala Lys Ile Phe Gly Asp Ile Asp Leu Ser Gln Ile Thr Lys Pro Pro  
 595 600 605  
 Lys Lys Ser Lys Ala Ile Pro Ile Val Arg Pro Asp Asp Asn Ala Gln  
 610 615 620  
 Asp Ser Lys Asn Lys Ala Asn Ala Glu Asp Asp His Gly Arg Val Ser  
 625 630 635 640  
 Ala Asp Arg His Lys Arg Val Arg Arg Gly Gln Ser Leu Glu Gly Asp  
 645 650 655  
 Ala Gln Tyr Ala Val Pro Ser His Pro Leu Thr Glu Thr Thr Asn Ala  
 660 665 670  
 Gln Gly Ser Lys Ala Ser Asn Val Pro Arg Asp Val Pro Ala Glu Gly  
 675 680 685  
 Lys Glu Asn Glu Val Pro Gly Gln Ile Ala His Gly Leu Asn Gln Lys  
 690 695 700  
 Glu Ala Val Asp Glu Glu Lys Lys Ser Val Glu Arg Asn Asp Thr Pro  
 705 710 715 720  
 Val Ser Glu Ala Ser Thr Trp Thr Pro Phe Asp Thr Lys Glu Glu Arg  
 725 730 735  
 Ala Asp Val Gln Pro Glu Ser Gln Glu Gln Lys Gln Glu Gly Asp Lys  
 740 745 750  
 Ala Thr Gln Lys Pro Ala Pro Ser Val Ala Gly Ala Ala Val Asn Asp  
 755 760 765  
 Glu Gly Pro Thr Lys Lys Thr Ala Glu Thr Ser Ala Lys Ser Ser Phe  
 770 775 780

Leu Lys Pro Thr Ala Lys Pro Phe Glu Phe Lys Pro Ala Val Pro Glu  
 785 790 795 800  
 Phe Val Pro Thr Val Phe Glu Gln Pro Thr Ser Ala Pro Ala Pro Ala  
 805 810 815  
 Pro Glu Lys Pro Arg Asn Asp Leu Met Ala Ser Arg Tyr Ala Val Ala  
 820 825 830  
 Ser Arg Pro Ala Ser Pro Lys Arg Asp Ser Val Pro Ser Glu Ser Ala  
 835 840 845  
 Glu Pro Val Ala His Ala Ala Asp Asp Val Pro Thr Val Ala Ala Asp  
 850 855 860  
 Val Pro Glu Asp Asp Leu Ser Gly Pro Val Ser Glu Val Asp Ser Pro  
 865 870 875 880  
 Asn Asp Glu Glu Leu Asn Ala Val Met Glu Gln Leu Asn Asp Gly Ser  
 885 890 895  
 Asp Val Gly Ile Glu Arg Leu Ser Thr Pro Arg Pro Ala Tyr Gln Pro  
 900 905 910  
 Pro Glu Ser Ala Leu Glu Pro Ser Lys Glu Lys Arg His Val His Ala  
 915 920 925  
 Asp Ile Arg Ser Glu Ala Pro Ser Pro Ser Pro Gly Arg Gly Pro Val  
 930 935 940  
 Val Gln Ala Leu Glu Val Pro Lys Leu Asp Phe Asp Ala Asp Ser Gln  
 945 950 955 960  
 Ala Ser Met Ser Pro Ser Arg Gly Val Ile Gly Gly Ser His Ser Pro  
 965 970 975  
 Val Arg Gln Leu Ile Ser Arg Asn Glu His Ile Ser Asp Trp Asp Asp  
 980 985 990  
 Val Ile Ser Ser Gly Glu Asp Glu Lys Leu Val Asn Arg Ser Arg Phe  
 995 1000 1005  
 Phe Asp Arg Arg Val Asn Asp Leu Ile Gly Ser Val Leu Glu Glu Arg  
 1010 1015 1020  
 Leu Leu Pro Leu Glu Arg Ala Leu Glu Ala Ile Gln Glu Ser Val Thr  
 1025 1030 1035 1040  
 Met Val Thr Ala Gly Ala His Glu Lys Trp Leu Ser Arg Ser Val Ser  
 1045 1050 1055  
 Ala Gln Ile Glu Glu Ser Asp Ala Asp Glu Asp Asp Glu Tyr Asp  
 1060 1065 1070  
 Glu His Gly Ser Tyr Arg Ala Arg Ser Pro Phe Ala Arg Arg Asp Arg  
 1075 1080 1085  
 Lys Leu Glu Arg Leu Lys Asn Val Ile Leu Glu Ala Leu Ala Thr Arg  
 1090 1095 1100  
 Glu Gln Gln Gln Leu Pro Glu Pro Thr Glu Asn Pro Glu Leu Thr Lys  
 1105 1110 1115 1120  
 Leu His Asp Met Val Met Glu Leu His Ser Leu Thr Ala Gln Lys Phe  
 1125 1130 1135  
 Ser Glu Asp Pro Met Ala Asn Leu Arg Glu Met Met Gln Glu Val Val  
 1140 1145 1150  
 Ser Ser Gln Leu Val Gln Tyr Gln Pro Arg Pro Ser Asp Ala Glu Glu  
 1155 1160 1165  
 Ile Gly Ala Asp Ser Leu Met Leu Gln Ile Asp Gly Leu Lys Asn Met  
 1170 1175 1180  
 Leu Arg Leu Thr Asp Glu Arg Ala Glu Gln Glu Tyr Lys Leu Arg Arg  
 1185 1190 1195 1200  
 Glu Ala Gln Asp Ser Val Ala Glu Leu Gln Arg Leu Leu Lys Leu Ala  
 1205 1210 1215  
 Glu Glu Glu Ala Ala Arg His Ser Glu Ala Ala Glu Ser Ala Glu Ala  
 1220 1225 1230

Arg Leu Leu Gln Phe Lys Glu Glu Lys Ile Pro Tyr Phe Glu Gln Ile  
 1235 1240 1245  
 Gln Phe Arg Phe Asp Thr Leu Glu Gln Glu His Ala Thr Leu Lys Leu  
 1250 1255 1260  
 Thr Leu Ala Glu Val Ser Ser Lys Asn Ile Ser Leu Glu Gly Thr Leu  
 1265 1270 1275 1280  
 Asp Glu Tyr Arg Phe Ser Ser Asp Asn Trp Lys Arg Glu Ser Asp Gln  
 1285 1290 1295  
 Ala Lys Ser Glu Leu Glu Lys Thr Lys Ala Glu Asn Glu Lys Leu Arg  
 1300 1305 1310  
 Gly Thr Ile Asp His Leu Lys Thr Arg Ile Glu Asp Gly Leu Ser Ile  
 1315 1320 1325  
 Arg Gln Asn Leu Ser Glu Lys Phe Asp Arg Leu Gln Asp Glu Met Val  
 1330 1335 1340  
 Ala Val Thr Arg Asp Ile Thr Arg Asp Gln Ala Leu Trp Arg Arg Arg  
 1345 1350 1355 1360  
 Glu Glu Glu His Ile Ala Lys Tyr Asn Glu Leu Arg Thr Ala Tyr Ser  
 1365 1370 1375  
 Arg Glu Val Lys Leu Arg Glu Lys Leu Glu Asn Asp Ile Ser Glu Leu  
 1380 1385 1390  
 Glu Gln Gln Glu Arg Glu Ala Ala Lys Leu Lys Phe Ile Phe Gly Gln  
 1395 1400 1405  
 Ser Gln Gln Glu Asn Ala Arg Leu Glu Glu Leu Val Ala Asn Leu Arg  
 1410 1415 1420  
 Leu Glu Asn His Glu Leu Gln Asn Lys Ala Ala Arg Tyr Glu Arg Glu  
 1425 1430 1435 1440  
 Phe Asn Glu Ala Arg Glu Thr Ser Arg Thr Glu Ile Gln Arg Thr Arg  
 1445 1450 1455  
 Thr Tyr Leu Glu Ala Asp Leu Glu Ala Ala Asn Ser Gln Val Asn Ile  
 1460 1465 1470  
 Val Arg Ala Glu Leu Glu Ala Gln Ile Ile Arg Leu Gln Ser Gln Leu  
 1475 1480 1485  
 Asp Asn Val Arg Leu Asp Thr Asp Thr Ala Arg Glu Arg Tyr Glu Leu  
 1490 1495 1500  
 Leu Leu Glu Glu Ala Ser Glu Thr Lys Ala Ser Ala Leu Ala Ala Ala  
 1505 1510 1515 1520  
 Ala Glu Ala Lys Glu Arg Ala Met Glu Glu Gln Arg Arg Thr His Glu  
 1525 1530 1535  
 Arg Val Leu Asn Asp Leu Arg Glu Arg His Ala Arg Ala Leu His Asn  
 1540 1545 1550  
 Ser Thr Glu Asp Arg Gln Arg Ala Glu Ser His Leu Met Glu Arg Leu  
 1555 1560 1565  
 Ala Leu Ala Asp Asp Lys Val His His Leu Glu Asp Arg Val Lys His  
 1570 1575 1580  
 Leu Glu Glu Lys Leu Glu Ile Ala Asn Ala Ala Ala Arg Ala Ala Ala  
 1585 1590 1595 1600  
 Glu Ala Ala Gln Thr Val Lys Ala Glu Ser Ser Gln Ser Pro Val Ala  
 1605 1610 1615  
 His Leu Thr Ser Pro Ser Met Thr Phe Ser Lys Asn Ser Met Val Pro  
 1620 1625 1630  
 Glu Lys Ile Ser Pro Gln Ala Leu Arg Glu Ser Ile Leu Val Leu Gln  
 1635 1640 1645  
 Asp Gln Leu Gln Gln Arg Glu Ala Arg Ile Glu Glu Leu Glu Gln Glu  
 1650 1655 1660  
 Leu Ser Gly Val Asp Lys Asp Ala Pro Asn Lys Leu Lys Glu Lys Asp  
 1665 1670 1675 1680

## 18298

Thr Glu Ile Thr Trp Leu Arg Glu Leu Leu Gly Val Arg Ile Asp Asp  
 1685 1690 1695  
 Leu Gln Asp Ile Ile Asn Thr Leu Ser Ser Pro Ser Phe Asn Gln His  
 1700 1705 1710  
 Ala Val Arg Asp Ala Ala Ile Arg Leu Lys Ala Asn Leu Gln Met Gln  
 1715 1720 1725  
 Leu Gln Glu Arg Glu Arg Ala Gln Ser Gly Gln Asn Phe Pro Ser Leu  
 1730 1735 1740  
 Pro Arg Leu Ala Asp Leu Ala Ala Ser Pro Arg Ser Leu Pro Leu Ala  
 1745 1750 1755 1760  
 Ala Ala Ala Ala Trp Gly Asn Trp Arg Lys Gly Arg Glu Asn Ala Asn  
 1765 1770 1775  
 Ser Ala Ser Glu Gln Thr Pro Ser Lys Ser Ser Asn Ala Gly Ser Phe  
 1780 1785 1790  
 Leu Ser Gly Leu Leu Thr Pro Pro Ser Ser Asn Phe Arg Gln Ala Pro  
 1795 1800 1805  
 Ser Asn Pro Gly Gly Ala Ala Thr Thr Gly Trp Arg Arg Ser Ser Glu  
 1810 1815 1820  
 Thr Arg Pro Leu Ser Asn Ile Asn Thr Thr Pro Arg Pro Leu Ser Ser  
 1825 1830 1835 1840  
 Arg Gln Thr Ala Ser Leu Pro Glu Pro Pro Ser Thr Pro Pro Leu Leu  
 1845 1850 1855  
 Arg Arg Ala Ser Tyr Asp His Asp Ala Glu Pro Ala Asp Tyr Ala Asp  
 1860 1865 1870  
 Ala Ser Phe Gly Glu Asp Val Glu Ser Thr Ala Asp Gly Leu Val Ser  
 1875 1880 1885  
 Ala Ser Pro Lys Gly Thr Glu Glu Gly Pro Phe Gly Pro His Leu Thr  
 1890 1895 1900  
 Ser  
 1905

&lt;210&gt; 41385

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41385

Arg Gly Cys Val Asp Pro Arg Gly Arg Arg Arg Leu Asp Ala Thr Ser  
 1 5 10 15  
 Glu Glu Leu Ser Ser Ser Arg Thr Ile Arg Glu Leu Ser Lys Pro Cys  
 20 25 30  
 Pro Ser Cys Glu Ala Gln Thr Glu Arg Ala Gly Gly Cys Lys Phe Met  
 35 40 45  
 Arg Cys Lys Gln Ser Phe Phe Pro Leu Trp Tyr Ile Arg Trp Leu Met  
 50 55 60  
 Val Val Gln Val Thr Tyr Val Val Arg Thr Gly Val Gly Thr Val Gly  
 65 70 75 80  
 Phe Gly Gly Ser Arg Ala Ile Leu Arg Leu Thr Val Phe Thr Arg Lys  
 85 90 95  
 Asn Arg Val Glu Tyr Gln Gly Ser Lys Thr Ser Ser Leu Ser Pro Leu  
 100 105 110  
 Asp Arg Ile Val Ser Asn Phe Arg Leu Thr Ala Ser Met Pro Thr Asn  
 115 120 125  
 Ile Ile Ser Leu Ile Ser His Phe Ser Leu Cys Asn Ser Lys Leu Thr  
 130 135 140  
 Ala Leu Asn Leu Ala His Pro

145

150

&lt;210&gt; 41386

&lt;211&gt; 771

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (541)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41386

Asn	Ala	Leu	Ile	Ala	His	Arg	Gly	Ile	Leu	Ser	Leu	Ser	His	Arg	Thr
1				5					10					15	
Ile	Leu	Pro	Phe	Ser	Glu	Ser	Ala	Gly	Ser	Ser	His	Ser	Leu	Arg	Thr
			20					25					30		
Glu	Asn	Ala	Thr	Cys	Arg	Tyr	Asn	Gly	Asp	Thr	Val	Ala	Ser	Leu	Ala
	35						40				45				
Lys	Arg	Ile	Ile	Ile	Pro	Thr	Thr	Ala	Phe	Thr	Thr	Pro	Ala	Glu	Val
	50					55					60				
Ala	Glu	Arg	Gln	Arg	Asp	Pro	Trp	Ser	Gln	Ser	Gly	Lys	Tyr	Gly	Gln
65					70				75						80
Gly	Trp	Val	Tyr	Phe	Ser	Val	Ile	Leu	Leu	Ala	Leu	Ala	Thr	Ile	Ile
				85				90						95	
Arg	Phe	Tyr	His	Val	Trp	Ser	Asp	Lys	Met	Arg	Ile	Ala	Leu	Tyr	Lys
			100					105					110		
Glu	Asp	Leu	Ala	Gly	Ala	Met	Gln	Gly	Asn	Ser	Leu	Gln	Asp	Glu	Tyr
		115					120					125			
Glu	Leu	Pro	Ser	Ala	Ala	Thr	Asp	Ser	Ser	Thr	Ala	Gln	Phe	Phe	Pro
	130					135					140				
Ala	Gly	Gly	Pro	Leu	Pro	Gly	Met	Lys	Lys	Gln	Gln	Ser	Ser	Ile	Ser
145					150					155					160
Thr	Ile	Ala	Pro	Leu	Asn	Asn	Thr	Ala	Ala	Phe	Leu	Arg	Trp	Ile	Phe
				165					170					175	
Tyr	Arg	Pro	Leu	Pro	Val	Leu	Arg	Ile	Gly	Asp	Leu	Arg	Ile	Val	Phe
			180					185					190		
Pro	Ser	Leu	Gly	Thr	Ser	Ala	Val	Val	Leu	Ala	Ala	Phe	Val	Phe	Val
		195					200					205			
Thr	Leu	Tyr	Thr	Phe	Val	Pro	Gln	Pro	Leu	Tyr	Tyr	Ser	Ser	Ile	Thr
	210					215					220				
Val	Gly	Ser	Pro	Pro	Leu	Ala	Ile	Arg	Ala	Gly	Met	Ile	Ala	Val	Ala
225					230					235					240
Met	Val	Pro	Trp	Ile	Val	Ala	Leu	Ser	Thr	Arg	Ala	Asn	Phe	Ile	Ser
				245					250					255	
Met	Leu	Thr	Gly	Phe	Gly	His	Glu	Arg	Leu	Asn	Val	Leu	His	Arg	Trp
		260					265						270		
Ser	Gly	Tyr	Leu	Cys	Leu	Phe	Leu	Ser	Leu	Val	His	Thr	Ile	Pro	Phe
	275						280					285			
Phe	Val	Thr	Pro	Ile	Trp	Glu	Asp	Gly	Ala	Leu	Ile	Trp	Tyr	Gln	Gln
	290					295					300				
Tyr	Leu	Pro	Arg	His	Val	Trp	Ile	Tyr	Gly	Thr	Gly	Leu	Ala	Ala	Leu
305					310					315					320
Val	Pro	Leu	Val	Phe	Leu	Cys	Ile	His	Ser	Leu	Pro	Ala	Leu	Arg	Arg
				325					330					335	
Arg	Met	Tyr	Glu	Leu	Phe	Leu	Phe	Ile	His	Met	Pro	Val	Ser	Val	Val

Variable	Mean	Standard deviation	Minimum	Maximum
Age	34.5	10.2	22	55
Gender	0.5	0.5	0	1
Marital status	0.7	0.5	0	1
Education	12.5	2.5	9	16
Income	15.2	8.5	5	35
Health status	0.8	0.4	0	1
Employment status	0.6	0.5	0	1
Religious affiliation	0.3	0.5	0	1
Political affiliation	0.4	0.5	0	1
Volunteer status	0.2	0.4	0	1
Charitable giving	0.1	0.3	0	1
Community involvement	0.3	0.5	0	1
Life satisfaction	0.7	0.4	0	1
Trust in government	0.6	0.5	0	1
Confidence in president	0.5	0.5	0	1
Support for military action	0.4	0.5	0	1
Concern for civil liberties	0.6	0.5	0	1
Perceived threat from terrorism	0.5	0.5	0	1
Willingness to sacrifice	0.3	0.4	0	1
Patriotism	0.7	0.4	0	1
Support for national security	0.6	0.5	0	1
Belief in American exceptionalism	0.8	0.4	0	1
Trust in the media	0.5	0.5	0	1
Confidence in Congress	0.4	0.5	0	1
Support for the Supreme Court	0.6	0.5	0	1
Belief in the right to life	0.7	0.4	0	1
Support for gay rights	0.5	0.5	0	1
Belief in the separation of church and state	0.6	0.5	0	1
Support for the environment	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	1
Support for the War on Terror	0.6	0.5	0	1
Belief in the right to free speech	0.8	0.4	0	1
Support for the right to life	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	1
Support for the War on Terror	0.6	0.5	0	1
Belief in the right to free speech	0.8	0.4	0	1
Support for the right to life	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	1
Support for the War on Terror	0.6	0.5	0	1
Belief in the right to free speech	0.8	0.4	0	1
Support for the right to life	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	1
Support for the War on Terror	0.6	0.5	0	1
Belief in the right to free speech	0.8	0.4	0	1
Support for the right to life	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	1
Support for the War on Terror	0.6	0.5	0	1
Belief in the right to free speech	0.8	0.4	0	1
Support for the right to life	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	1
Support for the War on Terror	0.6	0.5	0	1
Belief in the right to free speech	0.8	0.4	0	1
Support for the right to life	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	1
Support for the War on Terror	0.6	0.5	0	1
Belief in the right to free speech	0.8	0.4	0	1
Support for the right to life	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	1
Support for the War on Terror	0.6	0.5	0	1
Belief in the right to free speech	0.8	0.4	0	1
Support for the right to life	0.7	0.4	0	1
Belief in the right to privacy	0.6	0.5	0	1
Support for the death penalty	0.5	0.5	0	1
Belief in the right to bear arms	0.7	0.4	0	

				340				345				350				
Phe	Val	Ala	Met	Leu	Phe	Trp	His	Cys	Lys	Asp	Phe	Leu	Ala	Ser	Trp	
355				360				365								
Asn	Tyr	Leu	Trp	Ala	Thr	Ile	Ala	Ile	Trp	Val	Met	Ser	Tyr	Ala	Met	
370				375				380								
Arg	Leu	Phe	Tyr	Leu	Asn	Trp	Thr	Asn	Pro	Phe	Arg	Met	Ser	Phe	Met	
385					390				395				400			
Ile	Gly	Glu	Glu	Ser	Ala	Val	Thr	Ile	Leu	Pro	His	Asn	Ala	Ile	Lys	
				405				410				415				
Val	Thr	Val	Ala	Thr	Thr	Met	Arg	Trp	Lys	Pro	Gly	Gln	Tyr	Val	Tyr	
				420				425				430				
Leu	Arg	Met	Pro	Gly	Ile	Ser	Leu	Leu	Gly	Arg	His	Pro	Phe	Thr	Ile	
				435				440				445				
Ala	Ser	Leu	Cys	Ser	Asp	Asp	Phe	Pro	Ser	Glu	Tyr	Gly	Glu	Asn	Tyr	
				450				455				460				
Arg	Asp	Leu	Ala	Leu	Val	Phe	Arg	Pro	Phe	Gly	Gly	Phe	Thr	Arg	Lys	
465					470				475				480			
Val	Leu	Leu	Lys	Ala	Phe	Glu	Tyr	Gly	Pro	Tyr	Lys	Thr	Trp	Thr	Ala	
				485				490				495				
Phe	Leu	Glu	Gly	Pro	Tyr	Gly	Gly	Met	Arg	Arg	Glu	Met	Ala	Ala	Phe	
				500				505				510				
Asp	Asp	Val	Ile	Phe	Phe	Ala	Gly	Gly	Ser	Gly	Ile	Thr	Ala	Ile	Ala	
				515				520				525				
Ser	Gln	Leu	Leu	Asp	Leu	Ile	Lys	Lys	Met	Arg	Asp	Xaa	Lys	Ala	Phe	
				530				535				540				
Thr	Lys	Arg	Val	Arg	Val	Ile	Trp	Ala	Leu	Arg	Ser	Pro	Glu	Ala	Ile	
545					550				555				560			
Glu	Trp	Phe	Arg	Glu	Glu	Leu	Arg	Ile	Cys	Arg	Glu	His	Ala	Pro	Pro	
				565				570				575				
Asn	Thr	Val	His	Cys	His	Phe	Phe	Leu	Thr	Gly	Pro	Ala	Gln	Asp	Gly	
				580				585				590				
Pro	Gly	Glu	Gln	Pro	Gly	His	Asp	Ile	Val	Gln	Glu	Lys	Ile	Tyr	Asn	
				595				600				605				
Val	Leu	Ser	Gly	Met	Asp	Lys	Arg	Asn	Ser	Ala	Tyr	Ile	Arg	Glu	Glu	
				610				615				620				
Ala	Ala	Gly	Asp	Leu	Glu	Arg	Glu	Lys	Glu	Leu	Arg	Arg	Glu	Asn	Glu	
625					630				635				640			
Asp	Ala	Ile	Thr	Ser	Leu	Pro	Arg	Ile	Tyr	Thr	Ser	Pro	Val	Ile	Gly	
				645				650				655				
Ser	Arg	Gln	Phe	Thr	Ala	Leu	Pro	Gly	Leu	Gln	Ser	Gly	Pro	Gly	Asn	
				660				665				670				
Val	Pro	Phe	Asp	Phe	Gly	Phe	Ser	Asn	Ala	Pro	Ser	Pro	Pro	Gln	Lys	
				675				680				685				
Gln	Thr	Pro	Arg	Phe	Ala	Ser	Leu	Pro	Leu	Gln	Arg	Arg	Asp	Gly	Trp	
				690				695				700				
Arg	Ile	Asp	His	Val	Arg	Pro	Asp	Ile	Pro	Arg	Met	Leu	Thr	Glu	Tyr	
705					710				715				720			
Ser	Gln	Thr	Phe	Gly	Arg	Arg	Thr	Cys	Val	Phe	Val	Cys	Gly	Pro	Pro	
				725				730				735				
Ser	Met	Arg	Ile	Glu	Val	Thr	Lys	Thr	Val	Ala	His	Leu	Gln	Gln	Gln	
				740				745				750				
Val	Met	Met	Asp	Ser	Arg	Arg	Asp	Glu	Ile	Phe	Leu	His	Ala	Glu	Asn	
				755				760				765				
Tyr	Asn	Ile														
770																

&lt;210&gt; 41387

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41387

```

Pro Gly Gln Thr Cys Asp Ile Leu Asn Glu Thr Phe Tyr Asn Ile Ile
1          5          10          15
His Asp Ile Val Ala Gln Val His Arg Asp Glu Lys Val Ala Arg Met
          20          25          30
Arg Ser Ala Val Val Val Ala Arg Gln Lys Ala Glu Glu Glu Val Ala
          35          40          45
Arg Arg Arg Glu Asp Ala Gly Gly Lys Ala Thr Gly Ser Val Asp Ser
          50          55          60
Glu Asp Leu Lys Gly Ile Arg Val Glu Thr Asp Gly Ala Val Phe Glu
          65          70          75          80
Asp Gly Lys Val Tyr Leu Lys Gly Asn Pro Leu Gln Thr Thr Lys Glu
          85          90          95
Ile Ile Cys Pro Asp Cys Arg Leu Pro Arg Leu Leu Tyr Pro Val Thr
          100          105          110
Gly Val Gly Ala Arg Pro Pro Pro Asp Pro Tyr Arg Glu Tyr Cys Gln
          115          120          125
Asn Gln Pro Leu Ile Thr Lys Pro Gly His Asp Val His Gly Asn Pro
          130          135          140
Phe Ala Thr Asp Lys Leu Asn Pro Lys Lys Lys Lys Gln Thr Asn Ala
          145          150          155          160
Ser Asn Thr Pro Ala Ser Ser Pro Pro Thr Thr Pro Asp Ser Ser Phe
          165          170          175
Asn Lys Thr Gln Glu Lys Val Ser Tyr Pro Thr Val Lys Cys Pro Asn
          180          185          190
Cys Pro Arg Tyr Phe Val Val Thr Arg Val Ala Gln His Leu Asp Arg
          195          200          205
Cys Met Gly Leu Ser Gly Arg Gln Ala Asn Arg Asn Lys Thr Pro Met
          210          215          220
Glu Asn Gly Asn Gly Ser Pro Ser Thr Gly Pro Pro Lys Arg Pro Leu
          225          230          235          240
Ala Asp Asp Asp Ala Pro Pro Thr Leu Thr Lys Lys Lys Lys Leu Asn
          245          250          255
Thr His Lys Lys Leu Ser Gly Lys Lys Pro Pro Leu Pro Pro Ser Ser
          260          265          270
Lys Leu Arg Asn Gly Leu Thr Pro Asp Met Ala Ala Ala Ala Asp Ala
          275          280          285
Ala Ala Ser Gly Asp Val Asp Val Lys Arg Glu Ala Lys Asp Asn Ala
          290          295          300

```

&lt;210&gt; 41388

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41388

```

Ile Leu Gly Gln Arg Ala Gly Ala Lys Arg Gly Lys Lys Ala Lys Ala
1          5          10          15
Pro Leu His Ser Ala Gly Pro Val Arg Arg Pro Glu Asn Phe Gly Asn
          20          25          30
Val Ala Gly Gly Tyr Arg Lys Glu Asp Gln Asp Glu Glu Tyr Met Ser

```

## 18302

```

      35              40              45
Ala Gly Thr Ala Arg Gln Val Arg Gln Asp Thr Ala Ala Leu Arg Ser
  50              55              60
Lys Gly Ser Ala Ser Ser Leu Gln Val Pro Gln Arg Gln Ser Ala Leu
  65              70              75              80
Ser Ser Leu Glu Ser Ser Ala Ala Ser Ser Arg Thr Gln Ser Pro Ala
      85              90              95
Pro Arg Ser Ser Gly Thr Pro Lys Asn Pro Pro Ser Ala Ser Gly Pro
      100              105              110
Val Leu Ser Asp Leu Leu Pro Asn Val Lys Ser Lys Ala Ala Lys Pro
      115              120              125
Ser Thr Arg Gln Gln Gly Gly Gly Ser Ser Ser Lys Gly Ala Leu Thr
      130              135              140
Thr Asn Asn Ile Ser Asp Leu Thr Ala Ala Ile Ala Ala Leu Glu Val
      145              150              155              160
Ser Thr Asn Pro Thr Leu Gly Asn Gly Arg Gln Lys Cys Asn Cys Tyr
      165              170              175
Ala Thr Ile His Pro Leu Phe Glu Pro Ala Pro Asn Cys Arg Leu Leu
      180              185              190
Pro Gln Gly Gly Arg Arg Ile Ser Ala Met Arg Ile
      195              200

```

&lt;210&gt; 41389

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41389

```

Ile His Gly Ser Arg Ser Leu Ala Ala Cys Ile Phe Thr Thr Pro Gly
  1              5              10              15
Tyr Phe Phe Phe Gly Phe Leu Pro Gly Asn Asn His Arg Gly Ala His
      20              25              30
Ala Ser Asp Phe Phe Ile Ala Met Asn Leu Ser Asn Asp Ile Met Asp
      35              40              45
Asp Val Val Glu Cys Leu Ile Glu Asn Val Ala Gly Leu Thr Trp Ser
      50              55              60
Ala Asn Val Leu
  65

```

&lt;210&gt; 41390

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41390

```

Ile Leu Ile Phe Leu Ala Met Ala Tyr Gln Phe Phe Ala Lys Ala His
  1              5              10              15
Gln Ser Asn Lys Ala Pro Ser Ser Pro Pro Leu Ser Pro Pro Ala Ser
      20              25              30
Ser Pro Ser Pro Arg His Ser Arg Pro Pro Met Gln Pro Pro Ser Leu
      35              40              45
Leu Val Leu Pro Gln Ser Ser Ser Pro Ser Ala Thr Pro Asn Ile Ala
      50              55              60
Ser Arg Leu Lys Pro Pro Ala Ala Arg Asp Pro Leu Phe Gln Pro Pro
      65              70              75              80
Ala Tyr Pro His Ala Ile Ser Pro Gly Tyr Gln Thr Pro His Pro His

```



## 18303

```

      85          90          95
Val Thr Ile Asp Pro Val Ser Thr Ala His Ile Pro Ser Leu Thr Arg
      100          105          110
Ile Thr Gly Leu Leu Leu Pro Ile Arg Tyr Pro Asn Ser Phe Tyr Thr
      115          120          125
Ala Thr Ile Thr Asp Pro Val Ile Ala Ser Val Ser Arg Val Ala Ile
      130          135          140
Tyr His Asp His Pro Val Ala Ala Ala Pro Ser Thr Thr Pro Ser Pro
      145          150          155          160
Ala Ala Ser Gly Leu Gly Ala Ser Thr Gly Thr Asp Lys Val Ile Gly
      165          170          175
Gly Ile Arg Cys Arg Leu Glu Arg Leu Ser Val Gly Ser Glu Thr Ser
      180          185          190
Ser His Ser Gln Lys Pro Glu Pro Thr Asn Leu Tyr Ile Gln Thr Leu
      195          200          205
His Leu Leu Ser Pro Tyr Arg Cys Cys Gly Ile Ala Ala Ser Leu Leu
      210          215          220
Asn Ser Ile Leu Phe Ala Ser Pro Pro Ser Pro Ser Ser Ser Ser
      225          230          235          240
Ser Ser Ser Phe Ser Ser Tyr Asn Val Ser Glu Leu Val Lys His Tyr
      245          250          255
Asn Ile Arg Thr Val Thr Ala His Val His Glu Ala Asn Glu Glu Gly
      260          265          270
Leu Arg Trp Tyr Ile Ala Arg Gly Phe Gln Val Gln Glu Gly Leu Val
      275          280          285
Glu Asn Tyr Tyr Arg Arg Leu Lys Pro Ser Gly Ala Lys Ile Val Lys
      290          295          300
Leu Val Leu Gln Trp Ser Asp Asp Asp Gly Ser Asp Ala Asp Gly Thr
      305          310          315          320
Ser Gln Ser Gly Ser Glu Gln Ala Gln Pro Gly Gln Asn Asp Ala Arg
      325          330          335
Asp Gln Asp Glu Asp Asp Asp Trp Glu Lys Val Glu Ala Glu Asp Ser
      340          345          350
Asp Asp Pro Asp Ala Gln Gly Val Gln Phe Thr Glu Ser Arg Ile Leu
      355          360          365
Glu Gly Gly Asp Gly Pro Pro Arg Lys Arg Lys Ala Asp Asp Glu Pro
      370          375          380
Gln Arg His
      385

```

&lt;210&gt; 41391

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41391

```

Met Leu Leu Arg Thr Ile Asn Gly Ile Ser Thr Ser Gly Phe Gln Pro
1          5          10          15
Met Pro Cys Asn Leu Cys Asp Leu Ser Asp Phe Leu Ala Glu Phe Leu
20          25          30
Thr Arg His Gly Ser Thr Val Ile Gly Thr Gly Ala Phe Asn Arg Thr
35          40          45
Pro Phe Leu Leu Arg Arg Leu Lys Leu Leu Ser Asp Leu Phe
50          55          60

```

&lt;210&gt; 41392

18304

<211> 63  
<212> PRT  
<213> A.fumigatus

<400> 41392

Asn	Pro	Gln	Asn	Arg	Cys	Met	Ser	Thr	Pro	Lys	Lys	Leu	Ser	Gly	Val
1				5					10					15	
Leu	Leu	Gln	Gly	Ser	Lys	Ser	Leu	Glu	Phe	Arg	Ser	Arg	Ser	Ile	Trp
		20						25					30		
Ala	Leu	Lys	Pro	Asn	Cys	Pro	Tyr	Lys	Lys	Phe	Phe	Leu	Pro	Ser	Thr
		35					40					45			
Thr	Leu	Leu	Ala	Lys	Asn	Asn	Phe	Ser	Pro	Ser	Phe	Ser	Pro	Phe	
	50					55					60				

<210> 41393  
<211> 70  
<212> PRT  
<213> A.fumigatus

<400> 41393

Ala	Ala	Glu	Thr	Ser	Phe	Phe	Thr	Ser	Ile	His	Leu	Arg	Asp	Asp	Ser
1				5					10					15	
Ser	His	Gln	Phe	Ser	Phe	Asn	Lys	Ala	Leu	Thr	Ser	Leu	Val	Val	Ile
		20						25					30		
Leu	Ile	Pro	Ser	Ser	Lys	Val	Thr	Glu	Ser	Ile	Glu	Leu	Pro	Gly	Pro
		35					40					45			
Gln	Tyr	His	Asn	Asn	Arg	Tyr	His	Val	Trp	Arg	Arg	Asn	Gly	Ala	Thr
	50					55					60				
Pro	Ala	Ser	Leu	Arg	Arg										
	65				70										

<210> 41394  
<211> 608  
<212> PRT  
<213> A.fumigatus

<400> 41394

Thr	Ala	Tyr	Asp	Ser	Leu	Arg	Thr	Val	Gly	Ser	Leu	Leu	Leu	Thr	Asn
1				5					10					15	
Ala	Asp	Phe	Arg	Leu	Phe	Val	Glu	Asp	Leu	Thr	Thr	Val	Gly	Arg	Glu
		20					25						30		
Ile	Phe	Ser	Glu	Thr	Ala	Leu	Ala	Leu	Ser	Asp	Thr	Ser	Lys	Gln	Val
		35					40					45			
Gly	Glu	Lys	Leu	Lys	Pro	Ser	Glu	Glu	Glu	Arg	Gly	Ala	Val	Lys	Gly
	50					55					60				
Ala	Gly	Ala	Asp	Asp	Gly	Arg	Ala	Val	Ser	Gly	Glu	Glu	Leu	Arg	Lys
	65				70				75					80	
Glu	Val	Thr	Gln	Val	Ala	Glu	Val	Ala	Gly	His	Gly	Leu	Lys	Ala	Thr
			85						90					95	
Gly	Arg	Asp	Ala	Ile	Asp	Ser	Ala	Lys	Glu	His	Leu	Thr	Gly	Gln	Glu
		100					105						110		
Arg	Asp	Thr	Leu	Leu	His	Arg	Leu	Lys	Arg	Ala	Val	Ile	Lys	Leu	Arg
		115				120						125			
Glu	Arg	Ser	Asp	Tyr	Ser	Asp	Ser	Val	Ala	Thr	Leu	Ser	His	Leu	Val
	130					135					140				
Gln	Arg	Tyr	Ala	Gln	Leu	Tyr	Ala	Asn	Ala	Ala	Ser	Glu	Val	Val	Ser

## 18305

145 150 155 160  
 Thr Ala Glu Glu Glu Ala Asp Val Asn Glu Asp Leu Gln Gln Ala Met  
 165 170 175  
 Glu Gln Leu Trp Lys Leu Leu Gln Ser Tyr Gly Asp Val Glu Glu Trp  
 180 185 190  
 Lys Lys Leu Glu Glu Arg Phe Lys Asp Val Ile Lys His Ala Asn Lys  
 195 200 205  
 Asp Pro Glu Phe Glu Lys Ile Met Ser Glu Ile Gly Ser Ala Leu Gln  
 210 215 220  
 Glu Met Leu Thr Asp Pro Lys Phe Phe Asp Lys Ala Pro Gln Lys Val  
 225 230 235 240  
 Asp Glu Leu Lys Glu Lys Ser Lys Asn Val Gly Thr Glu Thr Thr Leu  
 245 250 255  
 Arg Arg Asp Val Asp Ala Phe Leu Val Gln Ala Lys Arg Thr Leu Arg  
 260 265 270  
 Thr Val Pro Glu Asp Thr Gln Val Ser Lys Leu Val Asp Val Thr Arg  
 275 280 285  
 Lys Ile Tyr Trp Asp Ala Trp Asn Gly Tyr Gln Asp Arg Lys Ser Gln  
 290 295 300  
 Leu Pro Ser Asp Met Ala Glu Ile Phe Phe Pro Val Ile Ile Arg Ser  
 305 310 315 320  
 Ile Gln Tyr Ile Pro Ile Pro Arg Leu Glu Ile Ser Ala Pro Glu Met  
 325 330 335  
 Asp Leu Leu Ile Glu Asn Leu Ile Leu Glu Pro Gly His Thr Val Asn  
 340 345 350  
 Phe Ser Ser Phe Leu Pro Tyr Arg Met His Leu Thr Thr Arg Asn Asp  
 355 360 365  
 Ile Asp Val Leu Lys Lys His Ser Lys Arg Thr Ser Thr Asp Leu Lys  
 370 375 380  
 Thr Thr Phe Thr Ala Thr Val Phe Gly Leu Asn Ile Ser Ala Ser Glu  
 385 390 395 400  
 Phe Gly Tyr Trp Ile Arg Thr His Ala Trp Pro Leu Phe Arg Ile Lys  
 405 410 415  
 Asp Glu Gly Ile Ala Ser Phe Tyr Leu Asp Arg Arg Gly Ile Asp Ile  
 420 425 430  
 Ser Leu Asp Val Glu Val Gly Arg Glu Arg Leu Glu Gln Ile Phe Thr  
 435 440 445  
 Leu Arg Gly Val Arg Val Arg Ile His Lys Leu Asp Tyr Lys Ile His  
 450 455 460  
 Lys Ser Lys Trp Lys Phe Leu Leu Trp Leu Thr Lys Pro Phe Leu Lys  
 465 470 475 480  
 His Leu Val Arg Arg Val Leu Glu Lys Lys Ile Ala Glu Ser Ile Val  
 485 490 495  
 Gln Ala Ala Phe Ala Leu Asn Arg Glu Leu Val Phe Ala Arg Glu Arg  
 500 505 510  
 Leu Arg Ala Ala Arg Ile Ala Ser Pro Gln Asp Leu Ala Thr Phe Val  
 515 520 525  
 Arg Ala Val Leu Ala Arg Leu Arg Leu Pro Glu Ser Asp Val Glu Thr  
 530 535 540  
 Arg Val Gly Phe Arg Ala Pro Arg Ser Gly Ala Phe Lys Asp Val Tyr  
 545 550 555 560  
 Ala Pro Gly Ser Ile Val Lys Val Trp Gln Glu Glu Gly Leu Arg Ala  
 565 570 575  
 Gln Glu Ala Ile Glu Glu Gly Asp Gln Ser Gln Cys Leu Gly Arg Thr  
 580 585 590  
 Trp Arg Asn Glu Ile Phe Asp Val Val Gly Arg Ser Trp Gly Ser Thr

595

600

605

&lt;210&gt; 41395

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41395

Ala Leu Pro Leu Arg Asp Phe Tyr Thr Gly Arg Glu Ile Arg Phe Gly  
 1 5 10 15  
 Ile Glu Lys Gln Gln Ile Cys Asp Ala Cys Glu Gly Thr Gly Ser Ala  
 20 25 30  
 Asp Arg Gln Val Val Thr Cys Pro Lys Cys Asn Gly Arg Gly Arg Val  
 35 40 45  
 Ile Gln Lys His Met Leu Ala Pro Gly Met Tyr Gln Gln Val Gln Met  
 50 55 60  
 Thr Cys Asp Ala Cys His Gly Gln Gly Lys Thr Ile Lys Lys Pro Cys  
 65 70 75 80  
 Pro Val Cys Ala Gly Gln Arg Val Val Arg Arg Glu Val Glu Thr Val  
 85 90 95  
 Ala Thr Val Glu Pro Gly Met Asp Lys Gly Thr Arg Leu Val Phe Glu  
 100 105 110  
 Asn Glu Gly Asp Glu Ser Pro Asp Trp Val Ala Gly Asp Leu Ile Leu  
 115 120 125  
 Val Leu Glu Glu Lys Glu Pro Glu Leu Ala Ala Asp Glu Ala Arg Arg  
 130 135 140  
 Thr Asp Gly Thr Phe Phe Arg Arg Lys Gly Arg His Leu Phe Trp Arg  
 145 150 155 160  
 Glu Val Leu Ser Leu Arg Glu Ala Trp Met Gly Asp Trp Thr Arg Asn  
 165 170 175  
 Ile Thr His Leu Asp Gly His Val Val Gln Leu Ser Arg Lys Arg Gly  
 180 185 190  
 Glu Val Val Gln Pro Leu Ser Val Glu Thr Val Lys Gly Glu Gly Met  
 195 200 205  
 Pro Phe Tyr Ser Glu Gly His Leu His Glu His His Asp His Asp Ser  
 210 215 220  
 Glu Pro Gly Asn Leu Tyr Val Glu Tyr Thr Val Ile Leu Pro Asp Gln  
 225 230 235 240  
 Met Glu Ser Gly Met Glu Lys Asp Phe Trp Ala Met Trp Glu Lys Trp  
 245 250 255  
 Arg Lys Lys His Gly Val Asp Leu Gly Lys Asp Ser Gly Arg Pro Ile  
 260 265 270  
 Pro Leu Glu Gly Lys Asp Glu Leu  
 275 280

&lt;210&gt; 41396

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41396

Asp Arg Leu Leu Arg Lys Val Asp Phe Ile Asn Tyr Lys Ser Asp Gly  
 1 5 10 15  
 Gly His Arg Glu His Gln Ile Arg Gln Arg Tyr His Leu Gln Asn Asp  
 20 25 30  
 Thr Asp Tyr Lys Ser Tyr Asn Ala Leu Ala Gly Ser Leu Arg Gln Leu

## 18307

35	40	45
Ala His Lys Leu Ser Gln Leu Asp Pro Asp Ser Asp Pro Leu Arg Lys		
50	55	60
Lys Ile Glu Ser Glu Val Leu Asp Lys Leu Trp Arg Met Gly Leu Leu		
65	70	75
Lys Gln Ser Arg Glu Gln Gly Ala Gly Leu Ser Arg Val Glu Arg Glu		
85	90	95
Val Thr Val Ser Ala Phe Cys Arg Arg Arg Leu Ala Val Val Met Val		
100	105	110
Arg Thr Gly Met Val Glu Thr Ile Lys Ala Val Cys Phe Ser Thr Leu		
115	120	125
Phe Phe Leu Ser Phe Gly Leu Lys Lys Lys Lys Lys Arg Gly Gly Cys		
130	135	140

&lt;210&gt; 41397

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41397

His Ile Val Ile Lys Met Val Pro Pro Leu Lys Tyr Tyr Glu Lys Lys	
1	15
Ser Gly Ser Val Asn Ser Pro Phe Leu Phe Thr Pro Thr Pro Arg Lys	
20	30
Gln Val Ser Asn Asn Asn Glu Ile Asp Ser Ser Glu Arg Ser Thr Ser	
35	45
Ser Thr Thr Asn Pro Thr Ala Ala Thr Ala Asn Thr Lys Ser Gly Asn	
50	60
Ala Thr Thr Ser Lys Thr Thr Gln Thr Thr Ser Pro Thr Thr Arg Ser	
65	80
Pro Ala Pro Ser Ala Ser Ser Pro Thr Ser Ser Pro Ser Ser Thr Arg	
85	95
Thr Arg Ile Arg Cys Ala Arg Arg Ser Ser Pro Arg Cys Trp Ile Ser	
100	110
Cys Gly Gly Trp Asp Cys	
115	

&lt;210&gt; 41398

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41398

Gln Tyr Thr Thr Leu Ala Leu Thr Ile Glu Gly Arg Pro Arg Pro Ile	
1	15
Ala Thr Cys Lys Arg Ser Cys Asp Ala Ala Cys Val Pro Ile Ile Thr	
20	30
Met Arg Leu Ile Thr Ile Leu Leu Val Ile Ala Leu Cys Leu Val Leu	
35	45
Ala Leu Ala Lys Glu Asp Tyr Tyr Lys Ile Leu Gly Leu Asp Arg Ser	
50	60
Ala Ser Glu Arg Asp Ile Lys Arg Ala Tyr Arg Thr Leu Ser Lys Lys	
65	80
Phe His Pro Asp Lys Asn Pro	
85	

<210> 41399  
 <211> 112  
 <212> PRT  
 <213> A.fumigatus

<400> 41399  
 Arg Glu Arg Phe Met Gly Ser Phe Lys Tyr Asp Gly Arg Gly Asp Glu  
 1 5 10 15  
 Thr Ala Arg Glu Arg Phe Val Glu Ile Ala Asp Ala Tyr Asp Val Leu  
 20 25 30  
 Ser Thr Pro Ala Thr Arg Lys Ile Tyr Asp Gln Tyr Gly His Glu Gly  
 35 40 45  
 Ile Glu Gln His Arg Gln Gly Gly Thr Ala Gly Arg Pro Ala Asn Asp  
 50 55 60  
 Pro Phe Asp Leu Phe Ser Arg Phe Phe Gly Gly Gly His Phe Gly  
 65 70 75 80  
 His Ala Pro Gly His Arg Arg Gly Pro Asp Met Glu Met Arg Val Gly  
 85 90 95  
 Ala Ala Ala Ala Gly Phe Leu His Gly Ala Gly Asp Pro Val Trp Asp  
 100 105 110

<210> 41400  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 41400  
 Arg Glu Tyr Val Ile Ala Glu His Asp Ala Phe Ala Asp Glu Pro Trp  
 1 5 10 15  
 Ile Ile Lys Leu Thr Asn Tyr Thr Arg Glu Leu Tyr Glu Lys His Lys  
 20 25 30  
 Lys Pro Ile Ile Gly Ile Cys Phe Gly His Gln Ile Ile Ala Arg Ala  
 35 40 45  
 Leu Gly Ala Arg Val Gly Arg Ser Asp Arg Gly Trp Glu Ile Ala Val  
 50 55 60  
 Glu Pro Ile Ile Leu Thr Asp Thr Gly Arg Val Leu Phe Ser Lys Asn  
 65 70 75 80  
 Val Leu Val Ser

<210> 41401  
 <211> 111  
 <212> PRT  
 <213> A.fumigatus

<400> 41401  
 Trp Gln Leu Arg Lys Asn His Leu Leu Ser Pro Lys Ser Ser Ile Ser  
 1 5 10 15  
 Leu Ser Leu Met Ala Arg Leu Leu Arg Ala Ala Ile Leu Glu Cys Asp  
 20 25 30  
 Thr Pro Ile Gln Pro Val Lys Asp Arg Tyr Gly Thr Tyr Gly Asp Leu  
 35 40 45  
 Phe Glu Asn Leu Leu Lys Ala Ser Leu Lys Ala Gln Gly Leu Asp Pro  
 50 55 60  
 Gln Val Asp Leu Gln Ile Thr Lys Trp Asp Val Val Asn Gly Ser Val  
 65 70 75 80

## 18309

Tyr Pro Glu Pro Asp Asp Cys Asp Ala Ile Leu Leu Thr Gly Ser Ser  
                   85                  90                  95  
 Thr Val Ser Leu Ala Gly Pro Ser Ala Thr Ala Asn Val Asn Met  
                   100                  105                  110

<210> 41402  
 <211> 161  
 <212> PRT  
 <213> A.fumigatus

<400> 41402  
 Gln Ala Gln Tyr Pro Tyr Leu Ile Thr Ile Asn Thr Leu Val Pro Ala  
 1                  5                  10                  15  
 Leu Leu Ala Gly Asn Thr Val Ile Leu Arg Pro Ser Pro Gln Thr Pro  
                   20                  25                  30  
 Leu Ile Gly Glu Arg Leu Leu Ser Tyr Phe Thr Gln Ala Gly Leu Pro  
                   35                  40                  45  
 Pro Asn Val Leu Gln Leu Ile His Val Gly Ser Leu Asp Val Leu Asp  
                   50                  55                  60  
 Glu Ile Val Lys Leu Pro Gln Ile Lys Leu Val Ser Phe Thr Gly Ser  
 65                  70                  75                  80  
 Thr Ala Gly Gly Val Arg Ile Arg Glu Ala Thr Ala Arg Arg Ile Val  
                   85                  90                  95  
 Pro Val Asn Leu Glu Leu Gly Gly Lys Asp Pro Ala Tyr Val Arg Ala  
                   100                  105                  110  
 Asp Ala Asp Ile Pro Tyr Val Ala Ala Gln Ile Val Asp Gly Ala Val  
                   115                  120                  125  
 Phe Asn Ser Gly Gln Ser Cys Cys Ser Ile Glu Arg Val Tyr Val His  
                   130                  135                  140  
 Ala Asp Val His Asp Asp Phe Val Ala Glu Val Gln Lys Glu Leu Gln  
 145                  150                  155                  160  
 Thr

<210> 41403  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (103)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 41403  
 Ser Leu His Gln Met His Arg Asp Ile Ala Tyr Glu Val Pro Glu Gly  
 1                  5                  10                  15  
 Cys Val Asn Leu Gly Ser Ser Ala Ile Cys Glu Ile His Gly Leu Tyr  
                   20                  25                  30  
 Arg Ala Gly Arg Ile Phe Ser Val Gln Gly His Pro Glu Tyr Asp Glu  
                   35                  40                  45  
 Phe Val Val Ser Lys Leu Ile Glu Thr Arg His Ala Met Gly Val Phe  
                   50                  55                  60  
 Asp Asp Gln Leu Ser Lys Asp Gly Leu Ser Arg Ala Gly Lys Pro His  
 65                  70                  75                  80  
 Asp Gly Leu Val Val Gly Glu Ala Ile Cys Lys Phe Leu Leu Asp Asp

## 18310

85  
Pro Gly Val Asn Arg Val Xaa  
100

90

95

<210> 41404  
<211> 265  
<212> PRT  
<213> A.fumigatus

<400> 41404  
Thr Val Asn Arg Gln Val Asp Cys Glu Thr Ile His His His Ile Phe  
1 5 10 15  
Asn Pro Thr Lys Met Ala Asn Gln Ile Arg Thr Leu Ser Pro Ser Thr  
20 25 30  
Asn Glu Val Ile Phe Glu His Gln Gly Thr Ser Leu Glu Glu Ala Arg  
35 40 45  
Lys Ile Ala Gln Ala Ser Tyr Glu Ala Phe Lys Leu Tyr Lys Lys Ile  
50 55 60  
Thr Leu Ser Glu Arg Lys Asp Ile Ile Val Lys Ala Leu Glu Leu Ile  
65 70 75 80  
Ala Ala Asn Ile Asp Thr Leu Ser Asn Glu Leu Thr Thr Gln Met Gly  
85 90 95  
Arg Pro Ile Ala Tyr Ser Ala Lys Glu Ile Glu Thr Met Arg Lys Arg  
100 105 110  
Ala Asp Tyr Leu Leu Ser Ile Ala Glu Asp Ser Leu Gln Glu His Pro  
115 120 125  
Gly Gln Leu Glu Lys Gly Phe Arg Arg Ser Val Lys Lys Glu Pro Val  
130 135 140  
Gly Pro Thr Leu Ile Ala Thr Ala Trp Asn Val Arg Ser Val Arg Thr  
145 150 155 160  
Ser Pro His Phe Arg Ile Ser Asn Arg His Ser Thr Pro Thr Ser Leu  
165 170 175  
Arg Ser Thr Arg Ser Phe Gln Pro Ser Trp Pro Glu Thr Arg Ser Ser  
180 185 190  
Ser Val Pro Pro Arg Lys Pro Pro Ser Ser Ala Asn Ala Ser Ser His  
195 200 205  
Thr Ser Pro Lys Pro Val Cys Arg Pro Thr Ser Ser Asn Ser Ser Thr  
210 215 220  
Leu Ala Pro Trp Thr Ser Ser Thr Arg Ser Ser Ser Ser Pro Lys Ser  
225 230 235 240  
Ser Leu Ser Arg Ser Pro Ala Pro Gln Gln Ala Ala Ser Ala Ser Val  
245 250 255  
Lys Arg Leu Pro Ala Ala Leu Ser Gln  
260 265

<210> 41405  
<211> 168  
<212> PRT  
<213> A.fumigatus

<400> 41405  
Pro Asn Thr Cys Asn Asp Asn Ala Arg Tyr Lys Leu Gly Asp Pro Thr  
1 5 10 15  
Asp Asn Ser Thr Thr Thr Gly Pro Val Ile Ser Arg His Ala Val Lys  
20 25 30  
Thr Ile Gln Ser His Ile Asp Asp Ala Leu Ser Lys Gly Ala Ile Asn



## 18311

```

      35              40              45
Ala Thr Pro Pro Asn Glu Ser Phe Leu Ser Val Pro Ser Gln Lys Pro
  50              55              60
Gln Gly Asn Tyr Ile Ala Pro Thr Val Leu Thr Asn Val Thr His Asp
  65              70              75              80
Met Thr Val Met Lys Asp Glu Thr Phe Gly Pro Val Leu Pro Ile Met
      85              90              95
Lys Val Ser Ser Asp Glu Glu Ala Val Ala Leu Met Asn Asp Ser Glu
      100              105              110
Tyr Gly Leu Thr Ala Ser Val Trp Thr Arg Asp Ile Ala Arg Gly Glu
      115              120              125
Glu Leu Ile Ala Glu Ile Glu Ala Gly Thr Val Phe Ile Asn Arg Cys
      130              135              140
Asp Tyr Pro Ser Pro Val Cys Thr Ser Pro Gln Phe Ser Phe Gln Lys
  145              150              155              160
Lys Lys Ser Gly Phe Thr Gly Cys
      165

```

&lt;210&gt; 41406

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41406

```

Ser Asp Thr Met Val Gly Arg Leu Ala Gly Lys Asn Ala Ile Val Thr
  1              5              10              15
Gly Ala Ala Gly Tyr Val Tyr His Val Pro Glu Leu Cys Leu Val Asp
      20              25              30
Gln Gly Gln Arg Glu Gln Leu Thr Arg Asn Asp Ser Gly Ile Gly Leu
      35              40              45
Glu Thr Thr Ile Leu Met Leu Arg Glu Gly Ala Ser Val Leu Met Thr
      50              55              60
Asp Ile Ser Ala Ala Gly Leu Glu Arg Ala Ile Ala Lys Val His Glu
  65              70              75              80
Val Val Pro Gln His Asp Gly Arg Val Glu Tyr Arg Val Val Asp Val
      85              90              95
Ser Lys Glu Ser Glu Val Glu Ala Ala Val Ala His Leu Asp Ala Trp
      100              105              110
Gly Gly Leu Asp Val Met Phe Asn Asn Ala Gly Ile Met His Pro Lys
      115              120              125
Gly Trp Arg Leu Gly Gly Asp Thr Gly Gly Asn Leu Gly Leu Asp Asn
      130              135              140
Glu Tyr Gln Cys Gln Gly Gly Val Val Arg Val Glu Thr Arg Gly Gln
  145              150              155              160
Glu Pro Ala Gln Thr Arg Gln Glu Glu Gly Ser Ile Ile Asn Thr Ala
      165              170              175
Ser Met Val Ala Leu Val Gly Ala Ala Thr Pro Gln Leu Ala Tyr Thr
      180              185              190
Ala Ser Lys Gly Ala Val Leu Ala Met Thr Arg Glu Leu Ala Ile Val
      195              200              205
His Ala Arg Glu Gly Phe Arg Phe Asn Ser Leu Cys Pro Ala Pro Leu
  210              215              220
Lys Tyr Val Ile Leu Ile Pro
  225              230

```

&lt;210&gt; 41407

<211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 41407

```
Ser Trp Val Lys Ala Asn Gly Phe Ser Thr Pro Leu Leu Gln Asp Trp
1          5          10          15
Leu Gly Asp Asp Lys Glu Lys Arg Phe Arg Arg Glu Val His Phe Pro
20          25          30
Thr Gly Arg Phe Gly Glu Ala Ile Glu Gln Ala His Ala Val Ile Phe
35          40          45
Leu Ala Ser Asp Glu Ser Ser Phe Val Asn Ala Ala Asp Phe Val Val
50          55          60
Asp Gly Gly Leu Thr Lys Ala Tyr Val Thr Pro Glu Gly Pro Ala Thr
65          70          75          80
Glu Ala Pro Lys Asn Leu Gly Ser
85
```

<210> 41408  
 <211> 296  
 <212> PRT  
 <213> A.fumigatus

<400> 41408

```
Ser Arg Pro Leu Val Leu Leu Pro Thr Phe Leu Val Val Met Pro Leu
1          5          10          15
Asn Lys Arg Pro Arg Thr Glu Pro Ile Val Arg Val Arg Thr Gly Cys
20          25          30
Trp Thr Cys Arg Arg Arg Lys Lys Lys Cys Asp Glu Asn Arg Pro Val
35          40          45
Cys Gly Gly Cys Thr Arg Asn Lys Leu Ser Cys His Trp Pro Ala His
50          55          60
Val Ser Ser Arg Pro Val Glu Asn Asp Arg Gly Ala Ile Pro Val Gln
65          70          75          80
Thr Asp Gln His Ser Arg Gly Ser Gly Gln Met Asp Glu Glu Asn Ile
85          90          95
Ile Ile Pro His Gly Ser Pro Gln Ser Val Arg Ser Ser Ile Ser His
100          105          110
Gly Ala Ser Ser His Ser Pro Phe Ser Pro Ala Val Ser Pro Thr Ser
115          120          125
Pro Ala Gln Ser Val Cys Leu Pro Thr Val Ser Pro Thr Gly Ala Ile
130          135          140
Gly Leu Glu Asp Leu Asp Ala Ala Ser Leu Val Pro Met Gly Tyr Ser
145          150          155          160
His Pro Arg Ser Asn Ser Gln Ala Ser Ile Arg Asp Val Met Pro Arg
165          170          175
Ser Leu Ser Met Leu Pro Gly Tyr Ser Pro Glu Ser Tyr Gln Leu Leu
180          185          190
Ser His Tyr Leu Ala Thr Thr Ala Asp Cys Met Ala Asn Gly Ser Thr
195          200          205
Pro Val Asn Pro Phe Leu Val Gln Ile Val Pro Leu Ala Phe Thr Ser
210          215          220
Asp Leu Leu Leu Gln Leu Val Leu Thr Gln Ser Ala Ala His Arg Ala
225          230          235          240
Phe Arg Cys Arg Asn Asp Ser Asp Glu Val Ala Gln Ser His Tyr Thr
245          250          255
```

## 18313

Lys Ala Leu Gln Leu Phe Arg Lys Gly Val Thr Asp Phe Ile Asp Gly  
                   260                  265                  270  
 Lys Glu Ser Asn Pro Leu Met Leu Thr Val Gly Ala Leu Leu Met Cys  
                   275                  280                  285  
 Phe Thr Glu Val Gly Gly Leu Ser  
           290                  295

<210> 41409  
 <211> 217  
 <212> PRT  
 <213> A.fumigatus

<400> 41409  
 Cys His Trp Pro Met Ala Ile Phe Pro Arg Ser Cys Gly Pro Met Met  
 1                  5                  10                  15  
 Arg Ala Gln Ser Gly Met Ser Ser Lys Leu His Asn Lys His Arg Cys  
                   20                  25                  30  
 Arg Ser Thr Phe Lys Lys Leu Phe Glu Thr Phe Phe Leu Val Ser Ile  
           35                  40                  45  
 Ile Phe Leu Leu Ile Ser Gly Leu Ile Leu Leu Asn Met Ser Gln Asp  
           50                  55                  60  
 Thr Ile Thr Val Glu Asp Leu Pro Ala Leu Leu Glu His Asp Ile Ser  
 65                  70                  75                  80  
 Val Lys Val Ala Gly Ile Asp Cys Asp Gly Ile Leu Arg Gly Lys Val  
                   85                  90                  95  
 Met Ala Lys Glu Lys Phe Leu Gly Ile Ala Gln Lys Gly Phe Gly Phe  
                   100                  105                  110  
 Ser Ser Ala Val Phe Gly Trp Asp Met Gln Asp Val Leu Tyr Thr Thr  
           115                  120                  125  
 Asp Ala Lys Ile Ala Pro Pro Glu Ser Gly Tyr Val Asp Phe Ile Ala  
           130                  135                  140  
 Val Pro Asp Leu Ser Ser Tyr Arg Arg Ile Pro Trp Glu Asp Asn Ile  
 145                  150                  155                  160  
 Pro Phe Phe Leu Val Arg Phe Val Gln Asn Glu Lys Pro Val Ala Ala  
                   165                  170                  175  
 Asp Gly Arg Ser Met Leu Arg Ala Ile Thr Asp Lys Leu Ala Glu Ala  
           180                  185                  190  
 Asn Cys Gln Ala Met Ala Gly Gly Lys Phe Pro Gly Ile Gly Pro Ser  
           195                  200                  205  
 Val Ser Ala Asn Glu Cys Ser Gly Thr  
           210                  215

<210> 41410  
 <211> 199  
 <212> PRT  
 <213> A.fumigatus

<400> 41410  
 Cys Thr Tyr Arg Thr Arg Ile Val Thr Pro Ile Asp Glu His Gly Pro  
 1                  5                  10                  15  
 Gly Leu Asn Leu Arg Asp Gln Leu Leu Ser Ala Arg Asp Ile Pro Arg  
                   20                  25                  30  
 Pro His Ala Ser Ser Gln Pro Val Leu Ala Ile Val His Glu Arg Asn  
           35                  40                  45  
 Arg Leu Phe Val Thr Gly Asp Leu His Asp Gly Glu His Gly Ala Glu  
           50                  55                  60

## 18314

Gly Leu Val Phe His Asp Gly His Val Val Arg Asp Val Arg Glu His  
 65 70 75 80  
 Ser Gly Gly Asp Val Val Pro Leu Gly Phe Leu Arg Gly Asp Arg Lys  
 85 90 95  
 Glu Gly Phe Ile Gly Gly Ser Cys Val Asp Gly Pro Leu Gly Glu Cys  
 100 105 110  
 Val Val Asp Val Arg Leu Asp Ser Phe His Cys Val Ala Gly Asn Asp  
 115 120 125  
 Gly Ala Gly Gly Cys Gly Val Val Gly Trp Ile Ala Lys Phe Val Pro  
 130 135 140  
 Ser Val Val Ile Ala Gly Val Arg Leu Leu Phe Arg Cys Gly Val Arg  
 145 150 155 160  
 Thr Arg Glu Ser Leu Arg Leu Thr Ser Glu Ala Pro Ser Ala Pro Pro  
 165 170 175  
 Arg Gln Asn His Arg Gly Arg Pro Arg Gly His Ile Pro Val Arg Trp  
 180 185 190  
 Ser Ser Ser Ser Ala Pro Ser  
 195

&lt;210&gt; 41411

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41411

Arg Lys Arg Ile Ala Arg Pro Trp Leu Glu Val Ser Phe Leu Val Ser  
 1 5 10 15  
 Ala Arg Val Cys Gln Leu Met Ser Val Val Glu Leu Glu Phe Met Asn  
 20 25 30  
 Phe Gln Thr Pro Ser Gln Asp Gly Tyr Ser Asn Gly Ser Gln Thr Arg  
 35 40 45  
 Asp Ile Ala Ala Phe Leu Glu Arg Asn Ala Pro Ser Ala Leu Arg Pro  
 50 55 60  
 Met Thr Ala Gly Ser Phe Ser Tyr Ser Ala Thr Arg Pro Val Ala Phe  
 65 70 75 80  
 Lys Lys Tyr Phe Trp Asp Ile Phe Asn Thr Ser Ala Arg Phe Asn Cys  
 85 90 95  
 Gly Ile Glu Gly Trp His Thr Glu Gly Gly Pro Gly Val Tyr Glu Ala  
 100 105 110  
 Val Ser Glu Leu His Phe Tyr Asp Arg Asn Val Ala Asn Gln Pro Arg  
 115 120 125  
 Pro Ser Lys Cys Val Met Leu Pro Lys Trp Gln Thr Gly Cys Pro Cys  
 130 135 140  
 Leu Ser Lys Ser Ser Ser Arg Pro Phe Val Ala Gln Thr Leu Ile Cys  
 145 150 155 160

&lt;210&gt; 41412

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41412

Arg Pro Ala Gly Gly Asp Thr Phe Gly Met Asp Asn Asp Asn Phe Asn  
 1 5 10 15  
 Gln Val Pro Ala Asn Val Ser Thr Ile Ala Asp Leu Phe Asp Thr Lys  
 20 25 30

## 18315

```

Asn Ile Ala Trp Gly Glu Tyr Gln Glu His Leu Pro Tyr Pro Gly Tyr
   35                               40                               45
Gln Gly Phe Arg Tyr Pro Glu Ser Gly Pro Asn Asp Tyr Val Arg Lys
   50                               55                               60
His Asn Pro Ala Ile Leu Phe Asp Ser Val Thr Gln Asp Ala Thr Arg
  65                               70                               75                               80
Leu Arg Gln Ile Lys Asn Phe Thr Ser Phe Tyr Asp Asp Leu Lys Asn
   85                               90                               95
His Arg Leu Pro Gln His Met Phe Ile Thr Pro Asn Met Thr Asn Asp
  100                               105                               110
Ala His Asp Thr Asn Ile Thr Phe Ala Ala Thr Trp Ser Trp Asn Phe
  115                               120                               125
Leu Ser Glu Leu Leu Glu Asn Asp Tyr Phe Thr Lys Asp Thr Leu Ile
  130                               135                               140
Leu Leu Thr Phe Asp Glu Asn Gly Thr Tyr Lys Leu Gly Asn Lys Ile
  145                               150                               155                               160
Tyr Ser Ile Leu Leu Gly Gly Ala Val Pro Lys His Leu Ile Gly Lys
   165                               170                               175
Glu Asp Asn Thr Tyr Tyr Asn His Tyr Ser Val Ile Ala Ser Leu Ser
  180                               185                               190
Ala Asn Trp Gly Leu Pro Ser Leu Gly Arg Trp Asp Cys Gly Ala Asn
  195                               200                               205
Leu Leu Ser Phe Ile Ala Glu Lys Thr Gly Tyr Val Asn Trp Glu Val
  210                               215                               220
Asp Thr Ser Asn Leu Tyr Leu Asn His Ser Tyr Pro Gly Pro Leu Ser
  225                               230                               235                               240
Thr Ser Ser His Thr Pro Asn Trp Pro Val Pro Leu Thr Lys Gly Ser
   245                               250                               255
Cys Ser Ala Gly His Gly Ile Leu Lys Ala Val Arg Lys Thr Tyr Lys
  260                               265                               270
Asp Met Ala Pro Thr Tyr Asn Tyr Thr Ser Pro Val Pro Tyr Asp Ala
  275                               280                               285
Ala Ser Lys Thr Asn Val Gly Val Lys Tyr Thr Arg Lys Leu Val Ser
  290                               295                               300
Leu Leu Asp Gln Ser Leu Thr His Glu Tyr
  305                               310

```

&lt;210&gt; 41413

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41413

```

Pro Val Ser Ser Pro Thr Tyr Pro Leu Ser Arg Gly Phe Cys Pro Asn
  1                               5                               10                               15
Gly Ser Ser Trp Tyr Val Cys Leu Leu Phe Asp Ser Phe Val Asn Lys
   20                               25                               30
Thr Pro Thr Lys Ser Gln Leu Thr Val Leu Ala Glu Gln Val Ser Val
   35                               40                               45
Val Ser Ala Ile Asn Ser Leu Gln Cys Tyr Arg Ser Asp Glu Tyr Ala
   50                               55                               60
Ala Gln Leu Tyr Asn Ala Arg Thr Ala Asp Gly Arg Ser Phe Ala Thr
  65                               70                               75                               80
Pro Leu Ser Ser Arg Thr Phe Gly Thr Trp Thr Phe Leu Ser Ala Val
   85                               90                               95
Val Arg Met Tyr Ala Ala Tyr His Ile Thr Thr Pro Ala Val Tyr Asp

```

## 18316

```

          100              105              110
Leu Ala Val Trp Ser Phe Gly Leu Ala Leu Ala His Phe Val Gly Glu
          115              120              125
Trp Leu Ala Phe Gly Ser Ala Gln Leu Lys Gly Arg Phe Val Ser Pro
          130              135              140
Leu Ile Val Ala Ser Val Thr Leu Thr Trp Met Leu Thr Gln Arg Glu
145              150              155              160
Ala Tyr Leu Ser Ala
          165

```

<210> 41414  
 <211> 285  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41414
Thr Arg Pro Thr Asp Cys Gly Arg Arg Gly Pro Ala Asp His Gly Asp
1          5          10          15
Leu Val Tyr Cys Phe Ala Ser Phe Asp Ile Cys Gln Gly Ala Leu Glu
          20          25          30
Ser Val Cys Ala Ser Arg Glu Thr Gly Thr Phe Asp Ile Ile Met Leu
          35          40          45
Leu Leu Ser Lys Val Asn Ser Arg Thr Asp Ser Ser Gln Leu Arg Ser
          50          55          60
Phe Gly Pro Lys Gly Ser Trp Ala Val Val Thr Gly Ala Ser Asp Gly
65          70          75          80
Leu Gly Lys Glu Phe Ser Leu Gln Leu Ala Arg Ala Gly Phe Asn Ile
          85          90          95
Val Leu Val Ser Arg Thr Ala Ser Lys Leu Thr Thr Leu Ala Glu Glu
          100          105          110
Ile Thr Thr Lys His Ser Val Gln Thr Lys Thr Leu Ala Met Asp Tyr
          115          120          125
Ala Ala Asn Asn Asp Ala Asp Tyr Glu Glu Leu Lys Ala Ile Val Asp
          130          135          140
Gly Leu Asp Val Ala Val Leu Ile Asn Asn Val Gly Lys Ser His Asp
145          150          155          160
Ile Pro Thr Pro Phe Ala Leu Thr Pro Glu Asp Glu Met Thr Asp Ile
          165          170          175
Val Thr Ile Asn Cys Leu Gly Thr Leu Arg Thr Thr Gln Leu Ile Ile
          180          185          190
Pro Gly Met Met Gln Arg Lys Arg Gly Leu Val Leu Thr Met Gly Ser
          195          200          205
Phe Gly Gly Leu Leu Pro Thr Pro Leu Leu Ala Thr Tyr Ser Gly Ser
          210          215          220
Lys Ala Phe Leu Gln Gln Trp Ser Thr Ser Leu Gly Ser Glu Leu Glu
225          230          235          240
Pro Tyr Gly Ile Thr Val Glu Leu Val Gln Ala Tyr Leu Ile Thr Ser
          245          250          255
Ala Met Ser Lys Val Arg Arg Thr Ser Ala Thr Ile Pro Asp Pro Arg
          260          265          270
Ala Phe Val Lys Ala Val Leu Ser Leu Gly Leu Ala Thr
          275          280          285

```

<210> 41415  
 <211> 70  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41415

```

Thr Ile Ser Leu His Ser Phe Pro Cys Ser Phe Pro Phe Val Phe Tyr
1           5           10           15
Phe Phe Lys Val Ala Trp Ser Val Gln Ser Phe Val Gly Lys Phe Ser
           20           25           30
Gln Leu Ala Thr Met Val Glu Ser Val Leu Asp Asp Ile Ser His Arg
           35           40           45
Arg Phe Asn Pro Leu Arg Gly Ser Tyr Val Leu Val Ser Pro His Arg
           50           55           60
Thr Lys Arg Pro Trp Gln
65           70

```

&lt;210&gt; 41416

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41416

```

Glu Arg Glu Gly Pro Ala Gly Arg Gly His Arg Arg Asp His Gln Thr
1           5           10           15
Val Arg Gln Pro Leu Arg Asn Ala Leu Ser Leu Gln His Gly His Pro
           20           25           30
Pro Gly Ala Ala Arg Gly His Arg Arg Gly Asp Arg Ser Phe Val Pro
           35           40           45
Ala Pro Ala Phe Leu Pro Ser Ala Ala Ala Gln Arg Asn Arg Ala Glu
           50           55           60
Ile Leu Gly Arg Val Gly Pro Leu Gln Phe Ala Pro Leu Thr Tyr Thr
65           70           75           80
Leu Thr Asn Pro Ser Tyr Glu Met Met Ala Glu Pro Gln Arg Asp Ile
           85           90           95
Thr Pro Glu Gln Ala Ala Ala Arg Leu Arg Ala Cys Gly Gly Glu Leu
           100          105          110
Tyr Arg Lys Lys Met Asp Ala
           115

```

&lt;210&gt; 41417

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41417

```

Phe Leu Leu Thr Gly Leu Ser Ala Leu Gly Ser Lys Leu Lys Lys Ile
1           5           10           15
Phe Leu Gly Asp Asp Thr Ser Leu Ile Ser Asp Pro Val Asn Arg Gly
           20           25           30
Gln Gln Glu Ser Pro Ser Lys Thr Thr Leu Pro Ala Tyr Asp Pro Ala
           35           40           45
Cys Tyr Leu Cys Pro Gly Asn Lys Arg Ala Gln Gly Asp Thr Asn Pro
           50           55           60
Lys Tyr Glu Lys Thr Phe Val Phe Val Asn Asp Tyr Ser Ala Val Lys
65           70           75           80
Glu Glu Gln Ala Pro Tyr Ser Pro Glu Ser Gly Asp Ser Ala Phe Ser
           85           90           95
Asn Ser Glu Thr

```

100

<210> 41418  
 <211> 261  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41418

Cys Ala Ile Leu Leu Gly Val Glu Ser Phe Phe Leu Lys Ala Glu Pro  
 1 5 10 15  
 Val Thr Gly Lys Cys Tyr Val Leu Thr Phe Ser Ala Ala His Asn Leu  
 20 25 30  
 Thr Leu Ala Asp Leu Ser Pro Ala Glu Ile Ile Pro Val Ile Asp Ala  
 35 40 45  
 Trp Thr Glu Ile Tyr Ser Ala His Leu Ser Pro Lys Ser Pro Leu Ala  
 50 55 60  
 Ala Val Ala Pro Ala Thr Thr Leu Pro Pro Asn Ser Pro Ile Ala Asn  
 65 70 75 80  
 Met Ala Lys Pro Lys Glu Gln Tyr Arg Tyr Met Gln Ile Phe Glu Asn  
 85 90 95  
 Lys Gly Ala Ala Met Gly Cys Ser Asn Pro His Pro His Gly Gln Val  
 100 105 110  
 Trp Thr Thr Ser Ser Leu Pro Glu Glu Pro Ala Met Glu Leu Glu Gln  
 115 120 125  
 Met Lys Lys Tyr Arg Arg Glu His Gln Asn Lys His Leu Leu Glu Asp  
 130 135 140  
 Tyr Ala Ala Leu Glu Ser Arg Lys Gln Glu Arg Val Val Phe Glu Asn  
 145 150 155 160  
 Gln Ala Phe Leu Val Val Cys Pro Trp Trp Ala Thr Trp Pro Phe Glu  
 165 170 175  
 Thr Met Ile Val Ser Lys Lys His Lys Arg Ala Leu Val Asp Leu Asn  
 180 185 190  
 Glu Asn Glu Lys Ala Gln Leu Ala Glu Ala Ile Ala Glu Ile Thr Arg  
 195 200 205  
 Arg Tyr Asp Asn Leu Phe Glu Thr His Phe Pro Tyr Ser Met Gly Ile  
 210 215 220  
 His Gln Ala Pro Leu Glu Gly Thr Asp Glu Glu Ile Glu Ala Ser Tyr  
 225 230 235 240  
 Leu His Leu His Phe Tyr Pro Pro Leu Leu Arg Ser Ala Thr Val Arg  
 245 250 255  
 Lys Phe Leu Val Gly  
 260

<210> 41419  
 <211> 272  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41419

Val Pro Thr Ser His Thr His Met Val Arg Thr Asp Trp Gln Leu Asp  
 1 5 10 15  
 Phe Thr Pro Ser Asn Ile Leu Leu Lys Phe Glu Gly Leu Asp Gly Leu  
 20 25 30  
 Pro Glu Asp Glu Val Leu Lys Val Leu Gly Glu Pro Val Lys Val Glu  
 35 40 45  
 Val Phe Thr Glu Ser Gly Glu Thr Pro Ser Asp Pro Thr Ala Pro Lys



## 18319

50                      55                      60  
 Tyr Leu Val Arg Pro Val Lys Phe Arg Asn Val Pro Leu Pro Tyr Val  
 65                      70                      75                      80  
 Val Asp Glu Ile Leu Val Ile Asp Phe Gly Glu Ser Tyr Asp Val Thr  
                     85                      90                      95  
 Asn Pro Pro Gln Glu Leu Gly Ile Pro Gly Ser Tyr Arg Ser Pro Glu  
                     100                      105                      110  
 Leu Val Leu Lys Asn Thr Pro Gly Phe Gly Ser Asp Leu Trp Ala Leu  
                     115                      120                      125  
 Gly Cys Thr Leu Phe Glu Ile Arg Thr Gly Arg Lys Leu Phe Asp Met  
 130                      135                      140  
 Phe Asp Asp Asp Asp Asp Ser Tyr Leu Phe His Met Val Glu Met Leu  
 145                      150                      155                      160  
 Gly Ala Leu Pro Glu Pro Trp Trp Ser Thr Trp Thr His Arg Lys  
                     165                      170                      175  
 Glu Phe Phe Lys Asp Glu Ala Asp Ser Leu Gly Arg Ala Val Leu Val  
                     180                      185                      190  
 Asp Ala Leu Ala Arg Glu Lys Ser Asn Leu Ser Val Glu Ser Pro Ser  
                     195                      200                      205  
 Ile Asp Leu Ala Leu Arg Arg Gly Leu His Tyr Trp Asp Leu Gly Pro  
                     210                      215                      220  
 Gly Glu Glu Phe Ser Arg Glu Ile Pro Pro Asp Glu Ile Glu Gln Leu  
 225                      230                      235                      240  
 Ala Asp Leu Leu Lys Lys Met Leu Pro Tyr Val Pro Asn Arg Arg Leu  
                     245                      250                      255  
 Thr Ala Thr Glu Val Leu Glu Tyr Glu Trp Phe Arg Arg Asp Glu Asn  
                     260                      265                      270

&lt;210&gt; 41420

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41420

Cys Lys Gln Arg Phe Asp Pro His Trp Leu Ala Arg Gly Thr Glu Val  
 1                      5                      10                      15  
 Pro Ser Val Thr Val Tyr Phe Cys Ser Ser Ser Thr Thr Gly Val Ile  
                     20                      25                      30  
 Ile Cys Val Met Asn Ile Ala Ala Val Asn Asp Lys Ser Pro Ala Gly  
                     35                      40                      45  
 Tyr Asp Arg Leu Met Leu Ala Ser Thr Asn Thr Glu Val Leu Lys Thr  
                     50                      55                      60  
 Arg Ile Leu Ala Gly  
 65

&lt;210&gt; 41421

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41421

Ala Val Gly Gly Phe Ala Asn Val Trp Leu Cys Gln Val Leu Arg Asn  
 1                      5                      10                      15  
 Gly Val Pro His Tyr Val Ala Leu Lys Ile Leu Met Ala Asp Tyr Ser  
                     20                      25                      30  
 Lys Asp Asp Cys Pro Glu Leu Arg Val Glu Arg Leu Arg Ala Val Gly

## 18320

35 40 45  
 Leu Glu Lys His Ile Cys Leu Pro Phe Asp His Phe Arg Ile Glu Gly  
 50 55 60  
 Pro Asn Gly Ser His Leu Cys Phe Val Tyr Pro Val Ala Gly Pro Arg  
 65 70 75 80  
 Val Ser Leu Ile Ala His Glu Phe Glu Asp Gln Asp Arg Ser Leu Arg  
 85 90 95  
 Lys Met Ala Arg Gln Ala Thr Glu Val Met Ala Ala Leu His Ser His  
 100 105 110  
 Gly Ile Cys His Gly Gly Lys Phe Pro Gln Ala Thr Leu Thr Trp Leu  
 115 120 125  
 Glu Leu Thr Gly Ser  
 130

<210> 41422  
 <211> 181  
 <212> PRT  
 <213> A.fumigatus

<400> 41422  
 Ser Glu Pro Val Ser Phe Leu Pro Val Cys Ala Pro Ser Pro Ala Ile  
 1 5 10 15  
 Gln Phe Leu Ala Leu Thr Ala Thr Ala Ser Thr Val Leu Lys Gly Ala  
 20 25 30  
 Gly Ser Val Gly Leu Ala Leu Phe Tyr Trp Val Ile Gly Phe Leu Met  
 35 40 45  
 Ala Gly Ser Ser Leu Ala Val Tyr Leu Glu Phe Ser Ser Tyr Phe Pro  
 50 55 60  
 Ser Arg Ser Gly Ser Glu Val Val Tyr Leu Glu Gln Ala Tyr Pro Arg  
 65 70 75 80  
 Pro Lys Tyr Phe Leu Pro Thr Val Phe Ala Met Gln Ser Val Leu Phe  
 85 90 95  
 Ser Phe Ser Ser Ser Asn Ala Ile Gly Met Cys Thr Gly Ser Trp Glu  
 100 105 110  
 Asn Ile Ser Asp Arg Leu Val Leu Ala Gln Tyr Leu Phe Arg Leu Ala  
 115 120 125  
 Glu Ala Gln Ser Thr Pro Trp Lys Leu Lys Gly Val Ala Val Ala Ser  
 130 135 140  
 Tyr Ser Val Ala Val Leu Gly Glu Ile Ala Phe Phe Ile Val Val Arg  
 145 150 155 160  
 Met Leu Thr Val Gln Ser Trp His Ser Thr Leu Lys Ser Ser Pro Arg  
 165 170 175  
 Arg Glu Asn Pro Arg  
 180

<210> 41423  
 <211> 138  
 <212> PRT  
 <213> A.fumigatus

<400> 41423  
 Ala Met Glu Gly Tyr Gly Asn Ala Leu Leu Arg Arg Arg His Tyr Ser  
 1 5 10 15  
 Val Cys Gln His Ser Pro Ser His Asn Asp Glu Thr Asn Asn Gln Ser  
 20 25 30  
 Arg Val Phe Lys Asn Ala Glu Arg Val Arg Thr Cys Asn Ser Leu Val

18321

```

      35              40              45
Thr Lys Thr Pro Gly Met Phe Ala Ser Val Asn Asn Ile Thr Asp Pro
  50              55              60
Ala Thr Gly Asp Val Thr Gly Tyr Ile Ser Asn Thr Gly Val Pro Ser
  65              70              75              80
Ile Ser Phe Leu Pro Gln Gln Glu Leu Asp Val Ile Thr Pro Tyr Ser
      85              90              95
Val Phe Pro Thr Val Leu Phe Asp Lys Gly Val Gly Leu Ala Trp Trp
      100              105              110
Arg Asn Met Val Val Ala Lys Lys Met Gln Ser Asn Leu Pro Pro Ala
      115              120              125
Leu Thr Ser Arg Ser Ile Leu Ile Lys Ala
      130              135

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<210> 41424  
 <211> 246  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41424
Val Asp Ala Cys Arg Pro Ile Pro Val Val Asn Thr Arg Ala Ala Ala
  1              5              10              15
Leu Tyr Asn Arg Glu Phe Arg Ser Val Gln Gln Gly Lys Ile Gly Ile
      20              25              30
Ser Leu Asn Gly Asp Tyr Tyr Glu Pro Trp Asn Ala Glu Asp Glu Arg
      35              40              45
Asp His Ala Ala Ala Glu Arg Arg Met Glu Phe His Ile Gly Trp Phe
      50              55              60
Ala Asn Pro Val Phe Leu Ala Arg Asp Tyr Pro Ala Cys Met Arg Glu
      65              70              75              80
Gln Leu Gly Ala Arg Leu Pro Lys Phe Ser Pro Ser Asp Phe Ala Leu
      85              90              95
Leu Arg Glu Ala Glu Ser Asp Phe Tyr Gly Met Asn Tyr Tyr Thr Ser
      100              105              110
Gln Phe Ala Arg His Arg Asp Gln Pro Ala Ser Glu Thr Asp Tyr Ile
      115              120              125
Gly Asn Val Asp Glu Leu Gln Glu Asn Ser Lys Gly Thr Ser Val Gly
      130              135              140
Glu Pro Ser Gly Ile His Trp Leu Arg Ser Cys Pro Asp Lys Phe Arg
      145              150              155              160
Lys His Leu Thr Arg Val Tyr Arg Leu Tyr Gly Lys Pro Ile Phe Ile
      165              170              175
Thr Glu Asn Gly Cys Pro Cys Pro Gly Glu Asp Arg Met Thr Cys Glu
      180              185              190
Glu Ser Val Asn Asp Met Tyr Arg Ile Arg Tyr Phe Glu Asp His Leu
      195              200              205
Glu Ala Val Gly Leu Ser Val Asn Gln Asp Gly Ala Asp Ile Arg Gly
      210              215              220
Tyr Phe Ala Trp Ser Leu Leu Asp Asn Leu Gly Glu Phe Leu Ala Lys
      225              230              235              240
Ile Glu Glu Asn Ile Gly
      245

```

<210> 41425  
 <211> 62  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41425

```

Leu Tyr Leu Ala Glu Trp Ser Asp Gly Tyr Gly Pro Arg Phe Gly Val
1           5           10           15
Thr Phe Thr Asp Tyr Gln Thr Leu Lys Arg Thr Pro Lys Lys Ser Ala
          20           25           30
Leu Leu Leu Arg Arg Ile Phe Glu Glu Arg Ile Gly Ile Ser Thr Lys
          35           40           45
Gly Gln Ala Pro Ser Ala Pro Gly Val Phe Arg Ala Glu Leu
          50           55           60

```

&lt;210&gt; 41426

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41426

```

Arg Leu Lys Leu Ser Met Arg Val Ser Lys Leu Ser Tyr Leu Ala Leu
1           5           10           15
Ser Trp Thr Ala Leu Thr Asp Ala Leu Pro Gln Lys Pro Asn Glu Pro
          20           25           30
Ser Cys Arg Phe Ala Arg Gln Tyr Thr Gln Arg Glu Ile Val Lys Asp
          35           40           45
Pro Ser Asn Phe Ile Ser Asp Leu Leu Tyr Trp Glu Gly Lys Phe His
          50           55           60
Gln Asn Asn Val Ser Tyr Asn Ser Gly Asn Gly Met Ser Tyr Asp Gly
          65           70           75           80
Thr Asn Ile Asp Phe Thr Thr Gly Glu Ser Thr Val Lys His Pro Phe
          85           90           95
Ser Ala Ala Ser Lys Glu Val Ser His Leu Gln Ala Cys Cys Cys Arg
          100           105           110
Cys Cys

```

&lt;210&gt; 41427

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41427

```

His Leu Lys Ile Phe Tyr Glu Gly Lys Gly Gln Val Cys Ala Val Thr
1           5           10           15
Thr Ile Lys Asn Gln Ser Leu Pro Val Asp His Pro Asp Gln Gly Tyr
          20           25           30
Ala Cys Glu Gly Ser Gly Arg Leu Asn Asp Pro Tyr Glu Gly Glu Leu
          35           40           45
Phe Thr Phe Trp Leu Gln Phe Phe Gly Gly Leu Ser Asp Glu Asp Val
          50           55           60
Glu Gln Leu Trp Ala Val Lys Lys Pro Met Leu Gln Ser Val Asp Tyr
          65           70           75           80
His Met Gly His Val Gly Pro Ile Thr Val Gln Lys Gly Thr Ser Val
          85           90           95
Asp Ala Gly Lys Gly Ser Pro Ala His Gly
          100           105

```

<210> 41428  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 41428  
 Ile Asn Thr Asn Lys Ser Ile Asp Pro Tyr Gly Ser Thr Glu Ser Thr  
 1 5 10 15  
 Arg Val Asp Gly Lys Gly Val Ser Ala Leu Leu Thr Trp Asp Ser Lys  
 20 25 30  
 Val Thr Thr Val Ala Ala Leu Leu Gly Gly Val Thr Asp Leu Val Arg  
 35 40 45  
 Gln Arg Met Lys Ala Glu Gly Ile Tyr Glu Glu Phe Ile Ser Tyr Ala  
 50 55 60  
 Glu Val Cys His Val Leu Phe Asn Met Pro Cys Pro Leu Leu Met Gly  
 65 70 75 80  
 Ser Leu Tyr

<210> 41429  
 <211> 126  
 <212> PRT  
 <213> A.fumigatus

<400> 41429  
 Gly Ser Leu Pro Val Val Asn Lys Val Asp Thr Asp Phe Tyr Leu Ala  
 1 5 10 15  
 Leu Leu Met Gln Ser Tyr Phe Leu Asn Asn Pro Ile Gly Arg Thr Arg  
 20 25 30  
 Trp Gln Ala Phe Ser Arg Phe Val Pro Gly Phe Ile Val Phe Asp His  
 35 40 45  
 Leu Ala Asp Gly Arg Ser Thr Pro Ala Gly Ala Ile Asn Ala Ala Asn  
 50 55 60  
 Lys Asn His Thr Trp Gly Gln Leu Ala Leu Arg Thr Ala Glu Lys Ile  
 65 70 75 80  
 Met Gly Gln Ala Ala Leu Phe Ala His Asn Pro Arg Lys Glu Asn Leu  
 85 90 95  
 Val His Leu Lys Pro Asp Gln Val Val Gly Glu Trp Arg Asp Ser Thr  
 100 105 110  
 Tyr Gly Met Pro Leu Gln Thr Ser Lys Leu Gln Pro Pro Phe  
 115 120 125

<210> 41430  
 <211> 638  
 <212> PRT  
 <213> A.fumigatus

<400> 41430  
 Ala Ile Val Asn Gln Ala Cys Ile Arg Arg Leu Ala Pro Val Ala Arg  
 1 5 10 15  
 Ser Ile Gly Leu Thr Asp Asn Cys Pro Lys Cys Asp Gly Glu Ala Ala  
 20 25 30  
 Leu Ser Thr Cys Thr Ser Cys Arg Arg Ala Gly Glu His Cys Thr Phe  
 35 40 45  
 Asp Leu Pro Val Gly Arg Arg Gly Pro Lys Ser Asn Lys Ser Arg Arg  
 50 55 60

His Ala Ser Leu Ser Ala Asp Ala His Gly Gln Asn Val Thr Leu Ser  
 65 70 75 80  
 Ser Ser Leu His Thr Gly Gln Pro Val Thr Thr Leu Gln Phe Ser Thr  
 85 90 95  
 Val Ser Pro Thr Pro Gly Pro Val Val Ser Leu Asn Pro Arg Thr Pro  
 100 105 110  
 Arg Pro Ser Ser Leu Thr Ser Ser Pro Ser Trp Asn Thr Gly Leu Val  
 115 120 125  
 Asp Pro Ala Leu Ser Leu Pro Glu Glu Gln Pro Ser Leu Ser Ser Leu  
 130 135 140  
 Gln Arg Trp His Gln Leu Ala Gly Ala Leu His Leu Arg Asp Pro Ala  
 145 150 155 160  
 Ala Asp Leu Glu Gln Thr Val Asn Arg Cys Phe Asp Leu Phe Phe Glu  
 165 170 175  
 Tyr Leu Phe Pro Leu Ile Pro Leu Val His Glu Pro Ser Leu Arg Asp  
 180 185 190  
 Gly Leu Arg Phe Phe Val Ser Gln Ala Ala Arg Ser Gly Ile Gly Val  
 195 200 205  
 Thr Gly Pro Glu Leu Trp Ser Ser Phe Val Arg Gly Asn Pro Ile Gly  
 210 215 220  
 Ala Asp Ser Ile Leu Asp Arg Ala Asn Ser Leu Lys Tyr Pro Glu Leu  
 225 230 235 240  
 Trp Pro Asp Ser Thr Phe Thr Leu Ile Thr Ala Val Cys Ala Glu Ala  
 245 250 255  
 Ala Phe Leu Leu Pro Lys Asp Ile Phe Pro Glu Gly Glu Arg Ile Ala  
 260 265 270  
 Asp Leu Phe Leu Lys Ala Ser Arg Ser Cys Leu His Gly Tyr Leu Glu  
 275 280 285  
 Glu Asp Leu Glu Tyr Pro Asn Ala Asn Ser Val Ala Ile Arg Tyr Phe  
 290 295 300  
 His Ser Asn Cys Leu His Ala Ala Gly Lys Pro Arg Phe Ser Trp His  
 305 310 315 320  
 Ile Phe Gly Glu Ala Thr Arg Leu Ala Gln Val Met Gln Met His Asp  
 325 330 335  
 Glu Met Ser Leu Gln Asn Leu Ser Ala Val Glu Ala Glu Leu Arg Arg  
 340 345 350  
 Arg Ala Phe Trp Ile Val Tyr Ile Gly Asp Lys Ser Ala Ala Ile Leu  
 355 360 365  
 Asn Asn Arg Pro Ile Thr Ile His Lys Phe Ser Phe Asp Thr Gly Ile  
 370 375 380  
 Thr Thr Ala Tyr Pro Ser Gly Ile Glu Asp Gly Thr Gly Val Ser Ser  
 385 390 395 400  
 Pro Ser Gly Thr Glu Pro Asp Leu Ser Pro Arg Met Ser Phe Ile Ala  
 405 410 415  
 Gly Phe Asn Ala Asn Leu Arg Leu Trp Gln Thr Ala Ser Asp Leu Ile  
 420 425 430  
 Leu Glu Met Arg Leu Leu Glu Ser Gln Lys Glu Val Gly Met Leu Thr  
 435 440 445  
 Pro Arg Leu Leu Thr Val Glu Glu Arg His Arg Leu Gly Asn Leu Tyr  
 450 455 460  
 Val Ser Phe Ile Thr Ser Leu Asp Lys Leu Pro Gln Tyr Leu Gln Thr  
 465 470 475 480  
 Asp Thr Leu Leu Ala Pro Thr Asn Asn Asn Asn Ile Ser Ser His Arg  
 485 490 495  
 Arg Lys Gln Tyr Val Ile Gln Trp Ala Asn Leu Asn Val Ser Leu His  
 500 505 510

## 18325

Cys Leu Arg Leu Val Ile Asp Gln Lys Leu Glu Asp Leu Gly Tyr Tyr  
           515                          520                          525  
 Ala Ser Gly Ile Glu His Pro Asp Met Pro Leu Leu Arg Lys Thr Glu  
           530                          535                          540  
 Ile Ala Arg Asp Met Leu Arg Val Ile Arg Glu Ala Pro Phe Trp Ser  
 545                          550                          555                          560  
 Leu Gln Val Asn Gly Glu Pro Cys Val Cys Phe Tyr Cys Leu Phe Ile  
                           565                          570                          575  
 Cys Cys Ile Leu Leu Lys Ala Pro Gln Val Glu Lys Ile Arg Leu Ile  
                           580                          585                          590  
 Gly Ala Ser Leu Leu Glu Ile Ile Asp Gln Tyr Glu Ala Ser Pro Leu  
                           595                          600                          605  
 Ser Val Arg Ala Arg Asn Asp Leu Ser Ile Leu Leu Asp Ile Leu Thr  
           610                          615                          620  
 Arg Leu Asp Ser Lys Ala Ser Asp Thr Leu Arg Arg Pro Ser  
 625                          630                          635

&lt;210&gt; 41431

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41431

Val Thr Val Pro Ala Glu Thr Ala Lys Gln Arg Leu Thr Ser Tyr Thr  
 1                          5                          10                          15  
 Gln Ala Gly Tyr Phe Pro Gly Pro Ser Ala Gly Glu Ser Ile Asp Ser  
           20                          25                          30  
 Asp Val Val Phe His Ala Leu Ala Leu Asp Gly Tyr Asn Asn Leu Ser  
           35                          40                          45  
 Gln Val Gln Val Met Asn Ser Asp Asp Cys Phe Arg His Phe Leu Leu  
           50                          55                          60  
 Asn Thr Thr Asn Gln Gln Gln Leu Thr Ser Phe Ile Asn Gln Thr Ala  
 65                          70                          75                          80  
 Thr Asn Ile Arg Arg Thr Phe Pro Ala Gly Leu Asn Thr Pro Val Gly  
                           85                          90                          95  
 Met Leu Ile Ala Asn Pro Ala Phe Gly Pro Asn Glu Val Tyr Ala Arg  
                           100                          105                          110  
 Asn Trp Thr Thr Gly Ala Tyr His Gly Thr Val Val Trp Ser Trp Gln  
           115                          120                          125  
 Leu Ala Met Met Ala Lys Gly Leu Glu Arg Gln Leu Gly Arg Cys Asp  
           130                          135                          140  
 Ala Gly His Gln His Ala Gln Pro Asp Phe Cys Ala Asp Lys Val Val  
 145                          150                          155                          160  
 Tyr Asn Asn Leu Arg Thr Ala Tyr Asn Thr Leu Trp Asp Gly Ile Glu  
                           165                          170                          175  
 Thr Asn Gln Ala Leu Leu Ser Glu Glu Val Trp Ser Phe Val Tyr Ser  
                           180                          185                          190  
 Asp Gly Arg Phe Asn Pro Ala Pro Leu Gly Asn Ile Pro Pro Pro Pro  
           195                          200                          205  
 Gly Val Gly Ala Gln Thr Gly Lys Pro Arg Glu Pro Ile Leu Leu Tyr  
           210                          215                          220  
 Leu Lys Arg Leu  
 225

&lt;210&gt; 41432

&lt;211&gt; 61

18326

<212> PRT

<213> A.fumigatus

<400> 41432

Trp	Ser	Thr	Leu	Asp	Gly	Ile	His	Ile	Asp	Met	Asn	His	Leu	Asn	Thr
1				5					10					15	
Gly	Glu	Val	Lys	Tyr	Val	Phe	Glu	Leu	Leu	Leu	Ile	Leu	Val	Leu	Ser
			20					25					30		
Asn	Lys	Leu	Leu	Thr	Thr	Val	Leu	Leu	Gln	Pro	Arg	Tyr	Leu	Asp	Val
			35					40					45		
Asn	Glu	Leu	Ile	Ser	His	Cys	Arg	Phe	Trp	Leu	Val	Tyr			
			50				55					60			

<210> 41433

<211> 121

<212> PRT

<213> A.fumigatus

<400> 41433

Asn	Ser	Arg	Asn	Leu	Leu	Thr	Gly	Phe	Asp	Gly	Ser	Ala	Gly	Ile	Ile
1				5					10					15	
Ile	Ala	Gly	Tyr	Asp	Pro	Arg	His	Gly	Gly	Gln	Val	Tyr	Ser	Ile	Pro
			20					25					30		
Leu	Gly	Gly	Ser	Leu	His	Lys	Gln	Pro	Tyr	Ala	Ile	Gly	Gly	Ser	Gly
			35				40					45			
Ser	Thr	Tyr	Ile	Tyr	Gly	Tyr	Cys	Asp	Ala	His	Trp	Lys	Glu	Asn	Met
			50				55				60				
Thr	Glu	Glu	Glu	Gly	Ile	Lys	Phe	Val	Arg	Asp	Ala	Leu	Gln	Glu	Ala
					70				75					80	
Ile	Lys	Trp	Asp	Gly	Ser	Ser	Gly	Gly	Val	Ile	Arg	Leu	Val	Val	Leu
			85					90					95		
Thr	Ser	Arg	Gly	Ser	Glu	Arg	His	Leu	Tyr	Leu	Pro	Asp	Thr	Glu	Tyr
			100					105					110		
Thr	Gly	Pro	Gly	Leu	Thr	Asn	Arg	Ser							
			115				120								

<210> 41434

<211> 514

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (350)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41434

Ile	Phe	Val	His	Asn	Arg	Ile	Val	Ile	Asn	Leu	Ser	Leu	Leu	Leu	Ser
1				5					10					15	
Pro	Ser	Ser	Pro	Leu	Ser	Pro	Ser	Leu	Ala	Ile	Glu	Thr	Arg	Cys	Pro
			20					25					30		
Asp	Val	Pro	His	Phe	Ala	Cys	Ser	Gln	Cys	Phe	Leu	Glu	Ala	Asp	Cys
			35				40					45			
Cys	Ser	Ala	Thr	Val	Ala	Leu	Gly	Phe	Ala	Ile	Thr	Arg	Ala	Ile	Ser
			50				55				60				
Phe	Gln	Ser	Arg	Pro	Leu	Phe	Ser	Leu	Arg	Leu	Asp	Met	Gly	Ser	Val





<210> 41435  
 <211> 118  
 <212> PRT  
 <213> A.fumigatus

<400> 41435  
 Ala Asp Phe Thr Leu Gln Ile Leu Ala Gly Ile Leu Ile Ala Tyr Ser  
 1 5 10 15  
 Met Ala Ile Asn Phe Lys Asp Gly Val Ile Leu Gly Ala Asp Ser Arg  
 20 25 30  
 Thr Thr Thr Gly Ala Tyr Ile Ala Asn Arg Val Thr Asp Lys Leu Thr  
 35 40 45  
 Gln Val His Asp Thr Ile Trp Cys Cys Arg Ser Gly Ser Ala Ala Asp  
 50 55 60  
 Thr Gln Ala Val Ala Asp Ile Val Ser Tyr His Leu Asn Met Tyr Gly  
 65 70 75 80  
 Ile Val Asn Asn Glu Pro Pro Ser Thr Gln Val Ala Ala Ala Leu Phe  
 85 90 95  
 Gln Glu Leu Cys Tyr Glu Asn Lys Asp Met Leu Arg Leu Ile Ile Pro  
 100 105 110  
 Pro Ser Leu Leu Ile Glu  
 115

<210> 41436  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 41436  
 Val Leu Gly Trp Pro Leu His Ser Ile Ile Thr Thr Asp Glu Cys Phe  
 1 5 10 15  
 Pro Arg Ser Asp His Ile Tyr Glu Thr Gln Gln Tyr Gln Ala Glu Ala  
 20 25 30  
 Ala Phe Leu Leu Pro Glu Gly Ser Val Phe Tyr Phe Phe Cys Arg Ala  
 35 40 45  
 Lys Val Pro Phe Cys Ser Pro Arg Glu Phe Ala Cys Thr Met Thr Trp  
 50 55 60  
 Asn Trp Arg Trp  
 65

<210> 41437  
 <211> 213  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (203)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 41437  
 Gln Gln Val Ser Ile His Ser Ile Lys Ala Asn Ile His Met Val Glu  
 1 5 10 15  
 Leu Thr Ser Asn Val His Gly His Leu Leu Asp Leu Gly Ala Val Glu

## 18329

```

      20              25              30
Leu Leu Asp Leu Thr His His Ala Asp Ile Val Ser Ser Asp Glu Val
      35              40              45
Asp Gly Asn Thr Leu Thr Thr Glu Thr Thr Thr Thr Thr Asp Thr Val
      50              55              60
Asn Val Val Leu Thr Val Gly Gly Gln Val Val Val Asp Asp Gln Gly
      65              70              75              80
Asn Leu Leu Asn Val Asp Thr Thr Ser Gln Lys Ile Gly Gly Asp Gln
      85              90              95
Asp Thr Gly Arg Thr Arg Ala Glu Leu Leu His Asp Asn Ile Thr Leu
      100             105             110
Gly Leu Leu His Ile Thr Val His Gly Gly Asp Ser Glu Val Thr Gly
      115             120             125
Ser Gln Leu Ile Ser Glu Pro Val Asp Leu Ala Ala Gly Val Ala Glu
      130             135             140
Asp Asp Ser Leu Gly Asp Gly Asp Ser Leu Val Glu Ile Gly Gln Gly
      145             150             155             160
Val Glu Leu Pro Leu Phe Leu Leu Asp Gly Asp Val Glu Leu Leu Asp
      165             170             175
Thr Phe Gln Gly Glu Phe Leu Leu Leu His Gln Asp Thr Asp Gly Val
      180             185             190
Ala His Glu Leu Gly Val Thr Ser Arg Thr Xaa Leu Gly Met Val Ala
      195             200             205
Asn Ser Arg Thr Thr
      210

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&lt;210&gt; 41438

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41438

```

Glu Ala Ile Phe Arg Ser Pro Pro Ser Trp Phe Thr Trp Arg Gly Thr
1              5              10              15
Trp Arg Ser Thr Tyr Leu Asn Ile Pro Ser Lys Val Ala Ile Leu
      20              25              30
Asp Cys Ser Ser Leu Phe Ser Asp Ala Leu His Arg Pro Phe Tyr Cys
      35              40              45
Thr His Ile Ser Leu Asp Thr Tyr Val Ser Asn Ile Pro Ser Arg Asn
      50              55              60
Gln Ile Thr Arg Leu Pro Asp Leu Ser Pro Glu Glu Phe Gln Ala Glu
      65              70              75              80
Trp Ser Ser Lys Pro Phe Ile Leu Thr Gln Pro Val Lys Gln Trp Pro
      85              90              95
Ala Tyr Lys Asn Trp Ser Val Asp Ser Leu Leu Ala Lys Tyr Gly Asp
      100             105             110
Thr Val Phe Arg Ala Glu Ala Val Asp Trp Lys Leu Ser Thr Tyr Val
      115             120             125
Asp Tyr Met Arg Asn Asn Ala Asp Glu Ser Pro Leu Tyr Leu Phe Asp
      130             135             140
Arg Ala Phe Val Ser Lys Met Gly Leu Lys Val Gly Pro Pro Glu Glu
      145             150             155             160
Glu Pro Asp Ala Thr Tyr Trp Pro Pro Pro Cys Phe Gly Glu Asp Phe
      165             170             175
Phe Ser Val Leu Gly Asn Asp Arg Pro Asp Arg Gln Trp Leu Ile Ile
      180             185             190

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## 18330

Gly Pro Glu Arg Ser Gly Ser Thr Phe His Lys Asp Pro Asn Ala Thr  
 195 200 205  
 Ser Ala Trp Asn Ala Val Ile Arg Gly Ser Lys Tyr Trp Ile Met Phe  
 210 215 220  
 Pro Ser Ser Ser Lys Leu Pro Pro Pro Pro Gly Val Phe Val Ser Asp  
 225 230 235 240  
 Asp Gln Ser Glu Val Thr Ser Pro Leu Ser Ile Ala Glu Trp Leu Leu  
 245 250 255  
 Cys Phe His Ala Glu Ala Arg Arg Thr Pro Gly Cys Ile Glu Gly Ile  
 260 265 270  
 Cys Gly Glu Gly Glu Ile Leu His Val Pro Ser Gly Trp Trp His Leu  
 275 280 285  
 Val Val Asn Leu Glu Pro Ser Ile Ala Ile Thr Gln Asn Phe Thr Pro  
 290 295 300  
 Arg Ala His Leu Thr Ala Thr Leu Asp Phe Leu Ser Asn Lys Ala Asn  
 305 310 315 320  
 Gln Val Ser Gly Phe Arg Lys Asp Val His Asn Pro Tyr Glu Arg Phe  
 325 330 335  
 Val Glu Asn Met Arg Lys Thr His Pro Glu Leu Leu Gln Gln Ala Leu  
 340 345 350  
 Asp Glu Leu Gln Lys Lys Ser Asp Gly Arg Lys Arg Lys Trp Asp Glu  
 355 360 365  
 Leu Val His Gly Lys Val Ala Gln Glu Asp Ala Gly Asp Ala Ser Glu  
 370 375 380  
 Gly Gly Gly Phe Ser Phe Gly Phe Gly Asp Asp Ser Asp Ile Glu Val  
 385 390 395 400  
 Pro

<210> 41439  
 <211> 146  
 <212> PRT  
 <213> A.fumigatus

<400> 41439  
 Ser Ser Tyr Gln Ala Asn Ser Ser Pro Leu Asn Leu Thr Gly Gly Thr  
 1 5 10 15  
 Ser Lys Thr Arg Gln Lys Lys Lys Gly Leu Pro Trp Ser Ile Ala Lys  
 20 25 30  
 Gly Phe Asp Thr Phe Leu Pro Ile Ser Glu Glu Ile Pro Lys Ala Arg  
 35 40 45  
 Ile Pro Asp Pro His Asn Ala Phe Leu Arg Leu Ser Val Gly Ser Gln  
 50 55 60  
 Leu Arg Gln Ala Asp Ser Thr Gly Leu Met Leu Tyr Arg Ile Pro Arg  
 65 70 75 80  
 Gln Leu Ala Glu Ile Ser Arg Val Met Thr Leu Glu Lys Gly Asp Leu  
 85 90 95  
 Val Leu Thr Gly Thr Pro Lys Gly Val Gly Glu Val Lys Ala Gly Asp  
 100 105 110  
 Val Met Lys Ala Ser Ile Glu Val Asp Gly Lys Glu Ile Glu Glu Gly  
 115 120 125  
 Arg Ile Glu Val Glu Val Lys Asp Arg Glu Gly Arg Tyr Val Tyr Ser  
 130 135 140  
 Glu Thr  
 145

<210> 41440  
 <211> 99  
 <212> PRT  
 <213> A.fumigatus

<400> 41440  
 Thr Leu Leu Leu Ser Pro Lys Pro Ser Pro Asn Leu Ile Gln Asn Leu  
 1 5 10 15  
 Pro Leu Tyr Arg Leu Pro Gln Phe Ser Gln Ser Arg Leu Leu Pro Ala  
 20 25 30  
 Phe Pro Phe Asp Thr Ile Glu Ala Leu Ser Gln Val Ala Ile Leu Thr  
 35 40 45  
 Leu Asn Asp Ile Lys Pro Thr Arg His Pro Leu Gln Pro Ser Phe Lys  
 50 55 60  
 Ser Val Arg Asp Val Leu Gln Pro Leu Gly Ala Tyr Ile Val Ile Gly  
 65 70 75 80  
 Val Gly Cys Leu Cys Leu Phe Ser Tyr Phe Ile Gln Leu Leu Leu Gln  
 85 90 95  
 Phe Ser Asp

<210> 41441  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 41441  
 Met Pro Asp Ile Thr Ser Leu Gln Ser His Pro Leu Glu Glu Thr Asp  
 1 5 10 15  
 Ser His Ser Phe Ser Pro Asp Asp Ser Phe Gln Glu Asp Leu Thr Gly  
 20 25 30  
 His Asp Ala Ile Pro Cys His Pro Ala Arg Arg Lys Ser Arg Val Ala  
 35 40 45  
 Thr Leu Phe Leu Pro Met Arg Ile Ser Val Met Arg Leu Gly Arg Ser  
 50 55 60  
 Ile Phe Cys Arg Met Ser  
 65 70

<210> 41442  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (155), (156)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 41442  
 Gln Val Leu Thr Ile Ser Ser Gln Val Ser Thr Pro Thr Val Ser Ser  
 1 5 10 15  
 Val Pro Leu Leu Ser Ser Ser Val Leu Ser Phe Pro Ser Ser Arg Val  
 20 25 30  
 Gly Leu Pro Ile Thr Ala Tyr Glu Ser Thr Val Ile Asn Leu Gly Ile  
 35 40 45  
 Thr Gly Asn Asp Val Ile Ala Gln Ala Gln Ser Gly Thr Gly Lys Thr

## 18332

50		55		60
Ala Thr Phe Ser Ile	Ser Ala Leu Gln Lys	Leu Asp Pro Asn Val Lys		
65	70	75	80	
Gly Cys Gln Ala Leu	Ile Leu Ala Pro Thr	Arg Glu Leu Ala Gln Gln		
	85	90	95	
Ile Gln Lys Val Val	Val Ala Ile Gly Asp	Phe Met Asn Ile Glu Cys		
	100	105	110	
His Ala Cys Ile Gly	Gly Thr Asn Val Arg	Glu Glu His Glu Ala Leu		
	115	120	125	
Gln Glu Gly Pro Lys	Val Val Val Gly Thr	Pro Gly Arg Val Lys Asp		
	130	135	140	
Met Ile Gln Arg Arg	Val Leu Arg Pro Thr	Xaa Xaa Lys Met Phe Ile		
145	150	155	160	
Leu Asp Glu Ala Asn	Glu Met Leu Ser Val	Ser		
	165	170		

&lt;210&gt; 41443

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41443

Gly Tyr Thr Lys Phe	Met Arg Asp Pro Val	Arg Ile Leu Val Lys Lys
1	5	10 15
Gln Glu Leu Thr Leu	Glu Gly Ile Lys Gln	Phe Tyr Ile Ala Val Glu
	20	25 30
Lys Glu Glu Trp Lys	Leu Asp Thr Leu Ser	Asp Leu Tyr Glu Thr Val
	35	40 45
Thr Ile Thr Gln Ala	Val Ile Phe Cys Asn	Thr Arg Arg Lys Val Asp
	50	55 60
Trp Leu Thr Asp Lys	Leu Thr Ala Arg Asp	Phe Thr Val Ser Ala Met
65	70	75 80
His Gly Asp Met Glu	Gln Ala Gln Arg Asp	Val Ile Met Lys Glu Phe
	85	90 95
Arg Ser Gly Ser Ser	Arg Val Leu Ile Ala	Thr Asp Leu Leu Ala Arg
	100	105 110
Gly Ile Asp Val Gln	Gln Val Ser Leu Val	Ile Asn Tyr Asp Leu Pro
	115	120 125
Ala Asn Arg Glu Asn	Tyr Ile His Arg Ile	Gly Arg Gly Gly Arg Phe
	130	135 140
Gly Arg Lys Gly Val	Ala Ile Asn Phe Val	Thr Ala Asp Asp Val Arg
145	150	155 160
Met Met Arg Glu Ile	Glu Gln Phe Tyr Ser	Thr Gln Ile Glu Glu Met
	165	170 175
Pro Met Asn Val Ala	Gly Lys Phe Asn His	Val Asp Ile Ser Leu Asp
	180	185 190

&lt;210&gt; 41444

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41444

Ser Ala Arg His Asp	Leu Arg Gly Thr Gly	Thr Phe Arg Ala Thr Asn
1	5	10 15
Ala Ile Trp Ser Ile	Ile Ile Ala Ile Ala	Arg Val Leu Pro Leu Cys

## 18333

```

                20                25                30
Ser Val Thr Phe Leu Ala Val Pro Arg Ala Val Thr Ala Arg Pro Ala
          35                40                45
Asn Met Thr Ser Ser Val Asp Ala Lys Leu Leu Lys Gln Thr Lys Phe
          50                55                60
Pro Pro Glu Phe Asn Arg Lys Val Asp Met Lys Lys Val Asn Ile Glu
65                70                75                80
Val Met Lys Lys

```

<210> 41445  
 <211> 92  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41445
Pro Asp Ile Lys Ser Leu Gln Ile Gln Leu Thr Gly Phe Leu Asp Lys
1                5                10                15
Asp Thr Pro Lys Phe Cys Lys Asp Leu Trp Ser Leu Cys Leu Ser Ala
          20                25                30
Gln Glu Asn Pro Gln Gly Val Pro Lys Glu Leu Leu Glu Ala Lys Lys
          35                40                45
Leu Glu Leu Ile Gln Glu Lys Val Ala Leu Ile His Cys Leu Asn Gly
          50                55                60
Phe Lys Pro Gly Ala Asp Thr Val Ser Ala Arg Ser Arg Pro Arg Lys
65                70                75                80
Gln Arg Lys Lys Pro Ala Ala Arg Gly Ser Lys Ser
          85                90

```

<210> 41446  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41446
Ala Ala Ser Asp Phe Ala Ile Arg Pro Gln Asp Glu Asn Leu Ile Leu
1                5                10                15
Thr Phe Pro Pro Val Arg Ala Gly Ala Val Gly Leu Gln Asp Arg Pro
          20                25                30
Val Pro Leu Pro Pro Ala Leu Val Pro Phe Pro His Leu Asp Arg His
          35                40                45
Pro Val Asp Ala Tyr Leu Ala Glu Thr Asp Thr Asn Val Ala Ala Pro
          50                55                60

```

<210> 41447  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (5), (10), (30), (47)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 41447
Val Ser Phe Val Xaa Thr Cys Phe Ala Xaa His Leu Phe Tyr Ala Gly

```

## 18334

```

1           5           10           15
Ile Gln Arg Gly Phe Thr Glu Gln Ile Tyr Asp Ile Phe Xaa Leu Leu
      20           25           30
Pro Gln Ser Thr Gln Val Val Leu Leu Phe Ala Thr Met Pro Xaa Asp
      35           40           45
Val Leu Glu Val Thr Pro Ser Ser Cys Ala Thr Pro Ser Val Ser Trp
      50           55           60

```

<210> 41448  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41448
Glu Ile Ser Leu Val Arg Val Val Val Leu Val Ser Lys Ser Ile Ser
1           5           10           15
Lys Gly Leu Ser Leu Leu Ser Asp Leu Cys Asp Tyr Asn Pro His Trp
      20           25           30
Asp Leu Leu Ser Leu Arg Lys Leu Pro Ser Ser Gln Pro Thr Pro His
      35           40           45
Cys Phe Ile Asp Arg Ser Phe Ser Pro Val Ile Thr Thr Tyr Phe Ser
      50           55           60
Arg Asn His Gly Phe
65

```

<210> 41449  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41449
Asp His Arg Leu Leu Arg Cys Tyr Gly Pro Glu Ala Arg Ala Ser Ser
1           5           10           15
Arg Tyr Val Ser Leu Val Ser Thr Arg Trp Arg Gly Met Cys Val Ala
      20           25           30
Ser Ile Asp Asp Ile Phe Pro Gly Val Tyr Ala Tyr Gly Phe Glu Arg
      35           40           45
Pro Ser Ala Ile Gln Gln Arg Ala Ile Leu Pro Ile Ile Lys Gly Arg
      50           55           60
Ser Ser Tyr Tyr Gly Leu
65           70

```

<210> 41450  
 <211> 182  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (158)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 41450
Ile Ala Ala Glu Lys Ala Ala Glu Glu Ala Arg Arg Lys Arg Glu Gln
1           5           10           15
Glu Leu Ala Arg Glu Arg Glu Leu Glu Glu Ile Arg Arg Arg Glu Arg

```



## 18335

	20		25		30
Phe	Asp	Arg	Asn	Arg	Gly
	35		40		45
Phe	Asp	Arg	Arg	Pro	Tyr
	50		55		60
Ser	Arg	Glu	Arg	Phe	Arg
	65		70		75
Tyr	Val	Pro	Ser	Gly	Ser
		85		90	
Ser	Ala	Ser	Pro	Ser	Arg
	100		105		110
Pro	Arg	Arg	Arg	Leu	Pro
	115		120		125
Val	Ser	Gly	Ser	Val	Ser
	130		135		140
Arg	Arg	Asn	Pro	Asp	Tyr
	145		150		155
Asp	Ser	Ser	Arg	Ser	Arg
		165		170	
Lys	Asp	Arg	Glu	Gly	Leu
		180			

&lt;210&gt; 41451

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41451

Ile	Gly	Val	Thr	Cys	Gln	Asp	Arg	His	Lys	Ala	Gln	Pro	His	Leu	Ala
1				5					10					15	
Asn	Cys	Leu	Asp	Tyr	Lys	Lys	Val	Leu	Pro	Asn	Trp	Val	Asn	Arg	Tyr
		20						25					30		
Asn	Pro	Gly	Ala	Gln	Arg	Ser	Lys	Asn	Ser	Ile	Ser	Ile	Arg	Lys	Val
		35					40					45			
Ser	Asp	Val	Gln	Gly	Ala	Ser	Met	Ser	Thr	Val	Tyr	Cys	Arg	Thr	Asn
	50					55					60				
Thr	Leu	Asp	Ser	Ile	Asn	Gln	Pro	Glu	Tyr	Gln	Ser	Gln	His	Thr	Thr
	65				70				75						80
Ile	Cys	Thr	Ser	Lys	Pro	Val	Met	Arg							
				85											

&lt;210&gt; 41452

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41452

Ala	Val	Ala	Asp	Leu	Arg	His	Lys	Tyr	Val	Lys	Asn	Gln	Ala	Ala	Tyr
1				5					10					15	
Asn	Thr	Arg	Ala	Thr	Asp	Val	Leu	Ser	Thr	Met	Gly	Leu	Thr	Arg	Ala
			20					25					30		
Glu	Tyr	Arg	Val	Gln	Ser	His	Leu	Leu	Pro	Cys	Pro	Ser	Leu	Cys	Ala
		35					40					45			
Arg	Val	Arg	Pro	Ala	Asn	Ser	Pro	Cys	Ser	Ser	Gly	Phe	Ala		
	50					55					60				

<210> 41453  
 <211> 86  
 <212> PRT  
 <213> A.fumigatus

<400> 41453  
 Met Trp Leu Gly Phe Val Thr Ile Leu Thr Gly Asn Ser Tyr Leu Cys  
 1 5 10 15  
 Tyr Phe Val Val Gly Trp Asp Ile Tyr Leu Val Phe Thr Pro Gly Ser  
 20 25 30  
 Arg His Thr Ser Val Tyr Tyr Ala Gln Leu His Gly His Leu Asp Arg  
 35 40 45  
 Ser Arg Ser Val Leu Leu Leu Ile Leu Ser Asn Leu Phe Met Pro Met  
 50 55 60  
 Pro Leu Thr Ala Gly Ile Lys Ile Tyr Ser Val Ser Ala Asp Gln Ser  
 65 70 75 80  
 Lys Asn Glu Ala Pro Lys  
 85

<210> 41454  
 <211> 318  
 <212> PRT  
 <213> A.fumigatus

<400> 41454  
 Gln Met Leu Asn Asp Ala Ser Leu Phe Ser Leu Trp Arg Gly Asp Met  
 1 5 10 15  
 Met Ser Gly Leu Glu Thr Ile Ala Ala Thr Asn Ile Pro Arg Ser Leu  
 20 25 30  
 Ser Thr Thr Leu Pro Cys Pro Pro Lys Phe Trp Gly Phe Ser Met Asp  
 35 40 45  
 Glu Phe Ala Phe Tyr Asp Ile Pro Asp Ser Ile Thr Tyr Ile Leu Asn  
 50 55 60  
 Ala Thr Gly Gln Ala Ser Leu Ser Tyr Ile Gly Phe Ser Gln Gly Thr  
 65 70 75 80  
 Ala Gln Ala Phe Ala Thr Leu Ser Ile His Pro Leu Leu Asn Gln Gln  
 85 90 95  
 Ile Asp Val Phe Val Ala Leu Ala Pro Ala Met Ala Pro Ser Gly Leu  
 100 105 110  
 Arg Asn Arg Ile Val Asp Ser Leu Met Lys Ala Ser Pro Asn Phe Leu  
 115 120 125  
 Phe Leu Leu Phe Gly Arg Arg Ser Ile Leu Ser Ser Thr Thr Met Trp  
 130 135 140  
 Gln Thr Ile Leu Tyr Pro Pro Ile Phe Val Arg Ile Ile Asp Thr Ser  
 145 150 155 160  
 Leu Ser Ile Leu Phe Gly Trp Glu Gly Lys Asn Ile Ser Trp Tyr Gln  
 165 170 175  
 Lys Leu Ala Gly Tyr Leu His Leu Tyr Ser Phe Thr Ser Thr Lys Ser  
 180 185 190  
 Val Val His Trp Phe Gln Ile Met Arg His Arg Thr Phe Gln Met Tyr  
 195 200 205  
 Asp Asp Glu Val His Ala Pro Phe Ser Val Val Ala Ser Gln Arg Phe  
 210 215 220  
 Tyr Lys Pro Val Lys Tyr Pro Thr Arg Asn Ile Lys Thr Pro Ile Val  
 225 230 235 240  
 Leu Leu Tyr Gly Gly Ser Asp Ser Leu Ile Asp Ile Gly Ala Met Leu

```
<210> 41455
<211> 61
<212> PRT
<213> A.fumigatus
```

```
<210> 41456
<211> 274
<212> PRT
<213> A.fumigatus
```

<400>	41456															
Thr	Cys	Pro	Tyr	Ala	Leu	Leu	Cys	Thr	Ser	Gln	Leu	Thr	Ser	Trp	Pro	
1				5					10					15		
Gly	Tyr	Gly	Pro	Ser	Leu	Thr	Pro	Lys	Asn	Ile	Ile	Asp	Phe	Met	Asn	
			20					25					30			
Lys	Asp	Gly	Asn	Val	Leu	Leu	Ala	Leu	Ser	Gly	Lys	Ser	Thr	Thr	Ala	
		35					40					45				
Ser	Ala	Ile	Ser	Ser	Leu	Leu	Leu	Glu	Leu	Asp	Leu	His	Leu	Pro	Val	
	50					55					60					
Asp	Arg	Ser	Ser	Val	Thr	Val	Asp	His	Phe	Asn	Tyr	Asp	Thr	Leu	Ser	
65					70					75					80	
Ala	Ser	Asp	Lys	His	Asp	Val	Leu	Leu	Leu	His	Arg	Pro	Gly	Lys	Leu	
				85					90					95		
Arg	Ser	Asp	Thr	Lys	Ala	Phe	Leu	Asp	Gly	Glu	Gly	Val	Val	Ala	Phe	
			100					105					110			
Pro	Arg	Ala	Val	Pro	His	Thr	Leu	Gly	Asp	Ala	Asn	Pro	Leu	Ile	Ala	
		115					120					125				
Pro	Ile	Leu	Arg	Ala	Pro	Ala	Thr	Ala	Tyr	Ser	Tyr	Asn	Pro	Lys	Glu	
	130					135					140					
Asp	Ala	Ser	Ser	Val	Glu	Asp	Val	Ala	Ala	Thr	Gly	Ser	Gln	Leu	Ala	
145					150					155					160	
Leu	Val	Ser	Ala	Met	Gln	Ala	Arg	Asn	Ser	Ala	Arg	Phe	Thr	Leu	Leu	
				165					170					175		
Gly	Ser	Val	Glu	Ser	Leu	Gln	Asp	Gln	Trp	Phe	Ser	Ala	Thr	Val	Lys	
			180					185					190			
Ala	Pro	Gly	Asp	Gly	Lys	Gln	Met	Lys	Thr	Val	Asn	Gln	Glu	Phe	Ala	

18338

```

      195                200                205
Lys Gln Leu Thr Ala Trp Thr Phe Lys Glu Thr Gly Val Leu Lys Val
      210                215                220
Gly Lys Ile Glu His His Leu Ala Glu Asp Gly Glu Ile Thr Pro Glu
225                230                235                240
Lys Leu Asn Pro Lys Ile Tyr Arg Val Lys Asn Glu Thr Val Ser Asp
      245                250                255
Ser His Leu Arg Phe His Cys Leu Phe Ala Cys Ser Pro Phe Ser Thr
      260                265                270
Gly Leu

```

<210> 41457  
 <211> 154  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41457
Gly Ser Ile Ala Tyr Leu His Ala His Pro Ser Gln Gln Val Phe Ser
1                5                10                15
Ile Glu Leu Ser Glu Tyr Asn Tyr Asp Arg Tyr Ala Pro Phe Glu Val
      20                25                30
Pro Thr Gly Asp Ala Val Gln Leu Glu Phe Thr Met Leu Ser Pro Phe
      35                40                45
His Arg Leu Asn Leu Glu Pro Val Arg Arg Thr Asp Asn Ser Thr Val
      50                55                60
Tyr Ser Thr Arg Phe Thr Thr Pro Asp Gln His Gly Ile Phe Ser Phe
65                70                75                80
Arg Val Asn Tyr Lys Arg Pro Phe Leu Thr Asn Ile Glu Glu Lys Leu
      85                90                95
Glu Val Thr Val Arg His Phe Ala His Asn Glu Tyr Pro Arg Ser Trp
      100                105                110
Lys Ile Ser Gly Gly Trp Val Trp Ile Ala Gly Leu Trp Ser Val Ile
      115                120                125
Ala Gly Phe Leu Val Phe Val Val Ala Trp Leu Tyr Ser Ala Pro Ser
      130                135                140
Ala Ala Ala Leu Asn Thr Lys Lys Thr Gln
145                150

```

<210> 41458  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41458
Pro Glu Ala Ala Glu Pro Ile Ile Glu Phe Cys His Asp Arg Ser Lys
1                5                10                15
Ala Leu Phe Asn Leu Leu Ser Pro Gly Glu Arg Leu Tyr Lys Arg Gly
      20                25                30
Lys Glu Glu Gln Ile Ala Ala Gln Val Ala Gln Ala Ser Asn Phe Ala
      35                40                45
Asp Ile Cys Ala Ile Phe Gly Tyr Glu Ala Glu Glu His Ile Val Gln
      50                55                60
Thr Lys Asp Gly Phe Leu Ile Gly Leu His Arg Leu Ala Tyr Arg Arg
65                70                75                80
Gly Glu Glu Gly Arg Leu Val Asn Arg Gly Glu Gly Thr Leu Glu Lys

```

## 18339

```

      85              90              95
Lys Val Val Tyr Leu His His Gly Leu Leu Met Cys Ser Glu Val Trp
      100              105              110
Val Cys Leu Thr Asp Ala Gln Arg Cys Leu Pro Phe Gln Leu Val Glu
      115              120              125
Arg Gly Tyr Asp Val Trp Leu Gly Asn Asn Arg Gly Asn Lys Tyr Ser
      130              135              140
Lys Lys Ser Ile His His Ser Pro Leu Ser Ala Gln Val Leu Gly Leu
      145              150              155              160
Phe Asp Gly Arg Val Cys Val Leu Arg Tyr Pro
      165              170

```

<210> 41459  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41459
Ala Trp Arg Leu Ser Pro Gly Asp Ala Leu Ala Gln Cys Leu Gln Glu
1              5              10              15
Ser Asp Cys Ile Met Val Gln Arg His Thr Pro Arg Glu Cys Leu Ser
      20              25              30
Thr Pro Leu Val Asp Glu Leu Pro Met Lys Cys Gln Gln Leu Arg Lys
      35              40              45
Gly Phe Ser Glu Cys Lys Trp Val Glu Arg Ile Cys Val Leu
      50              55              60

```

<210> 41460  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41460
Val Val Leu Ser Leu Leu Thr Pro Ile Gly Ala Leu Pro Arg Ser Thr
1              5              10              15
Phe His Ile Pro Ser Thr Thr Leu Thr Tyr Asn Val Thr Tyr Leu Asp
      20              25              30
Ala Asn Glu Pro Gly Asp Phe Leu Gln Glu Met His Trp Arg Asn Ala
      35              40              45
Cys Lys Asn Gln Ile Ala Ser Trp Ser Ser Gly Thr Pro Arg Val Asn
      50              55              60
Ala
65

```

<210> 41461  
 <211> 122  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41461
Ile Leu Asp Pro Ile His Leu Ser Arg Ser Gln Leu Ser Ile Lys Ser
1              5              10              15
Arg Lys Asn Pro Ser Glu Pro Ser Thr Phe Arg Leu Ile Thr Met Thr
      20              25              30
Thr Pro Gln Phe Trp Ser Thr Pro Leu Arg Tyr Leu Arg Trp Ala Ser
      35              40              45

```

## 18340

His Glu Lys Pro Ala Ile Phe Tyr Ser Leu Val Val Gly Ala Thr Gly  
 50 55 60  
 Pro Leu Met Leu Val Thr Leu Pro Pro Ile Arg Arg Phe Phe Gly Asp  
 65 70 75 80  
 Val Asp Pro Glu Pro Ile Pro Leu Thr Tyr Pro Arg Lys Ala Pro Ile  
 85 90 95  
 Phe Phe Phe Ser Phe Ser Cys Ser Pro Cys Ser Leu Ile Cys Val Leu  
 100 105 110  
 Cys Leu Ser His Ala Asn Ile Phe Ile Pro  
 115 120

<210> 41462  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 41462  
 Asp Tyr Ile Thr Val Gln Thr Thr His Ile Arg Phe Ser Arg Ile Pro  
 1 5 10 15  
 Ser Glu Arg Leu Lys Tyr Val Cys Asp Ser His Ile Lys Tyr Glu Pro  
 20 25 30  
 Trp Ala Thr Ile Asn Ser Ser Thr Ser Ala Cys Gln Ala Cys Asp Asn  
 35 40 45  
 Ala Arg Cys Asn Tyr Ile Thr Ile Tyr Ile His Thr Tyr Lys Trp Arg  
 50 55 60  
 Glu Asn Ser  
 65

<210> 41463  
 <211> 156  
 <212> PRT  
 <213> A.fumigatus

<400> 41463  
 Ile Phe Thr Met Gly Asp Arg Ser Arg Ser Arg Ser Pro Arg Arg Arg  
 1 5 10 15  
 Tyr Asp Glu Asp Arg Ser Arg Pro Arg Arg Thr Gly Gly Gly Phe Arg  
 20 25 30  
 Trp Lys Asp Lys Arg His Glu Gly Asp Arg Leu Gly Ala Glu Asp Ser  
 35 40 45  
 Arg Leu Ser Arg Gly Tyr Arg Asp Arg Gly Asp Arg Pro Arg Ser Pro  
 50 55 60  
 Arg Arg Asp Arg Asp Ser Asp Arg Tyr Arg Asp Ser Tyr Arg Asp Gly  
 65 70 75 80  
 Asp Arg Glu Arg Arg Arg Pro Asp Asp Asn Gln Lys Asp Glu Arg Arg  
 85 90 95  
 Glu Lys Lys Glu Lys Pro Glu Lys Lys Ala Val Val Ala Pro Gln Ser  
 100 105 110  
 Ser Glu Pro Met Ile Val Gly His Val Thr Asp Arg Leu Gly Thr Lys  
 115 120 125  
 Gly Cys Asn Thr Met Pro Gly Ile Arg Ser Tyr Gln Phe Val Ser Tyr  
 130 135 140  
 Ala Val Ser His Leu Pro Asn Val Val Thr Leu Asp  
 145 150 155

<210> 41464

<211> 664  
 <212> PRT  
 <213> A.fumigatus

<400> 41464

Arg	Lys	Gln	Tyr	Thr	Ser	Pro	Ser	Ile	Val	Arg	Gly	Met	Trp	Arg	Thr
1				5					10					15	
Pro	Gly	Arg	Pro	Leu	Ser	Thr	Leu	Ser	Arg	Ile	Thr	Asp	Ser	Ile	Ala
			20					25					30		
Val	Arg	Ile	His	Cys	Arg	Tyr	Pro	His	Thr	Arg	Ser	Val	Lys	Arg	Gly
		35					40					45			
Arg	Ala	Lys	Ala	Asn	Thr	Met	Pro	Gly	Pro	Ala	Asp	Ala	Pro	Pro	Glu
	50					55					60				
Gly	Gln	Pro	Asp	Tyr	Ser	Thr	Trp	Thr	Thr	Pro	Ser	Leu	Ile	Ala	Arg
65					70					75					80
Ile	Thr	Glu	Leu	Glu	Arg	Gln	Leu	His	Ser	Arg	Asn	Thr	Glu	Tyr	Ala
				85					90					95	
Thr	Leu	Pro	Ser	Lys	Gly	Val	Asn	Glu	Val	Gly	Val	Thr	Ser	Ser	Ala
			100					105					110		
Pro	Arg	Pro	Ser	Glu	His	Pro	Val	Thr	Asp	Thr	Gln	Glu	Leu	Val	Pro
		115					120					125			
Ala	Lys	Ala	Gly	Lys	Gln	Lys	Arg	Pro	Leu	Ser	Pro	Asp	Asp	Asp	Ile
	130					135					140				
Thr	His	Thr	Arg	Ala	Pro	Thr	Arg	Pro	Pro	Lys	Gln	Pro	Arg	Glu	Ile
145					150					155					160
Asp	Pro	Ser	Lys	Tyr	Asn	Thr	Arg	Phe	Ile	Ala	Leu	Lys	Phe	Ala	Tyr
				165					170					175	
Leu	Gly	Gln	Arg	Tyr	Asn	Gly	Leu	Glu	His	Ala	Asn	Gly	Asn	Val	Thr
			180					185					190		
Pro	Leu	Pro	Thr	Ile	Glu	Glu	Glu	Leu	Trp	Lys	Ala	Met	Arg	Arg	Thr
		195					200					205			
Arg	Leu	Ile	Phe	Pro	Lys	Asn	Ala	Glu	Ala	Phe	Asp	Asp	Ser	Arg	Gly
	210					215					220				
Pro	Arg	Glu	Leu	Lys	Pro	Tyr	Ala	Ile	Ser	Trp	Glu	Gly	Cys	Asp	Tyr
225					230					235					240
Ser	Lys	Ala	Gly	Arg	Thr	Asp	Arg	Gly	Val	Ser	Ala	Phe	Gly	Gln	Val
				245					250					255	
Ile	Gly	Ile	Arg	Val	Arg	Ser	Ala	Arg	Pro	Lys	Arg	Pro	Asp	Ala	Glu
			260					265					270		
Thr	Thr	Ser	Asp	Val	Glu	Met	Thr	Ser	Gly	Gly	His	Ala	Asp	Asp	Thr
		275					280					285			
Trp	Asp	Asp	Ile	Ala	Asp	Glu	Ile	Pro	Tyr	Ile	Ser	Ile	Leu	Asn	Arg
	290					295					300				
Val	Leu	Pro	Asp	Asp	Ile	Arg	Ile	Leu	Ala	Trp	Cys	Pro	Asn	Pro	Pro
305					310					315					320
Pro	Gly	Phe	Asp	Ala	Arg	Phe	Ser	Cys	Arg	Glu	Arg	Gln	Tyr	Lys	Tyr
				325					330					335	
Phe	Phe	Thr	Gln	Pro	Ala	Phe	Ser	Pro	Thr	Pro	Gly	Pro	Leu	Gly	Phe
			340					345					350		
Ala	Met	Arg	Gly	Ser	Gly	Asp	Lys	Asn	Ala	Ser	Thr	His	Leu	Arg	Glu
		355					360					365			
Gly	Trp	Leu	Asp	Ile	Asp	Ala	Met	Arg	Glu	Ala	Ala	Arg	Tyr	Phe	Glu
	370					375					380				
Gly	Val	His	Asp	Phe	Arg	Asn	Phe	Cys	Lys	Leu	Asp	Thr	Ser	Lys	Gln
385					390					395					400
Ile	Glu	Asn	Phe	Glu	Arg	Ile	Ile	Tyr	His	Ala	Asp	Ile	Glu	Leu	Leu

## 18342

```

          405                      410                      415
Asp Pro Lys Asp His Pro Leu Gly Tyr Val Asn Gln Pro Gly Phe Gln
          420                      425                      430
Ala Leu Gln Asp Ala Pro Ala Arg Thr Ser Ser Glu Ser Gly Thr Phe
          435                      440                      445
Thr Ser Pro Ala Ala Ala Lys Val Tyr Val Phe Asn Leu His Gly Ser
          450                      455                      460
Ala Phe Leu Trp His Gln Val Arg His Met Val Ser Ile Leu Phe Leu
465                      470                      475                      480
Val Gly Gln Gly Leu Glu Pro Pro Thr Ile Val Arg Asp Leu Leu Asp
          485                      490                      495
Val Ser Lys Asn Pro Cys Lys Pro Thr Tyr Glu Met Ala Ser Asp Ala
          500                      505                      510
Pro Leu Val Leu Trp Asp Cys Ile Phe Pro Asp Glu Ala Ser Gly Ser
          515                      520                      525
Arg Lys Asp Ala Leu Asn Trp Val Tyr Ala Gly Asp Pro Arg Gln Ser
          530                      535                      540
Lys Ser Gln Leu Gly Lys Gly Ser Gly Lys Phe Gly Val Gly Gly Val
545                      550                      555                      560
Val Asp Gly Leu Trp Ser Val Trp Arg Gln Arg Lys Met Asp Glu Ile
          565                      570                      575
Leu Ala Gly Ala Leu Leu Asp Leu Ala Val Ser Gln Gly Asp Gln Ser
          580                      585                      590
Val Val Arg Gly Glu Gly Ser His Asp Pro Ile Ser Glu Lys Asp Asn
          595                      600                      605
Arg Gly Gln Lys Val Phe Tyr Gly Ala Asn Glu Pro Arg Met Gly Gly
          610                      615                      620
Lys Tyr Val Pro Val Met Gln Lys Arg Arg Thr Glu Pro Val Glu Val
625                      630                      635                      640
Gln Asn Ala Arg Trp Leu Ala Ser Lys Gln Arg Lys Val Asp Lys Ala
          645                      650                      655
Ser Glu Pro Ala His Gly Asp Asp
          660

```

&lt;210&gt; 41465

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41465

```

Val Ala Asp Cys Asn Gly Gln Thr Val Ile Gln Ile Thr Asp Ile Leu
1          5          10          15
Lys Lys Gln Asn Ile Leu Gln Pro Thr Pro Gly Tyr Lys Gln Lys Gly
          20          25          30
Phe Leu Lys Lys Gly Leu Pro Lys Phe Lys Ile Ser Pro Ser Glu Glu
          35          40          45
Ile Gln Gln Lys Leu Lys Glu Glu Ile Leu Asn Pro Met Ala Lys Ile
          50          55          60
Gly His His Val Ser Val Phe Met Pro
65          70

```

&lt;210&gt; 41466

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus



&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (46)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41466

```

Ala Phe Ile Asp Leu Ala Lys Leu Ile Phe Glu Ala Tyr Ile Lys Tyr
1           5           10           15
His Val Ala Phe Ser Ala Arg Arg Gly Cys Trp Gly Pro Cys Leu Ser
           20           25           30
Gly Val Ser Phe Thr Ile His Arg Pro Thr Ala Gln Glu Xaa Pro Ser
           35           40           45
Gly Thr Ser Tyr Leu Thr Tyr His Trp Gln His Ser Ser Gly Glu Phe
           50           55           60
Thr Tyr Cys Ser
65

```

&lt;210&gt; 41467

&lt;211&gt; 421

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41467

```

Arg Pro Trp Ile Val Ser His Ala Gly Asn Val His Ile Ser Pro Lys
1           5           10           15
Gly Ser Phe Ser Phe Pro Tyr Gly Ala Ala Ala Leu Thr His Arg Leu
           20           25           30
Asn Gln Leu Arg Lys Gly Lys Ser Pro Asp Glu Ala His Arg Ala Glu
           35           40           45
Glu Ala Phe Arg Arg Glu Met Glu Ser Asn Phe Arg Met Ala Leu Glu
           50           55           60
Gln Leu Glu Ile Pro Asp Arg Leu Val Glu Lys Ala Arg Thr Glu Gly
65           70           75           80
Gly Phe Pro Leu Tyr Leu Ser Gly Gly Gly Phe Arg Gly Trp Gly Tyr
           85           90           95
Leu Leu Leu Tyr Leu His Gln Val Arg Gly Gln Tyr Tyr Pro Ile Ser
           100          105          110
Ile Ile Asn Gly Tyr Ser Ala Pro Lys Glu Asp Phe Glu Asn Thr Glu
           115          120          125
Val Leu Lys Lys Val Ala Arg Thr Ala Arg Asp Ile Phe Arg Val Ser
           130          135          140
Asp Arg Arg Arg Glu Gln Val Pro Ser Val Ala Phe Leu Val Asn Val
145          150          155          160
Leu Ala Lys Ala Val Pro Tyr Gly Ile Lys Glu Ala His Phe Cys Gln
           165          170          175
Gly Gly Val Arg Glu Gly Leu Leu Phe Arg Glu Ile Pro Pro Phe Val
           180          185          190
Arg Gln Gln Asp Pro Leu Glu Val Ala Thr Thr Ala Phe Ala Arg Pro
           195          200          205
Ser Ala Gln Val Ile Ala Phe Leu Met Phe Gly Ala Ile Pro Ala Arg
           210          215          220
Thr Glu Glu Arg Thr Phe Pro Pro Ser Ile Arg Gly Thr Leu Ile Gln
225          230          235          240
Ala Phe Ala Asn Ser Leu Phe Val His Ala Ala Met Ser Lys Glu Ser
           245          250          255
Ser Ser Thr Ala Ala Leu Tyr Ser Thr Ser Ala Gly Leu Leu Ala Ser

```

260 265 270  
 Thr His Gly Ile Pro His Ser Asp Arg Ala Arg Leu Ala Leu Met Leu  
 275 280 285  
 Gln Glu Arg Tyr Gly Gly Glu Leu Pro Pro Arg Glu Lys Asp Phe Lys  
 290 295 300  
 Ser Arg Leu Arg Glu Leu Leu Thr Pro Glu Glu Val Trp Trp Ile Arg  
 305 310 315 320  
 Tyr Leu Gly Lys Leu Gly Leu Val Leu Ala Arg Leu Tyr Pro Ile Gly  
 325 330 335  
 Ile Ile Asp Pro Ala Arg Pro Arg Ile Thr Thr Glu Ala Arg Trp Ala  
 340 345 350  
 Ser Asn Leu Gly Lys His Gly Asn Lys Thr Gly Ile Glu Leu Lys Val  
 355 360 365  
 Phe Val Gln Lys Val Ala Tyr Asp Pro Thr Gln Leu Lys Ser Glu Leu  
 370 375 380  
 Glu Arg Asp Val Arg Lys Ile His Lys Val Gly Lys Arg Lys Asn Trp  
 385 390 395 400  
 Ile Gly Gly Arg Asp Gly Trp Gly Met Lys Val Lys Ala Val Val Ala  
 405 410 415  
 Glu Glu Val Met Leu  
 420

&lt;210&gt; 41468

&lt;211&gt; 524

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41468

Cys Thr Ser Cys Pro Lys Phe His Leu Thr Arg Thr Lys Thr His Glu  
 1 5 10 15  
 Ser Pro Ser Lys Asp Ile Val Gln Ala Leu Asp Met Glu Leu Val Ala  
 20 25 30  
 Pro Thr Leu Leu Ala Ile Val Leu Val Cys Cys Cys Leu His Leu Leu  
 35 40 45  
 Arg Ser Arg Ala Ser Arg Leu Pro Leu Pro Pro Gly Pro Thr Leu Leu  
 50 55 60  
 Ser Arg Pro Phe Arg Glu Lys Asp Ile Ala Thr Thr Phe Gln Lys Trp  
 65 70 75 80  
 Asn Gln Arg Tyr Gly Pro Val Ile Ser Phe Arg Val Gly Ser Arg Thr  
 85 90 95  
 Phe Val Val Leu Gly Thr Arg Gln Ala Ala Gln Asp Leu Leu Glu Lys  
 100 105 110  
 Arg Gly Ser Ile Tyr Ser Ser Arg Pro Pro Ser Val Trp Met Glu Lys  
 115 120 125  
 Tyr Leu Asn Lys Gly Leu Ala Ala Ala Phe Met Pro Tyr Gly His Glu  
 130 135 140  
 Trp Arg Leu Asn Arg Arg Leu His Gly Ser Leu Leu Ser Ala His His  
 145 150 155 160  
 Thr Asn Ala Tyr Arg Ser Leu Gln Asp Ile Gln Ser Lys Gln Leu Leu  
 165 170 175  
 His Asp Phe Leu Ser Thr Asn Asp Phe Ser His Cys Phe His Gln Tyr  
 180 185 190  
 Thr Ser Asn Val Met Phe Thr Leu Val Tyr Gly Lys Gly Arg Gly Lys  
 195 200 205  
 Asp Asp Asn Asp His Arg Arg Leu Glu Gln Ile Asn Glu Leu Ala Gly  
 210 215 220

## 18345

Phe Val Leu Gln Gly Ala Ser Phe Trp Thr Phe Leu Met Asp Leu Phe  
 225 230 235 240  
 Pro Ile Leu Asp Tyr Val Pro Arg Ile Phe Trp Lys Trp Arg Thr Glu  
 245 250 255  
 Ala Ala Arg Leu His Asp Arg Thr Met Val Val Tyr Arg Glu Cys Cys  
 260 265 270  
 Glu Glu Ala Leu Thr Ala Glu Cys Trp Asn Trp Ser Lys Glu Val Thr  
 275 280 285  
 Gln Lys Pro Asp Ile Met Gln Leu Pro Trp Asp Asn Val Cys Tyr Ser  
 290 295 300  
 Leu Gly Glu Leu Tyr Val Ala Gly Ile His Thr Thr Lys Met Val Leu  
 305 310 315 320  
 Glu Leu Cys Val Met Val Ser Ile Leu Tyr Pro Asp Val Val Cys Lys  
 325 330 335  
 Ala Gln Gln Glu Leu Asp Ser Met Val Gly Ala Asp Arg Met Pro Ser  
 340 345 350  
 Phe Asp Asp Met Lys Arg Leu Pro Phe Ile Asn Ala Ile Ile Ser Glu  
 355 360 365  
 Leu Leu Arg Trp Arg Pro Ile Ser Pro Ile Ala Val Pro His Ala Ala  
 370 375 380  
 Ile Gln Asp Asp Glu Tyr Met Gly Tyr Phe Ile Pro Lys Gly Ala Thr  
 385 390 395 400  
 Val Ile Ala Asn Gln Phe Gly Met Asn Met Asp Asp Ala Phe Phe Tyr  
 405 410 415  
 Asp Pro Ser Ser Phe His Pro Glu Arg Tyr Val Glu Asn Pro Asp Leu  
 420 425 430  
 Pro Val Ser Ala Phe Gly Phe Gly Arg Arg Ala Cys Pro Gly His Arg  
 435 440 445  
 Leu Ala Arg Ser Ser Leu Phe Ile Val Ile Ser Arg Leu Leu Trp Ala  
 450 455 460  
 Phe His Ile Thr Ser Ala Asn Lys Glu Pro Leu Thr Glu Glu Ser Ser  
 465 470 475 480  
 Pro Ala Ala Val Lys Ala Thr Phe Arg Val Arg Ser Pro His Arg Gln  
 485 490 495  
 Lys Ile Ile Glu Arg Asp Trp Ala Leu Ala Glu Lys Asp Glu Arg Ile  
 500 505 510  
 Val Leu Ser Gln Ile Glu Ser Arg Ile Arg Gly Lys  
 515 520

&lt;210&gt; 41469

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41469

Leu Gly Thr Val Pro Glu Thr Asp Val Gln Arg Leu Gln Val Asn Ser  
 1 5 10 15  
 Pro Ala Arg Thr Phe Ile Trp Val Phe Leu Met Asp Thr Ala Phe Val  
 20 25 30  
 Thr Phe Asn Asn Leu Pro Pro Arg Met Val Val Lys Glu Met Lys Met  
 35 40 45  
 His Val Ala Ala Pro Glu Ser Cys Phe Gln Ala Pro Thr Ala Asp Gln  
 50 55 60  
 Cys Tyr Asp Ala Ile Arg Asp Trp Met Pro Ser Ala Ser Leu Cys Trp  
 65 70 75 80  
 Lys Phe Ser Phe Arg Ala Leu Phe Glu Thr Leu Cys Ile Asp Asp Leu

## 18346

				85				90					95				
Thr	Val	Lys	Met	Gln	Gln	Ala	Val	Ala	Ala	Leu	Gly	Pro	Leu	Asn	Leu		
			100					105					110				
Phe	Thr	Ile	Ile	Ser	Gly	Arg	Cys	Pro	Phe	His	Asn	Gly	Leu	Phe	Gly		
		115					120					125					
Leu	Val	Ile	Ser	Arg	Ile	Thr	Asp	Ile	Leu	Arg	Tyr	Pro	Leu	Val	Gly		
	130					135					140						
Leu	Pro	Leu	Pro	Glu	Phe	Leu	Gln	Arg	Arg	Glu	Pro	Ala	Leu	Thr	Asp		
145					150					155					160		
Pro	His	Cys	Ala	Ala	Lys	Leu	Gln	Ala	Tyr	Leu	Ala	Pro	Pro				
				165					170								

&lt;210&gt; 41470

&lt;211&gt; 424

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41470

Leu	Ala	Thr	Gly	Glu	Leu	Cys	Gln	Val	Val	Ile	Met	His	Val	Leu	His		
1				5					10					15			
Asn	Arg	Pro	Val	Ser	Pro	Gln	Lys	Phe	Pro	His	Lys	Leu	Gln	Ile	Leu		
			20					25					30				
Cys	Pro	Gly	Ser	Ala	Val	Pro	Leu	Leu	His	Arg	Ile	Arg	Ser	Gln	Glu		
		35					40					45					
Lys	Asn	Glu	Thr	Cys	Ala	Leu	Arg	Met	Lys	Thr	Ser	Pro	Ala	Tyr	Ala		
	50					55					60						
Asn	Leu	Ala	Thr	Ser	Pro	His	Gln	Cys	Ser	Ile	Cys	Phe	Lys	Ser	Tyr		
65					70					75					80		
Lys	Arg	Arg	Glu	His	Leu	Gln	Arg	His	Arg	Asn	Ser	His	Ser	Ala	Asp		
				85					90					95			
Arg	Pro	His	Arg	Cys	Pro	Ala	Cys	Pro	Ser	Thr	Phe	Gln	Arg	Ala	Asp		
		100						105					110				
Val	Leu	Arg	Arg	His	Leu	Arg	Thr	Cys	Asp	Arg	Ile	Ile	Ser	Ser	Ala		
	115						120						125				
Tyr	Gln	Gly	Ala	Thr	Arg	Lys	Arg	Ala	Cys	Asp	Arg	Cys	Ala	Arg	Gln		
	130					135					140						
Lys	Lys	Ala	Cys	Asn	Ser	Ala	Arg	Pro	Cys	Gln	Asn	Cys	Ser	Lys	Arg		
145					150					155					160		
Gly	Val	Glu	Cys	Ala	Tyr	Ser	Thr	Pro	Lys	Asn	Asp	Thr	Ser	Ala	Gly		
			165					170						175			
Thr	Glu	Ile	Ala	Ser	Pro	Ser	Ile	Ser	Leu	Gly	Ala	Asp	Ser	Ser	Asn		
			180					185						190			
Ala	Ala	Pro	Ala	Ala	Ala	Thr	Ser	Val	Asp	Leu	Trp	Thr	Pro	Arg	Thr		
	195					200						205					
Gly	Asn	Asp	Glu	Arg	Pro	Asp	Ser	Thr	Gly	Phe	Asp	Ala	Phe	Ala	Cys		
	210					215					220						
Pro	Asp	Leu	Gly	Leu	Leu	Gln	Tyr	Cys	Asp	Gln	Ser	Trp	Gln	Asp	Leu		
225					230					235					240		
Phe	Asn	Val	Gly	Ser	Glu	Asp	Leu	Ser	Pro	Thr	Ser	Gly	Asp	Arg	Asn		
			245						250					255			
Tyr	Phe	Phe	His	Phe	Leu	Asp	Thr	Phe	Thr	Ser	Arg	Thr	Gly	Phe	Val		
		260						265					270				
Ser	Ser	Phe	Glu	Cys	Gly	Thr	Leu	Glu	Gln	Arg	Phe	Met	Val	Leu	Tyr		
		275					280					285					
Ser	Ile	Glu	Glu	Lys	Glu	Arg	Leu	Ser	Asp	Ala	Phe	Trp	Thr	Ile	Asp		
	290					295						300					

## 18347

Met Asp Gln Cys Ser Asn Gln Glu Ser Asn Asn Ser Tyr Gly Val Ser  
 305 310 315 320  
 Ser Gln Trp Leu Asn Asp Pro Leu Ala Leu Gln Thr His Gln Ile Leu  
 325 330 335  
 Leu Leu Ile Lys Glu Val Val Met Ile Lys Pro Arg Asn Ser Cys Val  
 340 345 350  
 Thr Ile Ser Trp Ser Gln Asp Ile Glu Gln Arg Cys Leu Gln Phe Phe  
 355 360 365  
 Ser Pro Thr Ser Leu Arg Lys Tyr Ile Glu Leu Tyr Trp Leu Ile Trp  
 370 375 380  
 Ser Pro Asn Val Asn Phe Leu His Arg Pro Ser Phe His Pro Ala Ser  
 385 390 395 400  
 Ser Lys Pro Ile Leu Leu Ala Ser Met Ala Ile Ile Gly Lys Thr Glu  
 405 410 415  
 Lys Thr Asn Ser Phe Thr Pro Gln  
 420

&lt;210&gt; 41471

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41471

Leu Lys Tyr Ile Gly Ala Cys Val Ser Pro Asn Leu Glu Asp Asn Asp  
 1 5 10 15  
 Asn Ala Arg Met Trp Phe Asn Cys Val Glu Glu Ala Val Phe Ala Asp  
 20 25 30  
 Glu Asp Phe Asn Arg Asp Pro Val Ser Pro Phe Ser Pro Val Arg Asp  
 35 40 45  
 Arg Gln Lys Met Gln Ala Leu Gln Ala Ala Tyr Met Val Cys Leu Tyr  
 50 55 60  
 Gln Asn Trp Glu Gly Thr Asp Ala Ser Lys Lys Arg Ile Arg Arg His  
 65 70 75 80  
 Arg Phe Ser Thr Val Val Ser Val Gly Pro Pro Asp  
 85 90

&lt;210&gt; 41472

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41472

Val Tyr Ile Leu Phe Ile Val Ser Glu Cys Gln Thr His Ser Gln Gln  
 1 5 10 15  
 Met Pro Thr Arg Asp Ala His Leu Gln Leu Gln Lys Trp Ala Gln Glu  
 20 25 30  
 Tyr Gly Pro Val Tyr Ser Leu Ile Leu Gly Thr Lys Pro Leu Ile Val  
 35 40 45  
 Leu Ser Ser Asp Gln Ala Val Lys Ala Leu Leu Asp Lys Arg Ser Ala  
 50 55 60  
 Leu Tyr Ser His Arg Gln Glu Met Tyr Ile Gly Gln Thr Leu Cys Ser  
 65 70 75 80  
 Gly Gly Leu Arg Met Leu Met Met Val Gly Phe Gln Cys Pro Asn Ser  
 85 90 95

&lt;210&gt; 41473

<211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 41473  
 Ser His Gly Ala Asp Arg Phe Gln Phe Arg Lys Met Val His Gly Leu  
 1 5 10 15  
 Leu Asn Val Thr Ala Ala Lys Ser Tyr Val Pro Tyr Gln Met Leu Glu  
 20 25 30  
 Asn Lys Gln Met Met Tyr Glu Phe Leu Thr Gln Pro Glu Arg Phe Leu  
 35 40 45  
 Ser Ser Pro Arg Gly Ser Lys Asp Pro Arg Tyr Ala Tyr Ser Ala  
 50 55 60

<210> 41474  
 <211> 1420  
 <212> PRT  
 <213> A.fumigatus

<400> 41474  
 Val Asp Glu Ile Tyr Ser Cys Asp Cys Phe Arg Ala Cys Pro Val Ile  
 1 5 10 15  
 Ser Val Ala Ser Leu Phe Thr Gly Trp Glu Arg Gly His His Gln Tyr  
 20 25 30  
 Gln Phe Pro Ile Leu Leu Cys Ser Leu Cys Ser Ser Lys Phe Leu Ile  
 35 40 45  
 Leu Phe Val Phe Val Phe Ser Val Ser Ser Ser Leu Leu Gln His Leu  
 50 55 60  
 Pro Pro Glu Lys Phe Ser Asn Ser Gln Ser Ser Ile Ala Asn Leu Arg  
 65 70 75 80  
 Leu Pro Val Cys Leu Leu Gln Pro Glu Phe Val Thr Asp Asn Ile Gly  
 85 90 95  
 Arg Ile Lys Asp Ile Arg Arg Arg Thr Arg Pro Ser Thr Thr Ser  
 100 105 110  
 Ser Thr Thr Gly Thr Thr Phe Ser Pro Phe Asn Ser Ile Asp Pro Asn  
 115 120 125  
 Thr Val Ser Gly Ser Gln Pro Ala Thr Asn Gly Phe Ser Phe Gly Gln  
 130 135 140  
 Ser Gln Ser Leu Ser Phe Pro Gly Ala Ser Ser Asn Pro Ser Gln Pro  
 145 150 155 160  
 Ala Gln Asn Gly Gly Ser Pro Phe Ala Phe Gly Ser Gly Gly Ala Gly  
 165 170 175  
 Ser Ser Ser Phe Ser Phe Ser Thr Ser Phe Gly Gly Ser Gly Ser Ser  
 180 185 190  
 Gly Asn Pro Phe Ala Thr Leu Asn Thr Pro Thr Pro Ser Gln Pro Ser  
 195 200 205  
 Glu Asn Thr Gly Phe Ser Gly Phe Lys Gly Ser Met Phe Asn Val Pro  
 210 215 220  
 Pro Ala Gly Ser Thr Thr Pro Gly Gln Gln Ser Leu Pro Ala Gly Gly  
 225 230 235 240  
 Leu Phe Gly Thr Gly Ser Gln Gln Thr Thr Ala Pro Gly Gly Ile Phe  
 245 250 255  
 Gly Ser Thr Ser Thr Ser Ala His Pro Asn Gln Pro Val Thr Thr Ala  
 260 265 270  
 Pro Ser Thr Gly Ser Ile Phe Gly Gln Asn Asn Ala Thr Ser Thr Ala  
 275 280 285

Pro Ser Thr Ser Leu Phe Gly Gln Ser Thr Ser Asp Lys Pro Ser Pro  
 290 295 300  
 Phe Gly Gln Ser Thr Ala Phe Gly Gly Asp Ser Met Gln Thr Ser Pro  
 305 310 315 320  
 Asp Pro Lys Ala Asn Ala Ala Val Ser Lys Pro Val Ile Phe Gly Gly  
 325 330 335  
 Ser Ala Ser Gln Pro Thr Phe Gly Ala Ser Thr Gly Phe Gly Ser Pro  
 340 345 350  
 Ala Gly Gly Ser Val Phe Gly Gly Ala Ala Pro Ala Ala Gln Gln Thr  
 355 360 365  
 Pro Ala Lys Pro Leu Phe Gly Thr Lys Pro Thr Glu Gln Ala Thr Pro  
 370 375 380  
 Thr Ser Thr Pro Leu Phe Gly Thr Thr Ser Gln Gln Pro Thr Ala Gly  
 385 390 395 400  
 Ala Thr Ala Pro Thr Pro Ala Ser Thr Ser Ala Thr Pro Thr Thr Pro  
 405 410 415  
 Thr Ala Thr Thr Leu Phe Gly Thr Ala Ser Pro Ala Lys Pro Ala Thr  
 420 425 430  
 Pro Phe Gln Asn Pro Phe Gln Ser Ser Asn Leu Phe Ser Gly Thr Pro  
 435 440 445  
 Ser Pro Ser Ala Thr Pro Lys Pro Ala Glu Glu Lys Gly His Glu Gln  
 450 455 460  
 Lys Ala Gly Glu Ala Ala Pro Thr Lys Thr Gly Phe Gln Phe Ser Ser  
 465 470 475 480  
 Ser Thr Ala Gly Gly Asn Leu Phe Ser Lys Ser Glu Thr Ala Ala Ala  
 485 490 495  
 Ala Pro Ser Thr Thr Ser Ser Ala Gly Leu Phe Gln Ala Pro Ala Thr  
 500 505 510  
 Gly Ser Leu Phe Ala Pro Lys Pro Ala Ser Ala Glu Thr Ser Lys Pro  
 515 520 525  
 Glu Thr Pro Lys Ala Asn Pro Phe Ser Ser Leu Phe Ala Pro Lys Pro  
 530 535 540  
 Ser Thr Thr Asn Gln Ala Thr Pro Glu Gln Lys Pro Ser Pro Ala Ala  
 545 550 555 560  
 Ala Pro Phe Gly Ser Leu Phe Ser Pro Lys Pro Ser Thr Pro Asn Glu  
 565 570 575  
 Ala Ala Glu Gln Pro Ala Ala Ser Thr Pro Ala Val Ser Ser Ala Pro  
 580 585 590  
 Ala Pro Ser Pro Ser Leu Phe Thr Pro Gln Ser Ser Ser Leu Ser Thr  
 595 600 605  
 Thr Ser Met Glu Ser Lys Ile Gln Thr Pro Ser Ser Ala Thr Pro Ala  
 610 615 620  
 Ser Gln Gly Ile Phe Lys Ala Asn Gly Ala Ala Pro Ala Gln Pro Thr  
 625 630 635 640  
 Pro Ser Ala Lys Pro Pro Ala Val Gln Phe Ala Glu Ser Leu Arg Pro  
 645 650 655  
 Ser Lys Leu Pro Thr Gln Leu Ser Glu Gln Gln Lys Lys Asp Phe Asp  
 660 665 670  
 Leu Val Tyr Ser Leu Arg Met Leu Asn Glu Cys Phe Gln Arg Glu Ile  
 675 680 685  
 Ala Arg Leu Asn Pro Ala Thr Asp Asp Phe Asp Ala Ala Val Leu Phe  
 690 695 700  
 Tyr Met Arg Val Arg Glu Val Ile Gly Ala Pro Thr Gly Pro Met Ser  
 705 710 715 720  
 His Lys Arg Lys Ala Thr Asp Asp Glu Ser Ala Asp Leu Glu Gln Ser  
 725 730 735

## 18350

Ala Lys Lys Ala Lys Pro Phe Gly Thr Pro Ser Thr Asn Ile Ser Ser  
 740 745 750  
 Pro Ser Gln Lys Met Asn Ile Gly Pro Ser Ser Ile Thr Lys Thr Pro  
 755 760 765  
 Ser Lys Leu Phe Asp Thr Asn Pro Thr Pro Pro Thr Thr Asn Gly Lys  
 770 775 780  
 Leu Ala Glu Glu Lys Ala Glu Thr Gly Val Ser Val Ser Leu Ala Gly  
 785 790 795 800  
 Asn Arg Ser Asp Ser Asp Ser Ala Thr Ala Ser Ile Phe Ala Lys Ser  
 805 810 815  
 Phe Ser Lys Ser Lys Ala Asp Asp Ser Glu Pro Thr Ser Ala Val Ser  
 820 825 830  
 Pro Arg Pro Ala Thr Pro Glu Thr Asn Gln Pro Ala Leu Phe Ser Thr  
 835 840 845  
 Thr Pro Ser Ala Ser Pro Ala Lys Pro Ile Phe Ser Ser Ser Thr Thr  
 850 855 860  
 Ala Lys Glu Asn Ala Thr Ser Ser Ser Ile Phe Ser Gln Ser Thr Ser  
 865 870 875 880  
 Asn Pro Gly Leu Thr Ser Ser Thr Thr Ser Val Ser Thr Ser Ala Gln  
 885 890 895  
 Asn Leu Phe Ala Pro Lys Pro Thr Gly Asp Gly Lys Thr Glu Ala Pro  
 900 905 910  
 Ala Pro Pro Lys Phe Thr Ala Gly Thr Ala Thr Asn Phe Phe Ala Gln  
 915 920 925  
 Phe Lys Ser Ile Ala Asp Lys Ser Ala Glu Lys Glu Lys Glu Lys Arg  
 930 935 940  
 Lys Ala Glu Glu Phe Asp Ser Glu Glu Glu Asp Glu Ala Glu Trp Glu  
 945 950 955 960  
 Arg Lys Asp Ala Glu Lys Gln Arg Lys Lys Arg Glu Glu Leu Glu Ala  
 965 970 975  
 Gln Ser Lys Lys Arg Ala Lys Phe Val Pro Gly Lys Gly Phe Val Leu  
 980 985 990  
 Glu Asp Glu Ser Ser Asp Thr Thr Glu Pro Lys Lys Pro Ala Glu Thr  
 995 1000 1005  
 Ser Thr Ser Thr Ala Ser Ser Ser Val Phe Glu Ala Lys Arg Asp Thr  
 1010 1015 1020  
 Val Ala Lys Ala Asn Asn Ile Phe Gly His Leu Ser Ala Thr Pro Ser  
 1025 1030 1035 1040  
 Glu Val Glu Glu Asp Asn Asp Ala Asp Asp Thr Glu Glu Ala Ser Ala  
 1045 1050 1055  
 Ala Gly Glu Asp Ala Asp Glu Glu Ser Lys Gly Ser Ser Glu Val Pro  
 1060 1065 1070  
 Ala Ser Asp Arg Asp Gly Ser Arg Asp Ala Glu Thr Ser Glu Ala Asp  
 1075 1080 1085  
 Ser Lys Ala Val Ser Val Ser Gly Ala Glu Phe Ser Ala Asn Glu Ser  
 1090 1095 1100  
 Ser Asp Asp Gly Asp Phe Ser Lys Ala Leu Thr Lys Ser Lys Gln Ala  
 1105 1110 1115 1120  
 Ser Ser Gly Ser Lys Ser Leu Phe Asp Arg Val Gln Pro Lys Arg Gln  
 1125 1130 1135  
 Thr Asp Glu Glu Pro Lys Asn Ser Phe Ser Ser Leu Phe Ser Pro Ser  
 1140 1145 1150  
 Ser Lys Leu Ser Ser Ser Met Thr Thr Pro Gly Thr Ser Thr Pro Asn  
 1155 1160 1165  
 Pro Phe Gly Ser Pro Ser Thr Ala Ala Pro Gly Gln Gly Asp Ser Val  
 1170 1175 1180



## 18351

Glu Ser Lys Pro Ser Ser Ser Leu Phe Lys Ser Ser Asn Asn Thr Pro  
 1185 1190 1195 1200  
 Ser Gly Gly Leu Phe Thr Ser Gly Pro Ala Ser Thr Gly Thr Ser Thr  
 1205 1210 1215  
 Pro Ser Ile Phe Gly Gln Ser Ser Ser Lys Pro Ala Gly Asp Lys Thr  
 1220 1225 1230  
 Trp Lys Pro Asp Ser Pro Ile Lys Phe Ala Asp Ser Thr Gly Thr Ala  
 1235 1240 1245  
 Pro Ser Thr Met Ser Lys Pro Asp Ser Gly Pro Thr Thr Gln Ser Thr  
 1250 1255 1260  
 Asp Ser Ser Lys Pro Phe Ser Ala Leu Phe Gly Ala Pro Ala Ala Gly  
 1265 1270 1275 1280  
 Ala Lys Ala Ser Gly Ser Gly Gln Ser Ala Leu Gly Phe Ser Phe Gly  
 1285 1290 1295  
 Gly Pro Ser Gln Gln Ser Ser Ser Leu Leu Ala Pro Ser Thr Val Thr  
 1300 1305 1310  
 Ser Ala Thr Gly Ser Arg Ala Ser Thr Pro Gly Met Thr Ser Asp Thr  
 1315 1320 1325  
 Gly Ala Glu Glu Ser Gly Asp Gly Glu Ala Ala Glu Ser Leu Pro Gln  
 1330 1335 1340  
 Val Asp Leu Ala Arg Ser Arg Ala Gly Glu Glu Asp Glu Asp Ile Val  
 1345 1350 1355 1360  
 Ile Glu Thr Arg Ala Arg Ala Leu Lys Ile Lys Pro Gly Ala Gly Trp  
 1365 1370 1375  
 Glu Ser Gln Gly Val Gly Tyr Leu Arg Val Leu Lys Asn Arg Asn Thr  
 1380 1385 1390  
 Ser Arg Ser Cys Ile Ile Leu Arg Gly Asp Pro Ser Gly Lys Val Val  
 1395 1400 1405  
 Leu Asn Ala Asn Trp Leu Lys Asp Ile Lys Ser Thr  
 1410 1415 1420

<210> 41475  
 <211> 86  
 <212> PRT  
 <213> A.fumigatus

<400> 41475  
 Thr Thr Phe Trp Asp Lys Ala Asp Arg Ala Ser Tyr Ser Asn Phe Asp  
 1 5 10 15  
 Ala Ser Leu Trp His Tyr Phe Pro Ala Thr His Ser Arg Arg Tyr Gly  
 20 25 30  
 Thr Tyr Ala Arg Ile Asp Leu Cys Tyr Ser His His Thr Asp Ser His  
 35 40 45  
 Asp Ala Ile Trp Tyr Cys Phe Ala Gly Gln Ala Cys Asn Ala Val Pro  
 50 55 60  
 Glu Ser Phe Pro Val Phe Lys Ser Phe Leu Arg His Ala Leu Ser Ile  
 65 70 75 80  
 Ser Tyr Thr Lys Ala Cys  
 85

<210> 41476  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 41476

## 18352

Phe Gly Ala His Lys Cys Ser Val Ser Gln Thr Ser Tyr Ala Arg Asn  
 1 5 10 15  
 Gln Ser Ala Cys Ser Ile Leu Tyr His Pro Val Gly Ile Ser Gly Lys  
 20 25 30  
 Ala His Ile Phe Phe Ile His Tyr Cys Gln Gly Glu Cys Asp Ile Gln  
 35 40 45  
 Leu Asp Leu Leu Ser Ile Tyr Leu Lys Pro Trp Ala His Ile Ile Asn  
 50 55 60  
 Asn Gln Cys Gln His Val Cys Pro Glu Ser Val Arg Pro Glu Ala His  
 65 70 75 80  
 Arg

&lt;210&gt; 41477

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41477

Ser Phe Ser Ser Asp Gln Pro Tyr Leu Ser Ser Lys Leu Met Gln Ala  
 1 5 10 15  
 Thr Gly Tyr Cys Ile Leu Ser Leu Thr Lys Lys Arg Leu Ser Ile Val  
 20 25 30  
 Ala Glu Ser Lys Phe Pro Thr Gln Pro Pro Val Asn Ser Lys Ile Pro  
 35 40 45  
 Pro Leu Ile Gln Thr Val Leu Gly Tyr Asp Ile Glu Ser Ala Leu Ser  
 50 55 60  
 Ser Arg Leu Leu Arg Lys Thr Lys Ile Ser  
 65 70

&lt;210&gt; 41478

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41478

Ile Glu Pro Met Glu Tyr Ala Glu Gln Ile Ser Thr Leu Tyr Thr Phe  
 1 5 10 15  
 Ala Asp Cys Gly Gly Lys Trp Ile Asn Leu Leu Pro Cys Pro Ser Leu  
 20 25 30  
 Leu Arg Ser Pro His Phe Gly Lys Ser Thr Val Pro Asp Ser Val Asp  
 35 40 45  
 Leu Gln Arg Asp Thr Ser Glu Asn Leu Ala Ile Ala Leu Phe Glu Thr  
 50 55 60  
 Pro Ala Phe Lys Leu Val Leu Asp Gly Arg Arg Trp Lys Ile Trp Ser  
 65 70 75 80

&lt;210&gt; 41479

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41479

Gly Pro Lys Asn Leu Arg Ser Cys Arg Asn Ala Gly Arg Leu Ile Asn  
 1 5 10 15  
 Tyr Pro Leu Gln Arg Ala Phe Gln Ile Asn Thr Arg Val Arg Lys Gly

## 18353

20 25 30  
 Met Asn Ser Ile Thr Arg Gln Leu Lys Lys Ala Ala Arg Ile Ile Leu  
 35 40 45  
 Ile Gly Ala Pro Gly Val Gly Lys Gly Thr Gln Thr Glu Arg Leu Leu  
 50 55 60  
 Ala Arg Tyr Pro Glu Leu Ser Ser Ile Ser Ser Gly Asp Leu Leu Arg  
 65 70 75 80  
 Glu Asn Val Arg Lys Lys Thr Pro Leu Gly Lys Ser Asp Arg Cys Tyr  
 85 90 95

<210> 41480  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 41480  
 Lys Ala Glu Arg Asp Val Ser Ala Ala Thr Ser Gln Arg Gln Ala Leu  
 1 5 10 15  
 Glu Ala Ala Ile Asp Val Ala Glu His Tyr Met Lys Ala Leu Ser Leu  
 20 25 30  
 Ala Ala Thr Thr Asn Asp Lys Gln Ser Leu Asp Ala Lys Cys Lys Glu  
 35 40 45  
 Trp Leu Ser Arg Ala Glu Lys Ile Lys Glu Val Phe Thr Thr Gly Leu  
 50 55 60  
 Asp Gly Ser Pro Leu Asn Gly Leu  
 65 70

<210> 41481  
 <211> 196  
 <212> PRT  
 <213> A.fumigatus

<400> 41481  
 Pro Ser Cys Pro Leu Lys Gly Ile Lys Ala Glu Ala Ala Met Gln Ala  
 1 5 10 15  
 Gly Asn Leu Val Pro Asp Ser Met Ile Leu Glu Leu Ile Ser Ser Glu  
 20 25 30  
 Phe Arg Ser Lys Gly Trp Leu Pro Val Thr Ala Pro Leu Ala Thr Ala  
 35 40 45  
 Thr Ser Asn His Thr Ser Arg Pro Ser Thr Pro Leu Ser Pro Ser Ala  
 50 55 60  
 Ser Phe Ile Leu Asp Gly Phe Pro Arg Thr Ala Ala Gln Ala Leu Ser  
 65 70 75 80  
 Leu Asp Thr Ile Val Pro Val Asn Phe Val Val His Leu Val Thr Pro  
 85 90 95  
 Pro Ser Val Ile Leu Ser Arg Ile Ala Ser Arg Trp Val His Glu Pro  
 100 105 110  
 Ser Gly Arg Val Tyr Asn Thr Asp Phe Asn Val Pro Lys Val Pro Gly  
 115 120 125  
 Lys Asp Asp Val Thr Gly Glu Pro Leu Thr Gln Arg Gln Asp Asp Ser  
 130 135 140  
 Val Asp Thr Trp Lys Gln Arg Leu His Lys Phe Glu Glu Thr Ser Lys  
 145 150 155 160  
 Ala Leu Leu Gln Tyr Tyr Glu Arg Lys Gly Cys Leu Trp Arg Val Glu  
 165 170 175  
 Gly Asp Ser Ser Asp Glu Ile Ser Pro Lys Leu Phe Ala Glu Ile Glu

## 18354

180  
Arg Arg Phe Cys  
195

185

190

<210> 41482  
<211> 180  
<212> PRT  
<213> A.fumigatus

<400> 41482  
Asp Gly Ala Phe Gly Pro Ser Phe Met Thr Ala Val Val Ser Cys Gln  
1 5 10 15  
Arg Ala Leu Arg Thr Ile Ser His Ser Lys Ile Gln Val His Ile Arg  
20 25 30  
Leu Ala Gly Ile Asp Ala Pro Glu Leu Ala His Phe Gly Arg Pro Glu  
35 40 45  
Gln Pro Phe Ala Arg Glu Ala His Gln Trp Leu Thr Ser Tyr Leu Leu  
50 55 60  
Gly Arg Arg Val Arg Ala Tyr Ile His Arg Pro Asp Gln Tyr Gln Arg  
65 70 75 80  
Ala Val Ala Ser Val Tyr Val Arg Arg Leu Leu Asn Phe Pro Pro Phe  
85 90 95  
Arg Arg Arg Asp Val Ser Tyr Glu Met Leu Lys Arg Gly Leu Ala Thr  
100 105 110  
Val Tyr Glu Ala Lys Ile Gly Ala Glu Phe Gly Gly Glu Ala Met Glu  
115 120 125  
Arg Lys Tyr Lys Lys Ala Glu Trp Trp Ala Lys Leu Arg Gly Val Gly  
130 135 140  
Leu Trp Lys Asp Tyr Arg Arg Asn Lys Thr Lys Trp Glu Ser Pro Arg  
145 150 155 160  
Glu Tyr Lys Thr Arg Met Gly Leu Glu Glu Ala Ala Gln Pro Gly Val  
165 170 175  
Glu Ile Lys Lys  
180

<210> 41483  
<211> 126  
<212> PRT  
<213> A.fumigatus

<400> 41483  
Arg Leu Thr Gly Ile Ala Val Leu Gly Ala Leu Ser Lys Ala Leu Ala  
1 5 10 15  
Thr Ile Ala Thr Gln Pro Leu Ile Val Ala Lys Val Gly Leu Gln Ser  
20 25 30  
Arg Pro Pro Pro Gly Arg Gly Gly Lys Pro Phe Lys Thr Phe Gly Glu  
35 40 45  
Val Met Arg Tyr Ile Ile Glu Lys Glu Gly Ala Leu Ser Leu Phe Lys  
50 55 60  
Gly Ile Gly Pro Gln Ile Thr Lys Gly Leu Leu Val Gln Gly Leu Leu  
65 70 75 80  
Met Met Thr Lys Glu Arg Met Glu Leu Met Phe Val Leu Leu Phe Ala  
85 90 95  
Tyr Leu Arg Lys Ile Arg Gln Glu Lys Leu Arg Lys Ala Val Asp Ala  
100 105 110  
Ala Ala Ser Lys Ala Lys Thr Ser Leu Pro Ala Thr Leu Lys

## 18355

115

120

125

<210> 41484  
 <211> 153  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41484

Ala	Val	Met	Arg	Trp	Pro	Pro	Trp	Ala	Ser	Asp	Thr	Gln	Ala	Gln	Gln
1				5					10					15	
Gln	Ser	Arg	Lys	Ser	Ser	Ser	Glu	Asp	Asp	Glu	Arg	Gln	Ala	Ala	Ala
			20					25					30		
Ser	Ser	Thr	Thr	Thr	Ser	Lys	Lys	Lys	Asp	Trp	Glu	Ser	Ser	Val	Thr
		35					40					45			
Ala	Ile	Asp	Trp	Ala	Ala	Phe	Thr	Glu	Ala	Arg	Thr	Ile	Ile	Pro	Thr
	50					55					60				
Leu	Ile	Leu	Thr	Ser	Gly	Phe	Leu	Gly	Ala	Phe	Tyr	Ile	His	Arg	Arg
65					70					75				80	
Tyr	Leu	Arg	Arg	Phe	Pro	Asp	Ala	Val	Ser	Ile	Thr	Pro	Ser	Tyr	Phe
				85					90					95	
Arg	Arg	Arg	Ser	Leu	Leu	Gly	Gln	Val	Thr	Ser	Val	Gly	Asp	Gly	Asp
			100					105					110		
Asn	Phe	Arg	Ile	Tyr	His	Thr	Pro	Gly	Gly	Arg	Leu	Ala	Gly	Trp	Gly
	115						120					125			
Trp	Leu	Pro	Trp	Lys	Lys	Ile	Pro	Thr	Ser	Lys	Lys	Glu	Leu	Arg	Asp
	130					135					140				
Lys	Thr	Val	Arg	Leu	Ala	Pro	Val	Leu							
145						150									

<210> 41485  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41485

Ser	Arg	Tyr	Arg	Phe	Val	Cys	His	Thr	Gly	Leu	Gln	Val	Lys	Met	Ile
1				5					10					15	
Arg	Gln	Asp	Phe	Gln	Arg	Ile	Asp	Pro	Lys	Arg	Arg	Ala	Thr	Leu	Asp
			20					25					30		
His	Lys	Lys	Lys	Gln	Phe	Ala	Ser	Pro	Val	Tyr	Lys	Gln	Gln	Asp	Tyr
		35					40					45			
Pro	His	Arg	Leu	Asn	Phe	Tyr	Asp	Ile	Pro	Pro	Thr	Ala	Glu	Ile	Thr
	50					55					60				
Leu	Glu	Gln	Phe	Glu	Gln	Trp	Ala	Ile	Asp	Arg	Leu	Lys	Gly	Met	Asn
65					70					75				80	
Gly															

<210> 41486  
 <211> 203  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41486

Arg	Met	Asp	Asp	Leu	Thr	Gly	Arg	Val	Lys	Thr	Arg	Leu	Gln	Val	Gln
1				5					10					15	

## 18356

Val Lys Ser Asp Lys Thr Asp Gly Ser Asp Gly Thr Met His Tyr Glu  
                   20                  25                  30  
 Ser Thr Leu Asp Ala Ile Asn Lys Ile Val Glu Ser Glu Gly Ile Glu  
                   35                  40                  45  
 Gly Leu Tyr Ser Gly Ile Val Gly Ser Leu Ile Gly Val Ala Ser Thr  
                   50                  55                  60  
 Asn Phe Ala Tyr Phe Tyr Trp Tyr Ser Val Val Arg Ser Leu Tyr Met  
 65                  70                  75                  80  
 Ala Ser Asp Arg Val Pro Lys Pro Pro Gly Thr Ala Val Glu Leu Ser  
                   85                  90                  95  
 Leu Gly Ala Val Ala Gly Ala Val Ala Gln Ile Phe Thr Ile Pro Val  
                   100                  105                  110  
 Ala Val Ile Thr Thr Arg Gln Gln Thr Gln Pro Lys Gly Glu Lys Lys  
                   115                  120                  125  
 Gly Leu Ile Glu Thr Gly Arg Glu Val Val Asn Ser Glu Asp Gly Trp  
                   130                  135                  140  
 Thr Gly Leu Trp Arg Gly Leu Lys Ala Ser Leu Ile Leu Val Val Asn  
 145                  150                  155                  160  
 Pro Ala Ile Thr Tyr Gly Ala Tyr Gln Arg Leu Lys Asp Ile Ile Phe  
                   165                  170                  175  
 Pro Gly Lys Asn Ser Leu Lys Pro Trp Glu Ala Phe Arg Lys Leu Arg  
                   180                  185                  190  
 His Val Ile Gln Leu Trp Ser Pro Leu Glu Asp  
                   195                  200

&lt;210&gt; 41487

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41487

Val Arg Lys Trp Arg Cys Ser Arg Leu Ser Thr Val Ala Lys Gly Val  
 1                  5                  10                  15  
 Asp Pro Glu Arg Trp Gln Ser Arg Met Gln Ala Ile Pro Thr Ser Val  
                   20                  25                  30  
 Gln Gly Glu Trp Thr Lys Thr Arg Ser Ser Pro Cys Thr Cys Ala Arg  
                   35                  40                  45  
 Arg Pro Thr Ala Tyr Lys Ala Val Ser Lys Ala Ile Gly Ser Val Ala  
                   50                  55                  60  
 Ala Cys Ser Asn Asp Met Ala Ser Gly Lys Gly Lys Val Ala Leu His  
 65                  70                  75                  80  
 Glu Thr Val Thr Arg Phe Ala Lys Gln Pro Leu Pro Asn Thr Ala Thr  
                   85                  90                  95  
 Arg Trp Pro Thr Gln Arg Ala Leu Thr Gln Ala Pro Thr Arg Thr Thr  
                   100                  105                  110  
 Thr Pro Ala Pro Ser Lys Pro Ser Pro Ser Lys Ser Pro Glu Ile Ser  
                   115                  120                  125  
 Pro Ile Ala Thr Ser Met Ser Leu Glu Leu Gln Pro Ala Ala Lys Ile  
                   130                  135                  140  
 Ser Thr Ser Thr Ser Ser Gly Pro Ile Ser Cys Leu Leu His Thr Ser  
 145                  150                  155                  160  
 Arg Pro Cys Ser Ala Lys Cys Ser Ala Ser Lys Leu Pro Gly Leu Leu  
                   165                  170                  175  
 Ala Ile Lys Arg Met Val Asp Phe Glu Ser Cys Arg Leu Val Ser Thr  
                   180                  185                  190  
 Gly Gly Ala Pro Pro Ala Leu Ser Ser Thr Leu Arg Leu Phe Thr Pro

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      195              200              205
Ala Ser Gly His Ile Arg Leu Thr Cys Asn Arg Pro Pro Arg Ser Ala
  210              215              220
Ile Ser His Ser Met Gly Arg Asp Asp Leu Ser Ala Lys Val Ile Ser
  225              230              235              240
Leu Arg Ala Ile Leu Met Ala Asp Ala Phe Val Pro Lys Leu Ser Val
              245              250              255
Val Ala Asp Ser Thr Ser Arg Val Thr Met Arg Ile Met Gly Thr Ser
              260              265              270
Ala Arg Thr Val Arg Lys Ile Pro Cys Ala Thr Ala Leu Ser Gly Ala
              275              280              285
Val Gly Leu Thr Cys Glu Pro Ser Val Thr Gln Ser Lys Leu His Ser
  290              295              300
Asp Cys Ile Ile Ala Trp Ser Ala Val His Ser Trp Ser Val Ala Val
  305              310              315              320
Val Ser Lys Gly Arg Ser Asn Ser Ser Arg Thr Ser Thr Val Asp Leu
              325              330              335
Gly Gly Ser Arg Gly Ser Pro Val Pro Asp Ala Leu
      340              345

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<210> 41488  
 <211> 188  
 <212> PRT  
 <213> A.fumigatus

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<400> 41488
Leu Val Gln Phe Asn Thr Pro Lys Glu Ile Leu Leu Pro Asp Val Ala
  1              5              10              15
Val Trp Phe Gln Gln Gln Gly Val Thr Val Leu Leu Tyr Asp Asn Arg
              20              25              30
Cys Ile Gly Ala Ser Asp Gly Glu Pro Arg Asn Asp Val Lys Pro Ala
  35              40              45
Lys Leu Val Glu Asp Phe His Asp Ala Leu Thr Phe Met Ala Arg His
  50              55              60
Pro Met Val Asp Glu Asp Lys Ile Ile Leu Tyr Gly Tyr Ser Phe Ser
  65              70              75              80
Ala Met Thr Ala Leu Val Ala Ala Gly Leu Asp His Arg Val Gly Ala
              85              90              95
Ala Ile Ser Val Thr Pro Ile Ala Asn Tyr Asp Phe Arg Glu Lys Glu
              100              105              110
Lys Asn Asn Val Met Ala Leu Ala Met Gln Asp Arg Val Ser Thr Leu
              115              120              125
Ala Gly Asn Asp Pro Val Tyr Ile Pro Phe Val Gly Asp Asp Gly Tyr
  130              135              140
Asn Pro Ala Gly Trp Gly Asn Gln Tyr Asn Met Glu Gln Phe Arg Ala
  145              150              155              160
Phe Leu Gly Thr Ser Phe Phe Thr Asn Arg Thr Thr Val Gln Ser Tyr
              165              170              175
Tyr His Val Leu Ala Leu Gln Pro Tyr Gly Ala Met
      180              185

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<210> 41489  
 <211> 227  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41489

Leu Pro Val Val Thr Phe Ser Ser Arg Pro Phe Ser Asn His Ser Pro  
 1 5 10 15  
 Arg Ser Pro Pro Pro Gln Lys Gln Lys Met Thr Leu Thr Tyr Gly His  
 20 25 30  
 Lys Arg Leu Gln Asp Ala Pro Glu Pro Ile Ala Ile Val Ser Ala Ala  
 35 40 45  
 Cys Arg Leu Pro Gly His Val Asn Gly Pro His Lys Leu Trp Glu Leu  
 50 55 60  
 Leu Gln Ser Gly Gly Thr Ala Val Ser Asn Glu Val Pro Gln Ser Arg  
 65 70 75 80  
 Phe Ser Ser Glu Gly His Phe Asp Gly Ser Gly Arg Pro Gly Thr Met  
 85 90 95  
 Lys Ala Leu Ser Gly Met Phe Ile Glu Asp Ile Asp Pro Ala Ala Phe  
 100 105 110  
 Asp Ala Ala Phe Phe Asn Leu Thr Arg Ala Asp Ala Ile Ala Met Asp  
 115 120 125  
 Pro Gln Gln Arg Gln Leu Leu Glu Val Val Tyr Glu Cys Phe Glu Asn  
 130 135 140  
 Gly Gly Ile Pro Ile Glu Lys Val Arg Gly Lys Gln Ile Gly Cys Tyr  
 145 150 155 160  
 Val Gly Ser Leu Asn Gly Gly Lys Ser Leu Trp Met Ser Arg Trp Ser  
 165 170 175  
 Val Ala Asp Ile Ile Arg Ile Leu Ile Asp Ala Asp Tyr His Asp Met  
 180 185 190  
 Gln Met Arg Asp Pro Glu Gln Arg Val Ser Gly His Ala Val Gly Thr  
 195 200 205  
 Gly Arg Ala Ile Leu Ser Asn Arg Ile Ser His Phe Phe Asp Leu Arg  
 210 215 220  
 Gly Ser Arg  
 225

&lt;210&gt; 41490

&lt;211&gt; 1238

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41490

Ala Glu Leu Glu Gly Thr Ile Lys Ala Ala Gly His Phe Ala Arg Met  
 1 5 10 15  
 Leu Arg Val Glu Val Ala Tyr His Ser Pro His Met Ala Lys Ile Ala  
 20 25 30  
 Asn Arg Tyr Glu Glu Leu Leu Lys Glu His Gly Arg Leu Asp Asp Gly  
 35 40 45  
 Ser Lys Thr Asn Lys Arg Ser Asn Arg Met Ile Ser Thr Val Thr Glu  
 50 55 60  
 Asp Glu Val Thr Gly Ala Gln Val Cys Asp Ala Ala Tyr Trp Lys Ala  
 65 70 75 80  
 Asn Met Leu Ser Pro Val Arg Phe Asp Gly Ala Cys Asn Lys Leu Leu  
 85 90 95  
 Thr Asn Thr Gln Leu Ala Pro Asn Phe Leu Ile Glu Leu Gly Pro Ser  
 100 105 110  
 Asn Thr Leu Ala Gly Pro Val Thr Gln Ile Ala Arg Ala Ala Lys Val  
 115 120 125  
 Asp Asn Leu Thr Tyr Ala Ala Ala Asn Lys Arg Gly Pro Asp Glu Ser  
 130 135 140



Ser Arg Ala Ile Phe Asp Val Ala Gly His Leu Phe Leu Gln Asn Ala  
 145 150 155 160  
 Asp Ile Ser Leu Asp Lys Val Asn Leu Gly Asp Asn Thr Pro Asp Lys  
 165 170 175  
 Ala Lys Pro Ala Val Ile Val Asp Leu Pro Asn Tyr Gln Trp Lys His  
 180 185 190  
 Ser Thr His Tyr Trp His Glu Ser Leu Ala Ser Lys Asp Trp Arg Phe  
 195 200 205  
 Lys Lys Phe Pro Ser His Asp Leu Leu Gly Ser Lys Val Ile Gly Thr  
 210 215 220  
 Leu Trp Gln Ser Pro Ser Trp His Lys Met Leu Arg Leu Ser Asp Val  
 225 230 235 240  
 Pro Trp Leu Arg Asp His Arg Ile Gly Ser Glu Ile Leu Phe Pro Ala  
 245 250 255  
 Ala Gly Tyr Leu Ala Met Ala Met Glu Ala Val Arg Gln Ala Ala Leu  
 260 265 270  
 Ser Thr Ala Thr Ala Glu Ala Arg Glu Leu Leu Lys Thr Arg His Tyr  
 275 280 285  
 Arg Tyr Cys Leu Arg Asp Val Gln Phe Pro Arg Gly Leu Val Leu Glu  
 290 295 300  
 Asp Asp Ala Glu Val His Ile Met Leu Leu Leu Val Pro Met Ala Lys  
 305 310 315 320  
 Leu Gly Gln Gly Trp Trp Glu Tyr Lys Ile Thr Ser Leu Ala Glu Ser  
 325 330 335  
 Asp Ser Val Ala Ser Ser Ser Ser Ser Thr Leu Ser Pro Glu Lys Trp  
 340 345 350  
 Asn Ile Asn Ser Thr Gly Leu Val Arg Leu Glu Thr Ile Leu Glu Ala  
 355 360 365  
 Ser Ser Ser Arg Ala Pro Glu His Thr Cys Ser Leu Pro Leu Asp Asn  
 370 375 380  
 Pro Thr Pro Gly Gln Met Trp Tyr Lys Ser Leu Arg Asp Ala Gly Tyr  
 385 390 395 400  
 Ser Tyr Gly Pro Ser Phe Gln Arg Leu Val Ala Val Glu Ser Thr Glu  
 405 410 415  
 Gly Lys Ser Ala Thr Arg Ser Leu Ile Ser Leu Glu Pro Pro Arg Ser  
 420 425 430  
 Lys Trp Glu Pro Gln Ser Glu Tyr Pro Leu His Pro Ala Pro Leu Asp  
 435 440 445  
 Ser Val Leu Gln Ser Met Phe Pro Ser Leu His Arg Gly Asn Arg Thr  
 450 455 460  
 Lys Leu Asp Gln Leu Leu Val Pro Arg Gly Ile Gly Glu Leu Thr Val  
 465 470 475 480  
 Ser Gly Asp Ile Trp Lys Ser Gly Glu Ala Ile Ser Val Thr Thr Trp  
 485 490 495  
 Asn Lys Val Ser Gly Asp Ala Ser Leu Tyr Asp Pro Ala Ser Arg Ser  
 500 505 510  
 Leu Ile Met Gln Leu Asn Ser Val Ser Phe Ser Pro Met Leu Asp Gly  
 515 520 525  
 Arg Asp Ser Leu Tyr Met Ser His Val Tyr Thr Gln Leu Thr Trp Lys  
 530 535 540  
 Pro Asp Phe Gln Leu Leu Asp Thr Asp Glu Lys Leu Gln Gln Ala Leu  
 545 550 555 560  
 Ser Gly Gly Asp Gly Ala Ala Ser Ser Leu Val Gln Asp Leu Leu Asp  
 565 570 575  
 Leu Ala Ala His Lys Ala Pro Asn Leu Arg Val Leu Glu Phe Asn Leu  
 580 585 590

Val Pro Gly Ser Ser Glu Ser Leu Trp Leu Ala Gly His Pro Thr Pro  
 595 600 605  
 Arg Ala Val Arg Thr Ala Leu Thr Glu Phe His Phe Ala Ala Asn Ser  
 610 615 620  
 Ala Asp Thr Ala Leu Ala Ala Gln Glu Glu Tyr Ala Glu Trp Pro Ala  
 625 630 635 640  
 Ala Arg Thr Ala Arg Phe Ser Val Leu Asp Pro Phe Ser Lys Ala Leu  
 645 650 655  
 Ala Val Pro Ala Gly Ser Ser Gln Phe Asp Leu Val Ile Ile Arg Arg  
 660 665 670  
 Pro Gln His Ala Asp Leu Gly Glu Leu Asp Ile Leu Val Gly Asn Leu  
 675 680 685  
 Arg Arg Leu Thr Ser Asp Gly Gly Ser Val Ile Phe Tyr Asp Ser Lys  
 690 695 700  
 Gln Ser Ser Leu Ser Gly Gly Arg Gly Leu Ala Asn Gly His Asn His  
 705 710 715 720  
 Phe Pro Ala Ala Leu Gln Arg Phe Gly Leu Thr Lys Val Arg Gln Thr  
 725 730 735  
 Arg Asp Gly Ser Cys Ile Val Ala Glu Val Ser Pro Ala Gln Asn Leu  
 740 745 750  
 Ser Leu Arg Asn Asp Phe Arg Val Val Ile Val Arg Phe Ser Thr Ala  
 755 760 765  
 Arg Ser Thr Ile Ile Asp His Thr Ile Ser Gln Leu Arg Gln Phe Gly  
 770 775 780  
 Trp Thr Ser Thr Glu Ile Cys Ile Tyr Asn Ala Ser Gly Thr Gly Leu  
 785 790 795 800  
 Pro Arg Leu Pro Pro Lys Ser Thr Val Leu Val Leu Asp Glu Leu Asp  
 805 810 815  
 Arg Pro Leu Leu Thr Thr Ala Thr Asp Gln Glu Trp Thr Ala Leu Gln  
 820 825 830  
 Ala Ile Ile Gln Ser Glu Cys Asn Leu Leu Trp Val Thr Glu Gly Ser  
 835 840 845  
 Gln Val Arg Pro Thr Ala Pro Leu Lys Ala Val Ala His Gly Ile Phe  
 850 855 860  
 Arg Thr Val Arg Ala Glu Val Pro Met Met Arg Ile Val Thr Leu Asp  
 865 870 875 880  
 Val Glu Ser Ala Thr Thr Glu Ser Leu Gly Thr Asn Ala Ser Ala Ile  
 885 890 895  
 Asn Met Ala Leu Arg Glu Ile Thr Leu Ala Asp Arg Ser Ser Leu Pro  
 900 905 910  
 Ile Glu Cys Glu Ile Ala Glu Arg Gly Gly Leu Leu His Val Ser Arg  
 915 920 925  
 Ile Trp Pro Asp Ala Gly Val Asn Lys Arg Lys Val Glu Asp Asn Ala  
 930 935 940  
 Gly Gly Ala Pro Pro Val Leu Thr Asn Leu His Asp Ser Lys Ser Thr  
 945 950 955 960  
 Ile Arg Leu Met Ala Ser Arg Pro Gly Ser Leu Glu Ala Leu His Phe  
 965 970 975  
 Ala Glu Gln Gly Arg Asp Val Cys Ser Arg Gln Asp Met Gly Pro Asp  
 980 985 990  
 Asp Val Glu Val Glu Ile Phe Ala Ala Gly Cys Asn Ser Arg Asp Ile  
 995 1000 1005  
 Asp Val Ala Met Gly Asp Ile Ser Gly Asp Leu Asp Gly Leu Gly Leu  
 1010 1015 1020  
 Glu Gly Ala Gly Val Val Val Arg Val Gly Ala Cys Val Ser Ala Arg  
 1025 1030 1035 1040

## 18361

Cys Val Gly Gln Arg Val Ala Val Phe Gly Lys Gly Cys Phe Ala Asn  
                   1045                  1050                  1055  
 Arg Val Thr Val Ser Cys Lys Ala Thr Phe Pro Leu Pro Asp Ala Met  
                   1060                  1065                  1070  
 Ser Phe Glu Gln Ala Ala Thr Leu Pro Ile Ala Leu Leu Thr Ala Leu  
                   1075                  1080                  1085  
 Tyr Ala Val Gly Arg Leu Ala His Val Gln Gly Asp Asp Arg Val Leu  
                   1090                  1095                  1100  
 Val His Ser Pro Cys Thr Asp Val Gly Ile Ala Cys Ile Arg Leu Cys  
                   1105                  1110                  1115                  1120  
 Gln Arg Ser Gly Ser Thr Pro Phe Ala Thr Val Asp Asn Leu Glu Gln  
                   1125                  1130                  1135  
 Arg His Phe Leu Thr His Glu Leu Gly Leu Pro Glu Asp His Ile Phe  
                   1140                  1145                  1150  
 Met Ser Glu Pro Ala Ala Phe Pro Arg Ala Leu Arg His Ala Thr Lys  
                   1155                  1160                  1165  
 Gly His Gly Leu Asp Val Ile Ile Ser Gln Pro Ala Asn Arg Asn Leu  
                   1170                  1175                  1180  
 Asp Asn Glu Asn Met Arg Leu Leu Ala Pro Gly Gly Arg Leu Ile Gly  
                   1185                  1190                  1195                  1200  
 Ile Ala Asn Gly Gly Ala Asp Val Gly Asn Leu Leu Pro Thr Gly Ser  
                   1205                  1210                  1215  
 Leu Ala Pro Asn Cys Ser Phe Gln Arg Leu Asp Val Thr Ala Leu Pro  
                   1220                  1225                  1230  
 Glu Lys Thr Ile Glu Ser  
                   1235

&lt;210&gt; 41491

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41491

Pro Val Gln Thr Arg Pro Ala Thr Thr Leu Ala Gln Ser Met Ile Ser  
 1                  5                  10                  15  
 Pro Ser His Cys Tyr Leu Leu Val Gly Gly Leu Lys Gly Ile Cys Gly  
                   20                  25                  30  
 Ser Leu Ala Ile His Leu Ala Ser His Gly Ala Lys Asn Ile Ala Val  
                   35                  40                  45  
 Met Ser Arg Ser Gly Gly Gly Asp Gln Val Ser Gln Gly Ile Ala Arg  
                   50                  55                  60  
 Asn Ile Arg Ala Leu Gly Cys Ser Leu Asp Leu Leu Gln Gly Asp Val  
                   65                  70                  75                  80  
 Thr Ser Ile Ser Asp Val Arg Arg Ala Phe Ser Gln Ile Ser Val Pro  
                   85                  90                  95  
 Leu Gly Gly Ile Ile Gln Gly Ala Ala Val Phe Arg Val Arg Gln His  
                   100                  105                  110  
 Ser Arg Ser His Ser Leu Leu Phe Ile Ser Phe  
                   115                  120

&lt;210&gt; 41492

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41492

## 18362

Phe Met Thr Met Ala Gly Pro Arg Ile Val Pro Gly Tyr Ser Gln Pro  
 1 5 10 15  
 Arg Asn Ile Asn Pro Ser Gln Val Gly Asn Ser Thr Ser Ser Arg Phe  
 20 25 30  
 Ile Val Glu Ser Cys Val Leu Tyr Ser Ser Ile His Gln Tyr Pro Thr  
 35 40 45  
 Met Cys Leu Gln Cys Val Arg Lys Cys Gly Thr Arg Pro Ala Ala Pro  
 50 55 60  
 Ser Ser His Ile Asn Ile Ile Leu Ser Ser Glu Pro Ser Leu Ile Ser  
 65 70 75 80  
 Val Trp Thr Arg Gln Pro Thr Tyr Gln Thr Leu Glu Met  
 85 90

&lt;210&gt; 41493

&lt;211&gt; 500

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41493

Leu Arg Ser Thr Pro Cys Ser Phe Thr Ile Asp Thr Ala Cys Ser Ser  
 1 5 10 15  
 Gly Leu Val Gly Val Asp Val Ala Cys Lys Asn Leu Arg Ala Gly Thr  
 20 25 30  
 Leu Thr Gly Ala Val Val Ala Gly Val Asn Leu Trp Leu Ser Pro Glu  
 35 40 45  
 His Thr Glu Glu Arg Gly Thr Met Arg Ala Ala Tyr Ser Ala Ser Gly  
 50 55 60  
 Lys Cys His Thr Phe Asp Ala Lys Ala Asp Gly Tyr Cys Arg Ala Glu  
 65 70 75 80  
 Ala Val Asn Ala Val Tyr Leu Lys Arg Leu Ser Asp Ala Val Arg Asp  
 85 90 95  
 Gly Asp Pro Ile Arg Ala Val Ile Arg Gly Thr Ala Ser Asn Ser Asp  
 100 105 110  
 Gly Trp Thr Pro Gly Ile Asn Ser Pro Ser Ala Gln Ala Gln Ala Ala  
 115 120 125  
 Met Ile Arg Glu Ala Tyr Ala Asn Ala Gly Ile Asp Ser Ser Glu Tyr  
 130 135 140  
 Ala Glu Thr Gly Tyr Leu Glu Cys His Gly Thr Gly Thr Pro Ala Gly  
 145 150 155 160  
 Asp Pro Thr Glu Val Lys Gly Ala Ala Ser Val Leu Ala His Met Arg  
 165 170 175  
 Pro Pro Ala Ser Pro Leu Ile Ile Gly Ser Val Lys Ser Asn Ile Gly  
 180 185 190  
 His Ser Glu Pro Gly Ala Gly Leu Ser Gly Leu Ile Lys Ala Met Leu  
 195 200 205  
 Val Val Glu Glu Gly Glu Ile Pro Gly Asn Pro Thr Phe Leu Asn Pro  
 210 215 220  
 Asn Pro Ala Ile Asp Phe Asp Asn Leu Arg Val Tyr Ala Thr Arg Ile  
 225 230 235 240  
 Arg Ile Pro Trp Pro Lys Glu Ser Ser His Tyr Arg Arg Ala Ser Val  
 245 250 255  
 Asn Ser Phe Gly Phe Gly Gly Ser Asn Ala His Ala Val Leu Asp Asn  
 260 265 270  
 Ala Glu His Tyr Leu Gly Lys Tyr Trp Ala Ser Leu Glu Ile Pro Arg  
 275 280 285  
 Ser His Leu Ser Ser Tyr Ile Asn Leu Ser Asp Met Leu Ser Leu Phe

## 18363

290 295 300  
 Asp Gly Arg Arg Ser Ser Lys Thr Val Thr Arg Arg Pro Gln Val Leu  
 305 310 315 320  
 Val Phe Ser Ala Asn Asp Met Asp Ser Leu Lys Arg Gln Ile Ser Thr  
 325 330 335  
 Leu Ser Ala His Leu Leu Asn Pro Arg Val Lys Val Lys Leu Ser Asp  
 340 345 350  
 Leu Ser Tyr Thr Leu Ser Glu Arg Arg Ser Arg His Phe Cys Arg Ala  
 355 360 365  
 Phe Leu Leu Ser Tyr Pro Ala Lys Ser Gly His Ala Ser Lys Ile Ala  
 370 375 380  
 Val Glu Glu Ala Gln Phe Ser Lys Ile Ser Gln Glu Ala Thr Arg Ile  
 385 390 395 400  
 Gly Phe Val Phe Thr Gly Gln Gly Ala Gln Trp Ser Gln Met Gly Leu  
 405 410 415  
 Glu Leu Val Arg Thr Phe Pro Gly Val Val Lys Pro Ile Leu Glu Gln  
 420 425 430  
 Leu Asp Asn Val Leu Gln Glu Leu Pro Ala Asp Leu Lys Pro Glu Trp  
 435 440 445  
 Ser Leu Leu Gln Glu Leu Thr Glu Ala Arg Ser Ser Glu His Leu Ser  
 450 455 460  
 Arg Ala Glu Ile Ser Gln Pro Leu Val Thr Ala Leu Gln Leu Ala Gln  
 465 470 475 480  
 Leu Ala Val Leu Gln Ser Leu Gly Val Arg Ala Glu Ala Val Ile Gly  
 485 490 495  
 His Ser Phe Arg  
 500

&lt;210&gt; 41494

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41494

Leu Val Ala Ile Ser Val Gln Leu Leu Ala Trp Ala Val Gly Asp Phe  
 1 5 10 15  
 Glu Tyr Val Glu Ala Met Thr Gln Arg Lys Tyr Ser Gly Lys Ser Ile  
 20 25 30  
 Pro Val Arg Val Tyr Thr Thr Lys Gly Leu Lys Glu Gln Ala Arg Phe  
 35 40 45  
 Ala Leu Glu Cys Ala His Arg Thr Val Asp Tyr Phe Ser Glu Val Phe  
 50 55 60  
 Glu Ile Glu Tyr Pro Leu Pro Lys Ala Asp Leu Leu Ala Val His Glu  
 65 70 75 80  
 Phe Val Ser Gly Ala Thr Met Pro Pro Glu Gly Pro Thr Ser Thr Asp  
 85 90 95  
 Tyr Ile Ala Ser Gly His Gly Cys His Gly Glu Leu Gly Ser Gly His  
 100 105 110  
 Val Ser Tyr Asp Arg Ser Ser Ile Arg Arg Gly Lys Ile Arg His Pro  
 115 120 125  
 Leu Gln Glu Pro His Ser Ile Arg Arg Arg Ser Trp Cys Val Ser  
 130 135 140

&lt;210&gt; 41495

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41495

Leu Phe Gln Lys Asp Pro Trp Ile Arg Lys Ile Gly Phe Pro Val Leu  
 1 5 10 15  
 Thr Val Ala Glu Glu Pro Gly Gln Ile Ser Ile Arg Gln Asn Arg Phe  
 20 25 30  
 Leu Ser Thr Gly Asp Ala Lys Pro Glu Glu Asp Glu Thr Thr Trp Trp  
 35 40 45  
 Ile Pro Leu Gly Ile Lys Ser Gly Pro Arg Leu Ala Asp Val Asn Thr  
 50 55 60  
 Arg Ala Leu Val Ser Lys Ser Asp Thr Asn Ala Gly Arg Arg Ser Arg  
 65 70 75 80  
 Phe Ile Leu Gln Asn Gln Gln Arg Ser Val Arg Leu Leu Pro His Glu  
 85 90 95  
 Leu Ser Cys Arg Pro Ser Ser Glu Ala Gly Pro Ile Phe Gly Pro Val  
 100 105 110  
 Lys Tyr Arg Arg  
 115

&lt;210&gt; 41496

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41496

Glu Gly Gly Lys Leu Leu Val Ser Ala Glu His Ile Leu Ser Phe Arg  
 1 5 10 15  
 Thr Ala Thr His Tyr Ile Tyr Ser Arg Val Trp Ser Gln Ile Ser Ser  
 20 25 30  
 Ser Val Ala Asn Leu Arg Ser Val Phe Ser Gln Asn Asp Ser Val Ala  
 35 40 45  
 Ala Gly Leu Lys Lys Phe Thr Leu Ala Leu Ala Ser Pro Ala Ala Glu  
 50 55 60  
 Lys Ile Gly Trp Glu Phe Lys Ala Asp Glu Asp Tyr Leu Thr Val Gln  
 65 70 75 80  
 Leu Arg Lys Leu Leu Ile Gly Met Ala Gly Phe Ala Gly His Glu Arg  
 85 90 95  
 Trp Val Pro Ile Leu Pro Val Cys Gly Glu Arg Lys Leu Ser Ser Leu  
 100 105 110  
 Phe Ser Ser Ile Val Thr Glu Ala Lys Gln Arg Phe Asp Leu Trp Ala  
 115 120 125  
 Ser Gly Lys Asp Lys Ser Ala Val His Thr Asn Leu Arg Ser Ala Ile  
 130 135 140  
 Phe Gly Ile Thr Ile Ala Glu Gly Gly Arg Asp Lys Tyr Asp Ser Val  
 145 150 155 160  
 Lys Glu Glu Tyr Ile Lys Thr Asp Ser Val Asp Gly Lys Glu Ile Cys  
 165 170 175  
 Leu Ala Ala Leu Gly Arg Val Thr Asp Ala Asp Leu Val Tyr Asp Tyr  
 180 185 190  
 Leu Asp Phe Val Phe Ser Asp Lys Val Ala Ile Gln Asp Val His Asn  
 195 200 205  
 Gly Ala Val Ala Leu Ala Ala Asn Ser Lys Val Arg His Leu Leu Trp  
 210 215 220  
 Glu Tyr Met Lys Arg Asn Trp Asp Ala Val Glu Ala Arg Leu Ser Ala  
 225 230 235 240

## 18365

Asn Asn Val Val Phe Glu Arg Phe Val Arg Met Gly Leu Ser Lys Phe  
                           245                          250                          255  
 Ala Asp His Asn Ile Gly Ala Asp Ile Ala Ser Phe Phe Lys Asp Lys  
                           260                          265                          270  
 Asp Thr Ser Pro Tyr Asp Arg Ala Leu Val Ile Val Ala Asp Ser Ile  
                           275                          280                          285  
 Arg Thr Asn Ala Asn Tyr Lys Glu Arg Asp Glu Arg Leu Val Leu Glu  
                           290                          295                          300  
 Trp Leu Gln Ser His Gly Tyr Ala  
 305                          310

&lt;210&gt; 41497

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41497

Lys Asp Asn Ser Asn Ser Leu Gly Ser Val Asp Arg Tyr Asp Tyr Leu  
 1                          5                          10                          15  
 Phe Lys Leu Leu Leu Ile Gly Asp Ser Gly Val Gly Lys Ser Cys Leu  
                           20                          25                          30  
 Leu Leu Arg Phe Ala Asp Asp Thr Tyr Thr Glu Ser Tyr Ile Ser Thr  
                           35                          40                          45  
 Ile Gly Val Asp Phe Val Cys Thr Arg Arg Lys Gly Ile Pro Leu Ser  
                           50                          55                          60  
 Ile Gln Ala Pro Ser Gln Tyr  
 65                          70

&lt;210&gt; 41498

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41498

Trp Asp Thr Ala Gly Gln Glu Arg Phe Arg Thr Ile Thr Ser Ser Tyr  
 1                          5                          10                          15  
 Tyr Arg Gly Ala His Gly Ile Cys Val Val Tyr Asp Val Thr Asp Met  
                           20                          25                          30  
 Asp Ser Phe Asn Asn Val Lys Gln Trp Leu Gln Glu Ile Asp Arg Tyr  
                           35                          40                          45  
 Ala Thr Glu Gly Val Asn Lys Leu Leu Val Gly Asn Lys Ser Asp Met  
                           50                          55                          60  
 Glu Asp Lys Lys Val Val Glu Tyr Thr Val Ala Lys Val Arg Val Gln  
 65                          70                          75                          80  
 Pro Cys Leu Ser Pro Phe Ser Phe Leu Ile Leu Thr  
                           85                          90

&lt;210&gt; 41499

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41499

Asn Pro Leu Thr Ala Ile Ala Lys Phe Leu Thr Leu Gly Thr Glu Ser  
 1                          5                          10                          15  
 Ala Lys Ala Ser Lys Ile Thr Tyr Asp Lys Lys Ser Glu Arg Val Ser

## 18366

20 25 30  
 Phe Ile Phe Ser Gln Glu Ile Ser Pro Ser Asp Ile Val Leu Ser Ile  
 35 40 45  
 Gly Phe Thr Gly Thr Met Asn Asn Ala Met Ala Gly Phe Tyr Arg Ser  
 50 55 60  
 Lys Tyr Lys Pro Ala Val Gln Pro Thr Ala Asp Thr Pro Lys Glu Gly  
 65 70 75 80  
 Asp Phe Tyr Tyr Met Leu Ser Thr Gln Phe Glu Ser Cys Asp Ala Arg  
 85 90 95  
 Arg Ala Phe Pro Cys Phe Asp Glu Pro Asn Leu Lys Ser Thr Phe Asp  
 100 105 110  
 Phe Glu Ile Glu Val Pro Lys Gly Gln Thr Ala Leu Ser Asn Met Pro  
 115 120 125  
 Ile Lys Ser Glu Arg Asp Gly Ser Lys Pro Asp Leu Lys Phe Val Ser  
 130 135 140  
 Phe Glu Arg Thr Pro Val Met Ser Thr Tyr Val Ser Thr Asn Thr Leu  
 145 150 155 160  
 Val Leu Ile Cys

<210> 41500  
 <211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 41500  
 Val Val Gln Gln Cys Leu Leu Lys Val Leu Leu Gln Leu Ile Ile Leu  
 1 5 10 15  
 Pro Gln Ala Met Gly Ala Met Glu Asn Trp Gly Leu Val Thr Tyr Arg  
 20 25 30  
 Thr Thr Ala Val Leu Phe Glu Glu Gly Lys Ser Asp Thr Arg Tyr Lys  
 35 40 45  
 Asn Arg Ile Ala Tyr Val Val Ala His Gly Ala Phe Leu Ser Leu Arg  
 50 55 60  
 His Asn Asp Cys Val Trp Leu Phe Ser Lys Thr Glu Pro Gln Asn Trp  
 65 70 75 80  
 Pro Thr Ser Gly Leu Ala Ile Leu  
 85

<210> 41501  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 41501  
 Ala Glu Gly Val Gln Gln Ala Phe Gln Leu Asp Ser Leu Arg Ala Ser  
 1 5 10 15  
 His Pro Ile Glu Val Pro Val Arg Asn Ala Leu Glu Val Asp Gln Ile  
 20 25 30  
 Phe Asp His Ile Ser Tyr Leu Lys Gly Ser Ser Val Ile Arg Met Leu  
 35 40 45  
 Ser Asp His Leu Gly Gln Glu Thr Phe Leu Arg Gly Val Ala Asp Tyr  
 50 55 60  
 Leu Lys Lys His Ala Tyr Gly Lys Ser Gly Leu Arg Val Arg Leu Gln  
 65 70 75 80  
 Lys Lys Ala Ala Glu Asn Asp Val Arg



<210> 41502  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 41502  
 Ile His Ala Leu Leu Ser Arg Asn Pro Thr Leu Met Pro Gly Val Gly  
 1 5 10 15  
 Gln Asp Ser Phe Tyr Lys Ile Asn Lys Asp Leu Ser Gly Phe Tyr Arg  
 20 25 30  
 Thr Asn Tyr Pro Ala Asp Arg Leu Ala Lys Leu Gly Gln Ser Leu Asp  
 35 40 45  
 Leu Leu Ser Thr Glu Asp Lys Ile Gly Leu Ile Gly Asp Ala Ala Ala  
 50 55 60  
 Leu Ala Val Ser Gly Glu Gly Thr Ser Ala Ala Leu Leu Thr Leu Leu  
 65 70 75 80  
 Glu Gly Phe Lys Arg Glu Glu Asn Tyr Leu Ser Val Pro Ser Ile Phe  
 85 90 95

<210> 41503  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 41503  
 Glu Phe Ala Asp Ser Leu Gly Ile Pro Phe Leu Glu Thr Ser Ala Lys  
 1 5 10 15  
 Asn Ala Ser Asn Val Glu Gln Ala Phe Leu Thr Met Ala Arg Gln Ile  
 20 25 30  
 Lys Glu Arg Met Gly Pro Ala Thr Val Asn Asn Lys Pro Thr Val Gln  
 35 40 45  
 Val Gly Gln Gly Gln Gly Val Gln Ser Gly Ser Ala Gly Gly Cys Cys  
 50 55 60

<210> 41504  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 41504  
 His Arg Ile Val Arg Val Gln Tyr Phe Cys Tyr Tyr Cys Tyr Leu Gly  
 1 5 10 15  
 Thr Leu Gly Arg His Phe Leu Ile Lys Leu Cys Met Val Asp Thr Asp  
 20 25 30  
 Thr Ile Ile Val Pro Tyr Leu Thr Asn Asn Ala Ser Glu Asn His Pro  
 35 40 45  
 Tyr Pro Ser Leu Asp Gly Ser Val Pro Asp Gln Leu Leu Thr Asp Leu  
 50 55 60  
 Val Phe  
 65

<210> 41505  
 <211> 118  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41505

```

Ser Leu Ser Pro Tyr Arg Leu Leu Arg Asp Thr Thr Pro Leu Gln Arg
1      5      10      15
Gly Ile Ile Arg His Leu Ile Leu Ile Leu Asp Leu Ser Gln Ser Met
      20      25      30
Ala Glu Lys Asp Leu Arg Pro Thr Arg Tyr Leu Leu Ser Leu Arg Tyr
      35      40      45
Ala Gln Glu Phe Val Arg Glu Phe Phe Glu Gln Asn Pro Ile Ser Gln
      50      55      60
Leu Gly Val Leu Gly Leu Arg Asp Gly Leu Ala Ile Arg Val Ser Asp
65      70      75      80
Met Ser Gly Asn Pro Thr Glu His Ile Ser Ala Ile Gln Ala Leu Arg
      85      90      95
Asp His Asp Pro Lys Gly Leu Pro Ser Leu Gln Asn Gly Leu Glu Met
      100      105      110
Ala Arg Gly Ala Leu Leu
      115

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&lt;210&gt; 41506

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41506

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Pro Gly Val Asp Ser His Thr Pro Ser His Gly Thr Arg Glu Val Phe
1      5      10      15
Val Ile Phe Gly Ser Ile Leu Ser Ser Asp Pro Gly Asp Ile His Gln
      20      25      30
Thr Ile Thr Thr Leu Ile Asn Asp Lys Ile Ser Val Arg Ile Ala Gly
      35      40      45
Leu Ala Ala Gln Val Ala Ile Cys Arg Glu Leu Cys Ser Arg Thr Asn
      50      55      60
Ala Gly Asp Asp Thr Thr Tyr Gly Val Ala Leu Asn Glu Gln His Phe
65      70      75      80
Arg Glu Leu Met Met Asp Val Thr Thr Pro Pro Val Thr Tyr Ser Gln
      85      90      95
Lys Lys Ala Thr Ser Ser Leu Leu Met Met Gly Phe Pro Ser Arg Thr
      100      105      110
Val Glu Thr Cys Pro Ser Leu Cys Ala Cys His Ser Glu Pro Ser Cys
      115      120      125
Gly Gly Tyr Leu Cys Ser Arg Cys Asn Ser Lys Val Cys Gly Leu Pro
      130      135      140
Ala Glu Cys Pro Ser Cys Gly Leu Thr Leu Ile Leu Ser Thr His Leu
145      150      155      160
Ala Arg Ser Tyr His His Leu Phe Pro Leu Met Asn Trp Ile Glu Val
      165      170      175
Pro Trp Gln Arg Ala Ser Arg Ser Leu Thr Cys Phe Ala Cys Gly Ile
      180      185      190
Tyr Phe Pro Thr Val Pro Pro Lys Asp Gln Trp Gln Ala Thr Glu Ser
      195      200      205
Gln Ala Lys Gly Met Ser Val Ser Ser Arg Tyr Glu Cys Thr Val Cys
      210      215      220
Lys Asn His Phe Cys Ile Asp Cys Asp Leu Phe Ala His Glu Ile Val
225      230      235      240

```

## 18369

His Asn Cys Pro Gly Cys Gln Ser Gly Ile Ser Gly Leu Ala Ile Ala  
                   245                  250                  255  
 Asp Arg Pro Arg Gly Gln Thr Gly Thr Glu Glu Met Asp Thr Ser Thr  
                   260                  265                  270

<210> 41507

<211> 75

<212> PRT

<213> A.fumigatus

<400> 41507

Ser Arg Ser Val Tyr Arg His Ser Ser Lys Gly Ser Ser Leu Thr Gly  
 1                  5                  10                  15  
 Ile Lys Met Ile Asn Ser Gln Pro Ala Asn Pro Gly Cys Lys Ala Phe  
                   20                  25                  30  
 Val Gln Pro Lys Leu Val Pro Pro Val His Ser His Lys Ile Ala Lys  
                   35                  40                  45  
 Pro Leu Val Gly Gln Phe Cys Gly Ser Val Leu Glu Asn Ser His Thr  
                   50                  55                  60  
 Gln Ser Leu Cys Leu Lys Leu Arg Asn Ala Pro  
 65                  70                  75

<210> 41508

<211> 102

<212> PRT

<213> A.fumigatus

<400> 41508

Leu Thr Gln Tyr Pro Tyr His His His Arg Leu Thr Asn Arg His Ser  
 1                  5                  10                  15  
 Tyr Ser Ser Gln Leu Phe Glu Glu Thr Met Ala Asp Ser Asp Glu Glu  
                   20                  25                  30  
 Tyr Val Gly Glu Val Ser Asp Glu Glu Asn Asp Val Asn Gly Ile Arg  
                   35                  40                  45  
 Tyr Ala Arg Glu Thr Val Pro Ala Ser Arg Pro Lys Arg Arg Arg Gln  
                   50                  55                  60  
 Arg Arg Gly Ala Glu Trp Glu Val Ser Arg Thr Trp Glu Thr Leu Val  
 65                  70                  75                  80  
 Glu Gly Ala Asp Gly Thr Ile Ser Ser Thr Val Glu Gly Leu Leu Glu  
                   85                  90                  95  
 Ala Gly Lys Arg Lys Arg  
                   100

<210> 41509

<211> 65

<212> PRT

<213> A.fumigatus

<400> 41509

Trp Gly Phe Arg Leu Val Leu Trp Arg Arg Val Pro Leu Cys Val Arg  
 1                  5                  10                  15  
 Val Ile Leu Asn Leu Leu Val Glu Gly Thr Tyr Val His Asp Ala Ile  
                   20                  25                  30  
 Ala Lys Ser Val Gly Ser Leu Leu Asn Ala Pro Leu Ala Val Leu His  
                   35                  40                  45  
 Leu Tyr Phe Gln His Ile Leu His Asp Leu Ile Ile Thr Cys Phe Arg

```
<210> 41510
<211> 136
<212> PRT
<213> A.fumigatus
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<400> 41510															
Thr	Val	Thr	Ala	Thr	Val	Asn	Ala	Ala	Phe	Tyr	Ser	Phe	Gln	Asn	Ala
1				5					10					15	
Arg	Arg	Ile	Arg	Glu	Pro	Leu	Gly	Thr	Arg	Ala	Leu	Ser	Gln	Asn	His
			20					25					30		
Leu	Cys	Pro	Lys	Ile	Ser	Met	Pro	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			35				40					45			
Gly	Ser	Pro	Glu	Ser	Ala	Ser	Ser	Leu	Ala	Ile	Asp	Ser	Pro	Ser	Val
	50					55					60				
Glu	Ser	Ser	Leu	Ser	Ser	Pro	Ser	Pro	Ser	Thr	Ser	Glu	Val	Pro	Ser
65					70					75					80
Val	Asp	Ser	Val	Pro	Arg	Ser	Arg	Lys	Pro	Tyr	Leu	Tyr	Leu	Ile	Phe
				85					90					95	
Val	Pro	His	Lys	Arg	Arg	Leu	Pro	Pro	Ala	Trp	Ser	Leu	Leu	Tyr	Phe
			100					105					110		
Pro	Ala	Arg	Ser	Pro	Lys	Lys	Gly	Arg	Val	Asp	Phe	Asp	Leu	Leu	Asp
			115				120					125			
Ser	Arg	Ser	Gly	Gly	Ser	Pro	Lys								
	130					135									

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<210> 41511
<211> 65
<212> PRT
<213> A.fumigatus
```

```

<400> 41511
Val Leu Pro Ser Pro Arg Ser Ile Val Pro Leu Ser His Gln Phe Val
1      5      10      15
Asp His Thr Cys Phe Phe Leu Ile Ala Thr Leu Glu Val Pro Asn Ser
20      25      30
Val Asp Leu Leu Ser Gln Asn Ser His Ser Val Val Leu Arg Lys Gln
35      40      45
Glu Leu Val Thr Asn Val Ile Lys Ile Val Met Thr Gly Arg Ile Met
50      55      60
Met
65

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```
<210> 41512
<211> 120
<212> PRT
<213> A.fumigatus
```

```

<400> 41512
Ile Arg Tyr Asn Ala Gly His Leu Val Glu Ala Ala Leu Ala His Arg
1          5          10          15
Leu Leu Tyr Arg Asn Asp Asp Leu Leu Ser Pro Ile Leu Lys Tyr Val
          20          25          30

```

## 18371

Ala Leu Leu Ala Ala Thr Phe Gly Asn Lys Glu Gly Gln Lys Ala Gly  
 35 40 45  
 Tyr Pro Gly His Pro Glu Ile Glu Leu Ala Leu Leu Arg Leu Tyr Lys  
 50 55 60  
 Val Thr Gln Asp Pro Glu His Leu Arg Leu Ala Arg Phe Phe Leu Glu  
 65 70 75 80  
 Glu Arg Gly Asn Pro Ser Gly Gly Lys Glu Arg Arg His Tyr Tyr Asp  
 85 90 95  
 Val Glu Ala Glu Val Arg Gly Glu Arg Lys His Glu Val Pro Glu Ala  
 100 105 110  
 Tyr Pro Ala Ala Arg Ser Tyr Trp  
 115 120

&lt;210&gt; 41513

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41513

Lys Gln Thr Cys Ser Val Cys Leu Pro Ile Ser Ile Glu Asn Thr His  
 1 5 10 15  
 Arg Cys Ile Glu Arg Ser Thr Gln Cys Asp Cys Pro Ile Cys Gly Asp  
 20 25 30  
 Tyr Met Phe Thr Ser Pro Glu Thr Val Val Phe Met Arg Cys Gly His  
 35 40 45  
 Ser Ile His Gln Lys Cys Leu Ser Glu Tyr Ser Lys Ser Ser Tyr Arg  
 50 55 60  
 Cys Pro Ile Cys Ser Lys Thr Ile Ala Asn Met Glu Ser Thr Phe Arg  
 65 70 75 80  
 Asn Leu Asp Arg Thr Ile Gln Ser Gln Pro Met Pro Ala Glu Phe Lys  
 85 90 95  
 Asp Thr Ser Ala Leu Ile His Cys Asn Asp Cys Gly Ala Lys Ser Val  
 100 105 110  
 Val Arg Tyr His Trp Leu Gly Leu Lys Cys Asp Met  
 115 120

&lt;210&gt; 41514

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41514

Met Ile Thr Arg Cys Glu Ser Tyr Asn Thr Ala Gln Ile Arg Leu Leu  
 1 5 10 15  
 His Gly Glu Ala Ser Asp Ser Leu Asp Arg Ala Gly Gly Asp Asn Arg  
 20 25 30  
 Asp Ala Ser Ala Ser Pro Met Pro Ser Thr Phe His Gly Thr Glu Glu  
 35 40 45  
 Glu Ala Ser Ile Ser Leu Pro Leu Ala Gln Leu Arg Val Asp Thr Ser  
 50 55 60  
 Ser Pro Ser Gly Ala Asp Ser Ser Pro Arg Phe Ile Ala Ser Ser Ser  
 65 70 75 80  
 Ala Glu Gln Asn Gly Arg Phe Ser Ser Tyr Ser Leu Thr Arg Gly Arg  
 85 90 95  
 Ala Val Ser Pro Val Ile Ser Asn Tyr Phe Gly Leu Pro Pro Asp Arg  
 100 105 110

## 18372

Glu Ser Asn Arg Ser Lys Ser Thr Leu Pro Phe Phe Gly Asp Leu Ala  
           115                                  120                  125  
 Gly Lys Tyr Ser Asn Asp His Ala Gly Gly Asn Leu Arg Leu Trp Gly  
           130                                  135                  140  
 Thr Asn Ile Lys Tyr Lys Tyr Gly Phe Leu Asp Arg Gly Thr Glu Ser  
 145                                  150                  155                  160  
 Thr Glu Gly Thr Ser Glu Val Glu Gly Glu Gly Asp Asp Ser Asp Asp  
                                   165                  170                  175  
 Ser Thr Asp Gly Glu Ser Met Ala Ser Asp Glu Ala Asp Ser Gly Asp  
                                   180                  185                  190  
 Pro Glu Glu Asp Asp Asp Glu Asp Glu Gly Ile Asp Ile Phe Gly His  
           195                                  200                  205  
 Arg

&lt;210&gt; 41515

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41515

Asp Lys Thr Val Leu Glu Tyr Ser Asp Arg Cys Ser Thr Met Pro Asp  
 1                                  5                                  10                                  15  
 Thr Val Phe Asn Met Glu Tyr Pro Gln Glu Ser Phe Arg Ala Thr Thr  
                                   20                                  25                                  30  
 Phe Ala Pro Asp Ser Phe Trp Ala Gln Arg Arg Gln Val Val Arg Ser  
                                   35                                  40                                  45  
 Gln Thr Leu Arg His Gln Leu Gln Met Leu Lys Asp Thr Gly Arg Tyr  
                                   50                                  55                                  60  
 Asp Ala Phe Lys Leu Lys Trp His Pro Ser Tyr Ser Asp Pro Cys Thr  
 65                                  70                                  75                                  80  
 Val Trp Pro Val Pro Asn His Leu Phe Trp Asp Ser Asp Val Ala Lys  
                                   85                                  90                                  95  
 Trp Ile Glu Gly Ala Cys Tyr Phe Leu Met Asp Tyr Pro Asp Glu Glu  
                                   100                                  105                                  110  
 Ile Asp Ala Ala Ile Arg Glu Leu Val Glu Met Ile Gln Asn Ala Gln  
                                   115                                  120                                  125  
 Gln Ser Asp Gly Tyr Leu Asn Ile His Tyr Thr Val Val Glu Pro Gly  
                                   130                                  135                                  140  
 Lys Arg Phe Thr Asn Leu Arg Asp Met His Glu Leu  
 145                                  150                                  155

&lt;210&gt; 41516

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41516

Pro Arg Ile Ala Arg Tyr Gln Gln Ala His Val Pro Ile Ala Gln Gln  
 1                                  5                                  10                                  15  
 Gln Thr Ile Glu Gly His Ala Val Arg Ala Met Tyr Leu Leu Thr Ser  
                                   20                                  25                                  30  
 Val Ala Asp Leu Val Arg Ile Cys Glu Pro Ser Ser Asp Val Ala Asn  
                                   35                                  40                                  45  
 Lys Phe Val Pro Ala Leu His Arg Leu Trp Ser Asn Met Ile Glu Lys  
           50                                  55                                  60

## 18373

Lys Ser Tyr Val Thr Gly Gly Ile Gly Ala Met Lys Gln Trp Glu Gly  
 65 70 75 80  
 Phe Gly Ile Asp Tyr Phe Leu Pro His Gly Thr Asp Glu Gly Gly Cys  
 85 90 95  
 Tyr Ala Glu Thr Cys Ala Ala Ile Gly Val Met Met Leu Ala Glu Arg  
 100 105 110  
 Leu Leu Lys Val Ser  
 115

&lt;210&gt; 41517

&lt;211&gt; 437

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41517

Val Glu Phe Gln Thr Ile Ala Ser Asn Val Arg Cys Cys Leu Gly Pro  
 1 5 10 15  
 Phe Met Ser Gly Leu Ile Ser Ser Leu Ile Glu Thr Ile Val Arg  
 20 25 30  
 Gln Ala Arg Arg Leu Ser Asn Gln Thr Asp Ser His Pro Pro Tyr Asp  
 35 40 45  
 Asp Asp Leu Ala Asp Ser Leu Pro Ile Thr Gln Ser Ser Ser Ser Ser  
 50 55 60  
 Ala Thr Tyr Asp Gly Asn Asp His Ala Glu Val Ser Ser Arg Asn Gly  
 65 70 75 80  
 Asp His Glu Thr Ser Ala Arg Gly Thr Pro Ser Val Pro Ser Pro Pro  
 85 90 95  
 Pro Pro Ser Glu Leu Ser Ser Trp Arg His Asp Met Ser Pro Asn Gln  
 100 105 110  
 Ser Arg Ser Gly Thr Ala Ile Val Ser Pro Gln Ser Leu Arg Gly Leu  
 115 120 125  
 Tyr Glu Asn Glu His Val Asp Gly Val Arg Thr Tyr Thr Ala Pro Glu  
 130 135 140  
 Val Thr Gly Ala Asp Ser Pro Ser Val Ser Leu Arg Asn Met Val Leu  
 145 150 155 160  
 Glu Thr Asn Pro Ser Ala Gln Glu Ser His His Tyr Ser Ala Ser His  
 165 170 175  
 Asp Asn Leu Asp Asp Ile Gly Asp Gln Phe Leu Leu Pro Glu Asp Asp  
 180 185 190  
 Gly Met Gly Val Leu Arg Lys Lys Ile His Ala Ile Arg Asp Leu Gln  
 195 200 205  
 Cys Ser Asn Glu Glu Lys Ala Arg Met Ile His Glu Leu Met Thr Glu  
 210 215 220  
 Arg Tyr Asn Ala Ser Arg Gly Arg Lys Asp Leu Ile Pro Thr Ser Pro  
 225 230 235 240  
 Arg Thr Leu Ser Ser Ser Ser Pro Gln Leu Ser Glu Arg Ser Val Thr  
 245 250 255  
 Pro Ile Ser Arg Cys Gly Ser Leu Ser Ser Asp His Ala Pro Thr Asn  
 260 265 270  
 Pro Ala Ser Arg Ala Pro Thr Ser His Gln Ile Glu Asp Thr Tyr Lys  
 275 280 285  
 Leu Thr Ala Glu Asp Leu Lys Pro Thr Phe Phe Pro Lys Ser Glu Ser  
 290 295 300  
 Asp Ser Pro Val Cys Asp Phe Glu Asp Ala Asp Ala Glu Asp Val Glu  
 305 310 315 320  
 Val Ala Cys Leu Gly Cys Arg His Tyr Arg Arg Asn Val Lys Leu Gln

## 18374

325 330 335  
 Cys Phe Ala Cys Lys Lys Trp Tyr Thr Cys Arg Phe Cys His Asp Glu  
 340 345 350  
 Val Glu Asp His His Leu Asp Arg Pro Lys Thr Glu Asn Met Leu Cys  
 355 360 365  
 Met Leu Cys Gly His Ala Gln Pro Ala Ala Ala Val Cys Arg Gln Cys  
 370 375 380  
 Gly Lys Leu Ala Ala Gln Tyr Tyr Cys Asn Ile Cys Lys Leu Trp Asp  
 385 390 395 400  
 Asn Asp Ser Asn Lys Ser Ile Tyr His Cys Asn Asp Cys Gly Ile Cys  
 405 410 415  
 Arg Ile Gly Gln Gly Leu Gly Lys Asp Phe Phe His Cys Arg Val Arg  
 420 425 430  
 Lys Pro Arg Ile Asp  
 435

&lt;210&gt; 41518

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41518

Gly Leu Ser His Pro Pro Pro Ala Gly Ala Gln Ala Lys Arg Lys Phe  
 1 5 10 15  
 Pro Ser Ala His Arg Glu Leu Glu Thr Arg Ser Ser Thr Pro Lys Thr  
 20 25 30  
 Thr Thr Thr Thr Ser Ser Pro Ser Thr Thr Met Ala Ser Arg Pro Thr  
 35 40 45  
 Val Thr Ile Ala Thr Ala Asp Gly Lys Pro Ser Gly Ala Thr Leu Pro  
 50 55 60  
 Leu Pro Ala Val Phe Thr Ala Pro Ile Arg Pro Asp Ile Val Gln Tyr  
 65 70 75 80  
 Ala Tyr Arg Asn Pro Glu Ile Pro Gly Arg Arg Glu Ala Arg Glu Arg  
 85 90 95  
 Gly Met Glu Glu Arg Thr Ser Ser Gly  
 100 105

&lt;210&gt; 41519

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41519

Leu Cys Asp Cys Arg Gln Val His Thr Gly Met Ala Lys Asn Lys Arg  
 1 5 10 15  
 Gln Pro Tyr Ala Val Ser Glu Lys Ala Gly Glu Gln Thr Ser Ala Glu  
 20 25 30  
 Ser Trp Gly Thr Gly Met Leu Asn Leu Leu Asp Trp Gly Glu Gly Glu  
 35 40 45  
 Arg Leu Gly Trp Glu Val Phe Thr Lys Tyr Leu Tyr  
 50 55 60

&lt;210&gt; 41520

&lt;211&gt; 428

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus



&lt;400&gt; 41520

Lys Ser Asp Asn Arg His Ser Leu Val Lys Met Met Phe Ser Lys Ser  
 1 5 10 15  
 Gly Leu Val Ala Val Ala Met Leu Gly Ala Ser Ala Val Glu Ala His  
 20 25 30  
 Met Lys Met Arg Gln Pro Thr Pro Tyr Ser Asp Ser Ser Leu Asn Asn  
 35 40 45  
 Ser Pro Leu Ala Ala Asp Gly Ser Asp Phe Pro Cys Lys Leu Arg Asp  
 50 55 60  
 Asn Ala Phe Val Pro Pro Ser Gln Glu Thr Ile Ala Gln Ile Gly Glu  
 65 70 75 80  
 Val Met Pro Leu Thr Phe Thr Gly Ser Ala Thr His Gly Gly Gly Ser  
 85 90 95  
 Cys Gln Val Ser Leu Thr Thr Asp Leu Lys Pro Ser Lys Asp Ser Lys  
 100 105 110  
 Trp Met Val Ile Lys Ser Ile Glu Gly Gly Cys Pro Ala Asn Val Asp  
 115 120 125  
 Gly Asn Met Ser Gly Gly Ala Asp Val Pro Asp Pro Phe Glu Phe Asn  
 130 135 140  
 Tyr Thr Ile Pro Ala Gly Ile Glu Pro Gly Lys Tyr Thr Leu Ala Trp  
 145 150 155 160  
 Thr Trp Phe Asn Arg Ile Gly Asn Arg Glu Met Tyr Met Asn Cys Ala  
 165 170 175  
 Pro Ile Thr Val Thr Ala Gly Ser Ser Lys Arg Asp Ala Ala Pro Val  
 180 185 190  
 Ala Glu Lys Val Glu Val Glu Lys Arg Ser Ala Asn Phe Pro Ala Met  
 195 200 205  
 Phe Val Ala Asn Ile Asn Gly Cys Thr Thr Lys Glu Gly Val Asp Ile  
 210 215 220  
 Arg Phe Pro Asp Pro Gly Asp Val Val Glu His Asp Gly Asn Pro Ser  
 225 230 235 240  
 Asn Leu Gln Pro Ala Gly Glu Ala Ala Cys Ser Gly Thr Pro Ala Trp  
 245 250 255  
 Thr Val Ser Gly Gly Ser Gly Ser Pro Ser Thr Pro Ser Thr Ser Ser  
 260 265 270  
 Ser Thr Pro Ala Gly Thr Ser Ala Gly Val Ser Val Ser Val Gly Ala  
 275 280 285  
 Thr Val Gly Ala Thr Pro Thr Ala Glu Pro Glu Ser Ser Ser Ser Glu  
 290 295 300  
 Pro Ala Glu Ser Glu Gly Ala Pro Gly Val Phe Ala Pro Thr Ser Ala  
 305 310 315 320  
 Thr Val Phe Pro Ser Thr Pro Thr Ala Ser Ala Ala Pro Thr Ser Ser  
 325 330 335  
 Ser Ser Gly Ala Gly Ser Glu Ser Asp Ser Ser Ser Ser Ser Asn Gly  
 340 345 350  
 Ala Leu Thr Gly Pro Cys Ser Thr Glu Gly Leu Trp Asn Cys Ile Asp  
 355 360 365  
 Gly Ser Ser Phe Gln Arg Cys Ala Asn Gly Gln Trp Thr Thr Ala Gln  
 370 375 380  
 Gln Met Ala Ala Gly Thr Glu Cys Thr Val Gly Gln Asn Ala Gln Phe  
 385 390 395 400  
 Thr Ile Ser Ala Thr Ala Val Lys Pro Arg Met Ile Asn Ala Met Arg  
 405 410 415  
 His Arg Lys Arg Ala His Gly Gly His Arg His Ala  
 420 425

<210> 41521  
 <211> 259  
 <212> PRT  
 <213> A.fumigatus

<400> 41521  
 Arg Gln Ile Tyr Arg Arg Phe Ala Thr Ala Ser Ala Leu Ala Ala Ser  
 1 5 10 15  
 Ser Val Pro Ser Leu Leu Phe Ala Arg Gly His Arg Ile Ala Asn Val  
 20 25 30  
 Pro Glu Val Pro Leu Val Val Glu Ser Lys Thr Phe Glu Asn Ala Ala  
 35 40 45  
 Ile Thr Lys Thr Lys Ala Ala Ile Ala Leu Leu Lys Ala Leu Gly Ala  
 50 55 60  
 Gly Ala Asp Leu Val Lys Val Gln Lys Ser Lys Lys Met Arg Ala Gly  
 65 70 75 80  
 Lys Gly Lys Leu Arg Asn Arg Arg Phe Arg Gln Arg Arg Gly Pro Leu  
 85 90 95  
 Val Val Tyr Asn Pro Glu Val Asp Gly Lys Glu Leu Val Arg Ala Phe  
 100 105 110  
 Arg Asn Ile Pro Gly Val Glu Thr Ser Ser Val Phe Ser Leu Asn Leu  
 115 120 125  
 Leu Gln Leu Ala Pro Gly Gly His Leu Gly Arg Phe Ile Val Trp Thr  
 130 135 140  
 Ser Ala Ala Phe Glu Ala Leu Asp Gln Val Tyr Gly Ser Thr Thr Thr  
 145 150 155 160  
 Pro Ala Ala Leu Lys Lys Asp Tyr Val Leu Pro Gln Asn Leu Val Ala  
 165 170 175  
 Asn Ala Asp Leu Ala Arg Leu Ile Asn Ser Ser Glu Ile Gln Ser Val  
 180 185 190  
 Leu Arg Ala Pro Lys Gly Glu Ala Arg Thr Lys Arg Ala Val Val Gln  
 195 200 205  
 Lys Lys Asn Pro Leu Arg Asn Lys Gln Val Met Leu Arg Leu Asn Pro  
 210 215 220  
 Tyr Ala Ala Ala Phe Ser Lys Glu Lys Leu Gly Gln Lys Pro Val Glu  
 225 230 235 240  
 Ser Lys Glu Lys Pro Ala Arg Pro Ala Gln Glu Phe Ile Asn Thr Leu  
 245 250 255  
 Arg Glu Glu

<210> 41522  
 <211> 180  
 <212> PRT  
 <213> A.fumigatus

<400> 41522  
 Thr Val Leu Pro Ser Arg Ser Pro Pro Ala Pro Ala Ser Val Met Gln  
 1 5 10 15  
 Pro Leu Ser Leu Arg Lys Ser Arg Leu Arg Ser Ala Pro Pro Thr Ser  
 20 25 30  
 Pro Pro Cys Ser Ser Pro Thr Ser Thr Val Ala Leu Pro Lys Arg Ala  
 35 40 45  
 Leu Thr Phe Ala Ser Pro Thr Arg Glu Met Leu Ser Asn Thr Thr Glu  
 50 55 60

## 18377

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Thr Arg Ala Thr Ser Ser Pro Leu Val Lys Leu His Ala Leu Val Leu
65          70          75          80
Pro Arg Gly Pro Ser Ala Ala Ala Leu Ala Leu Arg Pro Pro Leu Gln
          85          90          95
Pro Leu Leu Pro Pro Leu Leu Val Pro Val Pro Ala Ser Ala Ser Ala
          100         105         110
Ser Ala Gln Leu Ser Val Leu Leu Pro Pro Leu Ser Leu Asn Pro Ala
          115         120         125
Ala Ala Ser Leu Pro Ser Leu Lys Val Leu Pro Glu Ser Ser Leu Pro
          130         135         140
Leu Arg Leu Leu Ser Ser Leu Arg Arg Leu Arg Arg Pro Gln His Pro
145          150          155          160
Arg Leu Pro Leu Pro Val Leu Ala Pro Ser Pro Ile Pro Leu Pro Gln
          165          170          175
Ala Thr Glu Leu
          180

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&lt;210&gt; 41523

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41523

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Leu Gly Gly Gly Gly Ala Ile Gly Met Gly Gly Phe His Lys Ile Leu
1          5          10          15
Ile Leu Ser Ala Gly Arg Ala Val Ala Arg Ile Pro Arg Val Ser Gly
          20          25          30
Gly Gly Thr His Arg Ala Gly Gln Ala Ala Phe Gly Asn Gln Cys Arg
          35          40          45
Ser Gly Arg Met Phe Ala Pro Thr Lys Val Trp Arg Lys Trp His Gln
          50          55          60
Lys Val Asn Leu Gly Gln Lys Tyr Ala Ile Leu Ser Thr Ser Arg Ala
65          70          75          80
Val Gly Glu Lys Thr Leu Asp Gly Asp Ser Trp Glu
          85          90

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&lt;210&gt; 41524

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41524

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Gln Met Pro Phe Leu Thr Ser Ser Asn Met Phe Gln Tyr Phe Thr Gly
1          5          10          15
His Thr Ala Thr Leu Tyr Gln Gly Asp Lys Leu Ile Val Phe Gly Gly
          20          25          30
Glu Asn Glu His Arg Glu Tyr Leu Ser Asp Ile Val Ile Leu Asp Ile
          35          40          45
Pro Thr Ser Thr Trp Thr Gln Pro Glu Ile Arg Gly Gln Ile Pro Arg
          50          55          60
Gly Arg Ala Arg His Ala Ala Val Ile His Asp Glu Lys Leu Phe Ile
65          70          75          80
Ile Gly Gly Val Thr Gly Glu Asn Asn Val Ile Leu Asp Asp Leu Cys
          85          90          95
Tyr Leu Asp Leu Lys Thr Trp Thr Trp Ser Arg Ser Trp Arg Phe Thr
          100         105         110

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## 18378

Ala Arg Phe Asp His Thr Ala Trp Val Trp Gly Asp Arg Leu Trp Ile  
 115 120 125  
 Phe Gly Gly Leu Asp Pro Asp Met Glu Arg Thr Thr Asp Ile Trp Trp  
 130 135 140  
 Leu Asp Leu Lys Gly Ser Pro Phe Leu Gly Thr Pro Ser Ser Gln Gly  
 145 150 155 160  
 Thr Val Asp Ser Leu Glu  
 165

&lt;210&gt; 41525

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (46)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41525

Ser Gln Gly Leu Ala Val Ser Trp Asn Ser Val Phe Thr Arg Tyr Arg  
 1 5 10 15  
 Gly Phe Pro Gly Ile Ile Asn Arg Met Thr His Ser Pro Asp Pro Val  
 20 25 30  
 Tyr Ser Ile Pro Thr Gln Gln Leu Pro Gly Arg Ser Gly Xaa Tyr Ala  
 35 40 45  
 Ala Asn Ser Gly Ser Val Gln Val Arg Asn Ser Gly Arg Lys Lys Pro  
 50 55 60  
 Ile Ala Pro Gly Ala Ile Ser Cys His Lys Phe Arg Ser Gly Pro Tyr  
 65 70 75 80  
 Val Pro Ala Leu Phe Ala Gly Thr His Phe Gln Ala His Ala Ser Gly  
 85 90 95  
 Val Leu Leu Arg Leu Ile Thr Pro Ser Glu Thr Val Arg Thr Tyr Glu  
 100 105 110  
 Cys Lys Leu Ser Ala Leu Glu Leu Asp Thr Leu Arg Trp Gln Lys Leu  
 115 120 125  
 Ala Asp Gly Gln Glu Ile Phe Lys Pro Gly Tyr Arg Trp His Tyr Cys  
 130 135 140  
 Thr Val Asp Ala Ser Gly Thr Lys Ala Trp Leu Leu Gly Cys Ser Leu  
 145 150 155 160  
 Asp Val Gly Ala Ala Pro Gly Asn Ser Asp Glu Asn His Met Ser Glu  
 165 170 175  
 Val Leu Cys Ile Asp Leu Glu Lys Tyr Gly Leu Leu Gly Asn Glu Leu  
 180 185 190  
 Ala Thr Leu Ser Pro Asp Gln Ser Arg Ala Leu Val Ser Glu Arg Ser  
 195 200 205  
 Gly Leu Pro Pro Ile Ser Gly Leu Gly Ala Asp Leu Ser Ala Val Phe  
 210 215 220  
 Asp Gln Pro Pro Glu Ser Gly Ser Asp Ala Asp Phe Ile Ile Thr Ala  
 225 230 235 240  
 Asn Pro Asp Asp Ile Glu Ser Pro Asp Asp Val Ala Glu Asp Val Ala  
 245 250 255  
 Pro Thr Glu Ser Arg Pro Ala Phe Leu Pro Ala Asn Ala Pro Thr Ser  
 260 265 270  
 Pro Pro Ile His Val His Arg Ile Ile Leu Gln Leu Arg Trp Pro His  
 275 280 285

## 18379

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Phe Lys Arg Leu Tyr Ser Ala Gln Met Ala Glu Tyr His Ser Lys Arg
 290                295                300
Met His Ile Pro Glu Pro Tyr Ser Val Val Arg Ala Phe Leu Tyr Tyr
305                310                315                320
Leu Tyr Thr Asp Ser Ile Ser Gly His Pro Glu Tyr Cys Ser Ser Ile
                325                330                335
Ile Asp Val Ala Gly Met Leu Val Met Ala Asn Leu Tyr Asp Met Pro
                340                345                350
Lys Leu Arg Leu Leu Leu Arg Lys Phe Ser Pro Pro Phe Leu Gly Lys
                355                360                365
Asn Pro Pro Gly Pro Arg Lys Lys Ile Phe
 370                375

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<210> 41526  
 <211> 630  
 <212> PRT  
 <213> A.fumigatus

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<400> 41526
Tyr Thr Ile Arg Trp Val Leu His Ile Thr Asn Met Ala Thr Pro Leu
 1                5                10                15
Ile Ser Thr Pro Val Lys Ser His His Gly Leu Phe Ser Ser Lys Thr
                20                25                30
Ala Gly Gly Arg Met Pro Leu Thr Pro Ser Pro His Ala Arg Arg Ala
                35                40                45
Ser Val Ala Ser Asn His Ser Ser Pro Phe Thr Pro Pro Arg Gln Ser
                50                55                60
Ala Asp Ala Thr Lys Asp Asn Gly Arg Leu Val Tyr Gly Gly Asn Leu
65                70                75                80
Ser Ser Tyr Phe Ala Lys Ser Val Ala Lys Thr Ser Lys Thr Tyr Arg
                85                90                95
Glu Ser Pro Lys Ser Asn Ile Ala Arg Thr Arg Lys Ser Pro Arg His
                100                105                110
Leu Glu Leu Gly Val Ser Asp Trp Ser Leu Thr Gly Thr Gly Pro Ser
                115                120                125
Ser Gly Gln Ser Pro Ser Ser Arg Glu Arg Ala Arg Lys Glu Val Ser
                130                135                140
Ala Arg Thr Arg Ser Gly Lys Thr Thr Val Arg Ile Pro His Asn Ala
145                150                155                160
Gly Asp Arg Phe Ile Pro Asn Arg Ser Ala Ser Glu Gly Leu Thr Thr
                165                170                175
Thr Gly Thr Ala Lys Pro Glu Glu Asn Gln Arg Pro Lys Ser Gly Ser
                180                185                190
Ser Glu Gly Ser Ala Val Leu Ala Ser Ala Ala Ser Ala Phe Asp Ile
                195                200                205
Gly Gly Arg Gly Val Asp Asp Asp Leu Thr Ala Ala Leu Glu Asn Leu
                210                215                220
Gly Leu Glu Asp Asn Asp Asn Ser Thr Thr Ser Tyr Thr Lys Pro Ala
225                230                235                240
Pro Asp Ala Val Ala Tyr Glu Ser Ser Leu Ala Asp Ala Cys Gly Val
                245                250                255
Asn Leu Asn Thr Arg Ile Leu Ala Phe Lys Pro Leu Pro Pro Glu Ser
                260                265                270
Ser Lys Pro Ile Asp Leu Arg Ala Gln Tyr Asn Arg Pro Leu Lys Ser
                275                280                285
Ser Lys Ala Lys Gly Ser Gln Phe Arg Arg Arg Val Gln Thr Ala Pro

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## 18380

290		295		300
Glu Arg Val Leu Asp	Ala Pro Gly Leu Leu Asp	Tyr Tyr Leu Asn		
305	310	315	320	
Leu Leu Asp Trp Ser	Ser Gly Asn Gln Val Ala Ile Gly Leu Glu Arg			
	325	330	335	
Asn Val Tyr Val Trp Ser	Ala Asp Ser Gly Ser Val Asn Cys Leu Leu			
	340	345	350	
Glu Thr Ser Pro Asp Thr Tyr Val Ser Ser Val Lys Trp Ser Gly Asp				
	355	360	365	
Gly Ala Tyr Val Gly Val Gly Leu Gly Thr Gly Glu Val Gln Ile Trp				
	370	375	380	
Asp Val Glu Glu Gly Thr Lys Leu Arg Ser Met Phe Gly His Asp Ser				
385	390	395	400	
Arg Val Gly Val Met Gly Trp Ser Lys His Thr Leu Ser Thr Gly Ala				
	405	410	415	
Arg Ser Gly Leu Val Phe Asn His Asp Val Arg Ile Ala Gln His Lys				
	420	425	430	
Val Ala Glu Leu Val Ser His Thr Ser Glu Val Cys Gly Leu Glu Trp				
	435	440	445	
Arg Pro Asp Gly Ala Gln Leu Ala Thr Gly Gly Asn Asp Asn Leu Val				
	450	455	460	
Asn Ile Trp Asp Ala Arg Ser Leu Ser Ala Pro Lys Phe Thr Lys Thr				
465	470	475	480	
Asn His Arg Ala Ala Val Lys Ala Leu Ser Trp Cys Pro Trp Gln Leu				
	485	490	495	
Asn Leu Leu Ala Thr Gly Gly Gly Ser Tyr Asp Arg His Ile His Phe				
	500	505	510	
Trp Asn Thr Thr Thr Gly Ala Arg Thr Asn Ser Ile Asp Thr Gly Ser				
	515	520	525	
Gln Val Thr Ser Leu Arg Trp Ser Asn His Tyr Arg Glu Ile Val Ser				
	530	535	540	
Ser Ser Gly Phe Pro Asp Asn Ser Leu Ser Ile Trp Ser Tyr Pro Thr				
545	550	555	560	
Leu Val Arg Asn Val Glu Ile Pro Ala His Glu Thr Arg Val Leu His				
	565	570	575	
Ser Cys Leu Ser Pro Asp Gly Gln Leu Leu Ala Thr Ala Ala Ala Asp				
	580	585	590	
Glu Ser Leu Lys Phe Trp Lys Ile Phe Glu Arg Lys Pro Gly Thr Ser				
	595	600	605	
Ala Ser Ala Ser Arg Glu Gly Gly Val Gly Ser Lys Ala Gln Met Thr				
	610	615	620	
Lys Ser Met Thr Ile Arg				
625	630			

&lt;210&gt; 41527

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41527

Asn Tyr Ile Pro Leu Gln Ser Trp Gln Lys Lys Leu Ser Ser Leu Gly				
1	5	10	15	
Val Ala His Phe Pro Trp Asp Pro Ala Pro Pro Gln Pro Ala Pro Pro				
	20	25	30	
Gln Thr Gln Asn Gln Ile Leu Pro Pro Thr Ala Pro Val Pro Ser Asn				
	35	40	45	

## 18381

Ala Pro Arg Pro Ala Pro Pro Gln Gln Thr Gln Gln Gln His Val Pro  
 50 55 60  
 Pro Gln Gln His Leu Pro Gln Ser Leu Pro Gly Thr Ile Pro Pro Met  
 65 70 75 80  
 Gln Ala Pro Ala Pro Ala His Met Gly Gln Gln Ser His Ile Lys Ser  
 85 90 95  
 Glu Pro Gly Leu Asn Gly Gln Pro Gly Met Pro His Met Ser Asn Met  
 100 105 110  
 Met Ser Ala Pro Ser Ser Asn Pro Gln Ser Ala Arg Glu Arg Ala Ala  
 115 120 125  
 Asn Met Leu His Gln Arg Tyr Gly Ala Ala Ala Gly Leu His His Gly  
 130 135 140  
 Ala Gly Arg Thr Arg Ala  
 145 150

<210> 41528  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 41528  
 Tyr Gln Ser Pro Ala Leu Ile Arg Arg Gln Gly Arg Gln Phe Ile Ala  
 1 5 10 15  
 Lys Gln Pro Val Phe Leu Gln Val Asn Ala Lys Asn Phe Ala His Met  
 20 25 30  
 Ile Leu Ile Thr Val Ala Arg Ser Gly Ala Asn Val Lys Ala Ala Ser  
 35 40 45  
 Gln Gln Pro Gly Phe Gly Ala Thr Ser Val Asp Cys Thr Ile Met Pro  
 50 55 60  
 Ala Val Pro Gly Leu Glu Asn Leu Leu Pro Ile Ser  
 65 70 75

<210> 41529  
 <211> 163  
 <212> PRT  
 <213> A.fumigatus

<400> 41529  
 Cys Cys Phe Pro His Tyr Pro Leu Arg Asp Ile Leu Leu Lys Leu Tyr  
 1 5 10 15  
 Pro Ile Thr Glu Leu Ala Glu Lys Thr Leu Val Ala Trp Cys Arg Pro  
 20 25 30  
 Phe Pro Leu Gly Ser Cys Ala Thr Thr Ala Arg Pro Ser Ser Asp Ser  
 35 40 45  
 Lys Pro Asn Thr Pro Ser Tyr Cys Ser Cys Ala Phe Lys Arg Ser Ser  
 50 55 60  
 Thr Cys Ser Ser Thr Thr Asp Thr Ala Thr Thr Cys Ser Ala Pro Thr  
 65 70 75 80  
 Thr Ser Ser Pro Ile Pro Thr Gly Asp Asp Thr Ser Asp Ala Ser Ala  
 85 90 95  
 Cys Ala Arg Ala His Gly Ala Ala Ile Ser His Gln Glu Arg Thr Gly  
 100 105 110  
 Pro Gln Trp Ala Thr Gly Asn Ala Ser His Glu Gln His Asp Val Gly  
 115 120 125  
 Ser Phe Leu Lys Ser Ser Val Gly Thr Arg Thr Cys Cys Gln Tyr Ala  
 130 135 140

## 18382

Ser Ser Glu Ile Arg Cys Arg Ser Arg Ser Ser Pro Arg Gly Trp Lys  
 145 150 155 160  
 Asp Pro Arg

<210> 41530  
 <211> 238  
 <212> PRT  
 <213> A.fumigatus

<400> 41530  
 Ser Gly Tyr Cys Arg Phe Ser Trp Pro Leu Arg Ala Asn Thr Glu Leu  
 1 5 10 15  
 Leu Trp Ala Asn Ser Leu Leu Ser Pro Thr Tyr Pro Gln Ile Thr Met  
 20 25 30  
 Arg Ser Thr Phe Arg Leu Leu Ala Asn Val Lys Ser Ala Arg Tyr Leu  
 35 40 45  
 Glu Pro Phe Ala Pro Thr Gly Leu Thr Gly Leu Val Thr His Pro Ser  
 50 55 60  
 Pro Arg Pro Thr Leu Ile His Leu Tyr Arg Thr Thr Leu Glu Asn Leu  
 65 70 75 80  
 Lys Arg Phe Pro Glu Ser Ser Val Tyr Arg Gln Ser Thr Glu Ala Leu  
 85 90 95  
 Thr Arg His Arg Leu Gln Ile Val Glu Ser Val Lys Pro Pro Gly Tyr  
 100 105 110  
 Asp Ala Trp Leu Glu Arg Val Lys Lys Ala Val Ser Ala Glu Pro Glu  
 115 120 125  
 Arg Phe Ala Ser Leu Arg Leu Ala Asp Gly Thr Tyr Ala Gly Phe Met  
 130 135 140  
 Arg Asn Asp Gly Thr Asp Asn Pro Arg Gly Glu Trp Asp Gly Glu  
 145 150 155 160  
 Ala Leu Glu Pro Thr Glu Gly Pro Ala Arg Thr Ala Glu Glu Glu  
 165 170 175  
 Ala Arg Trp His Lys Ala Ile Glu Glu Ala Thr Ala Thr Thr Gln Ala  
 180 185 190  
 Lys Asp Ser Asp Phe Ala Thr Glu Gln Met Lys Trp Glu Asn Glu Pro  
 195 200 205  
 Ala Leu Glu Ala Glu Gln Tyr Val Asp Leu Arg Pro Tyr Ser Ala Val  
 210 215 220  
 Thr Ser Arg Ala Thr Asp His Arg Ser Gln Asp Cys Arg Asp  
 225 230 235

<210> 41531  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 41531  
 Ser Gly Arg Met Ser Gln Pro Ser Arg Gln Asn Ser Thr Ser Thr Tyr  
 1 5 10 15  
 Ala Leu Ile Leu Arg Ser Leu Ala Gly Gln Leu Thr Ile Asp Arg Arg  
 20 25 30  
 Ile Ala Glu Ile Glu Lys Gln Ile Gly Ala Gly Leu Ile Glu Glu Val  
 35 40 45  
 Ile Gln Val Ala Glu Asn Glu Leu Lys Leu Val Asp Glu Met Tyr Lys  
 50 55 60



Ser Lys Val

65

&lt;210&gt; 41532

&lt;211&gt; 432

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41532

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Pro Ile Phe Phe Pro Lys Ser Ile Ile Lys Thr Phe Glu Leu Thr Asp
1      5      10      15
Val Pro Val Arg Ala Gly Arg Phe Ile Ala Arg Lys Asn Trp Ile Val
      20      25      30
Cys Gly Ser Asp Asp Phe Gln Leu Arg Val Tyr Asn Tyr Asn Thr Ser
      35      40      45
Glu Lys Ile Ala Ser Phe Glu Ala His Pro Asp Tyr Ile Arg Ser Ile
      50      55      60
Ala Val His Pro Thr Gln Pro Phe Val Leu Thr Ala Ser Asp Asp Met
65      70      75      80
Thr Ile Lys Leu Trp Asp Trp Glu Lys Gly Trp Lys Cys Val Gln Val
      85      90      95
Tyr Glu Gly His Ser His Tyr Val Met Gly Leu Ala Ile Asn Pro Lys
      100     105     110
Asp Thr Asn Thr Phe Ala Ser Ala Cys Leu Asp Arg Thr Val Lys Ile
      115     120     125
Trp Ser Leu Gly Ser Pro His Ala Asn Phe Thr Leu Glu Ala His Glu
      130     135     140
Thr Lys Gly Val Asn His Val Asp Tyr Tyr Pro Gln Ala Asp Lys Pro
145     150     155     160
Tyr Leu Leu Thr Thr Ser Asp Asp Arg Thr Val Lys Val Trp Asp Tyr
      165     170     175
Thr Thr Lys Ala Leu Ile Ala Thr Leu Glu Gly His Thr Ser Asn Val
      180     185     190
Ser Phe Ala Cys Tyr His Pro Glu Leu Pro Val Ile Ile Ser Gly Ser
      195     200     205
Glu Asp Gly Thr Ile Lys Leu Trp His Ala Asn Thr Tyr Arg Leu Glu
      210     215     220
Gln Ser Leu Ser Tyr Gly Leu Glu Arg Ala Trp Cys Val Ala Tyr Gln
225     230     235     240
Arg Gly Arg Gln Gly Ile Ala Met Gly Phe Asp Asp Gly Ala Val Val
      245     250     255
Val Lys Met Gly Arg Glu Glu Pro Ala Val Ser Met Asp Gly Ser Gly
      260     265     270
Lys Ile Val Trp Ala Arg His Asn Glu Val Val Ser Thr Val Ile Lys
      275     280     285
Gly Gly Asp Ser Ser Ile Lys Asp Gly Thr Pro Leu Ser Leu Pro Thr
      290     295     300
Lys Glu Leu Gly Ser Cys Glu Ile Tyr Pro Gln Thr Leu Ser His Ser
305     310     315     320
Pro Asn Gly Arg Phe Val Ser Val Cys Gly Asp Gly Glu Tyr Ile Ile
      325     330     335
Tyr Thr Ala Leu Ala Trp Arg Asn Lys Ala Phe Gly Gln Ala Leu Asp
      340     345     350
Phe Ala Trp Gly Ser Lys Asp Asn Ser Asn Asp Tyr Ala Ile Arg Glu
      355     360     365
Ser Pro Thr Ser Val Lys Ile Phe Lys Asn Phe Lys Glu Val Thr Gly

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## 18384

370                      375                      380  
 Gly Leu Asp Val Gly Phe Gln Ala Glu Gly Leu Thr Gly Gly Val Leu  
 385                      390                      395                      400  
 Leu Gly Val Lys Gly Gln Gly Gly Ile Gly Met Phe Asp Trp Glu Thr  
                     405                      410                      415  
 Gly Asn Leu Val Arg Arg Ile Glu Val Glu Pro Lys Ala Val Ser Leu  
                     420                      425                      430

<210> 41533  
 <211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 41533  
 Lys Arg Ser Leu Ala Arg Ala Ser Gly Ser Ile Ser Ile Val Ser Pro  
 1                      5                      10                      15  
 Leu Leu Arg Leu Asn Arg Leu Leu Thr Ser His Ile Met Cys Ser Asn  
                     20                      25                      30  
 Glu Asn Tyr Leu Tyr Leu Leu Ala Asn Val Ala Leu His Leu Asn Gly  
                     35                      40                      45  
 His Pro Phe Glu Thr Ile Thr Phe Arg Phe Tyr Glu Phe Glu Asp Pro  
                     50                      55                      60  
 Leu Leu Val Ile Val Ala Pro His Gly Ser Tyr Thr Leu Ala Pro Ala  
 65                      70                      75                      80  
 Cys Gly Thr Ser Leu Tyr Met Glu  
                     85

<210> 41534  
 <211> 405  
 <212> PRT  
 <213> A.fumigatus

<400> 41534  
 Val Cys Asp Trp Lys Phe Cys Tyr Asn Ile Ala Leu Ser Tyr Gln Ser  
 1                      5                      10                      15  
 Ser Gln Val Tyr Trp Ser Glu Ser Gly Glu Leu Val Thr Leu Ala Cys  
                     20                      25                      30  
 Glu Asp Thr Phe Tyr Val Leu Arg Phe Ser Lys Glu Asn Tyr Ile Asn  
                     35                      40                      45  
 Gly Leu Asn Ala Gly Glu Ala Asp Glu Asp Gly Val Glu Ser Ala Phe  
                     50                      55                      60  
 Glu Val Val Thr Asp Val Asn Glu Ser Val Arg Thr Gly Gln Trp Val  
 65                      70                      75                      80  
 Gly Asp Cys Phe Ile Tyr Thr Asn Ser Thr Asn Arg Leu Asn Tyr Leu  
                     85                      90                      95  
 Val Gly Asp Gln Thr Tyr Thr Ile Ser His Phe Asp Gln Gly Met Tyr  
                     100                      105                      110  
 Val Leu Gly Tyr Leu Pro Arg Asp Gly Arg Ile Tyr Leu Ala Asp Lys  
                     115                      120                      125  
 Asp Val Asn Ile Val Ser Phe Gly Leu Ser Leu Ser Met Val Glu Tyr  
                     130                      135                      140  
 Gln Thr Val Val Leu Arg Gly Asp Met Asp Met Ala Ala Glu Leu Leu  
 145                      150                      155                      160  
 Lys Asp Val Pro Arg Asp Gln Met Asn Lys Val Ala Arg Phe Leu Glu  
                     165                      170                      175  
 Gly Gln Gly Tyr Lys Glu Met Ala Leu Glu Val Ala Thr Asp Pro Glu

## 18385

	180		185		190
His Arg Phe	Glu Leu Ala Leu	Ser Leu Asn Asn	Leu Asp Thr	Ala Leu	
	195	200	205		
Glu Ile Ala	Arg Glu Ala Asn	Val Glu His Lys	Trp Lys Ile	Val Gly	
	210	215	220		
Asp Ala Ala	Met Ala Ala Trp	Asn Leu Ala Leu	Ala Glu Glu	Cys Phe	
225	230	235	240		
Thr Asn Ala	Lys Asp Leu Gly	Ser Leu Leu Leu	Leu His Thr	Ala Ser	
	245	250	255		
Gly Asn Arg	Ala Gly Leu Arg	Gln Leu Ala Glu	Gln Ala Ser	Glu Ala	
	260	265	270		
Gly Leu Gln	Asn Val Ala Phe	Ser Ser Leu Trp	Ser Leu Gly	Asp Val	
	275	280	285		
Asp Gly Cys	Ile Asp Leu Leu	Val Arg Thr Asn	Arg Leu Ala	Glu Ala	
290	295	300			
Val Leu Phe	Ala Gln Thr Tyr	Lys Pro Ser Arg	Ala Pro Lys	Leu Val	
305	310	315		320	
Val Gln Trp	Lys Ala Ser Leu	Glu Gln Ser Gly	Lys Ser Lys	Val Ala	
	325	330		335	
Arg Leu Ile	Gly Val Pro Pro	Gly Ala Pro Asp	Ala Val Ala	Thr Asp	
	340	345		350	
Asp Asp Leu	Phe Pro Glu Trp	Asp Glu Tyr Leu	Arg Leu Glu	Lys Glu	
	355	360		365	
Gly Val Val	Pro Glu Pro Pro	Ser Ser Glu Ser	Leu Ile Asp	Ile Asn	
	370	375		380	
Ala Asp Asp	Glu Ala Val Thr	Arg Ser Ala Glu	Asn Gly Thr	Ala Glu	
385	390	395		400	
Val Gln Thr	Glu Ala				
	405				

&lt;210&gt; 41535

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41535

Thr Ser Lys	Pro Ile Ser	Ser Ser Ser	Glu Pro Ser	Asp Thr Gln	Ser
1	5	10	15		
Leu Asn Ser	Phe Gln Asn	Phe Tyr Asn	Phe His Phe	Ala Ser Met	Asn
	20	25	30		
Cys Leu Ala	Phe Ser Asp	Phe Cys Lys	Arg Leu Asp	Val Lys Trp	Phe
	35	40	45		
Pro Thr Phe	Ser Leu Tyr	His Asn Gly	Lys Leu Ile	Glu Gln Phe	Glu
	50	55	60		
Gly Ala Lys	Thr Met Glu	Gly Leu Ser	Glu Phe Ile	Glu Gly Lys	Leu
65	70	75	80		
Glu Ser Ile	Arg Pro Gly	Ser Arg Pro	Pro Lys Gly	Val Lys Leu	Pro
	85	90	95		
Lys Pro Gly	Asp Lys Gln	Val Asp Thr	Glu Ala Ala	Pro Asp Val	Pro
	100	105	110		
Ala Ala Lys	Asp Lys Asp	Arg Val Ala	Gly Val Lys	Ala Gly Glu	Lys
	115	120	125		
His Asn Glu	Gln Val Ala	Gln Leu Ala	Ser Ala Glu	Ala Pro Val	Lys
	130	135	140		
Ser Ala Thr	Pro Lys Val	Asn Ser Lys	Pro Ser Ala	Pro Ala Asn	Pro
145	150	155	160		

## 18386

Gln Gly Ile Ser Val Pro Leu Thr Ala Glu Ser Phe Gln Lys Leu Val  
 165 170 175  
 Thr Thr Thr Arg Asp Pro Trp Phe Val Lys Phe Tyr Ala Pro Trp Cys  
 180 185 190  
 His His Cys Gln Ala Leu Ala Pro Val Trp Gln Gly Met Ala Arg Glu  
 195 200 205  
 Met Gln His Val Leu Asn Val Gly Glu Val Asn Cys Asp Ala Glu Pro  
 210 215 220  
 Arg Leu Cys Lys Asp Ala Arg Val Asn Ala Tyr Pro Thr Met Tyr Phe  
 225 230 235 240  
 Phe Arg Gly Gly Glu Arg Val Glu Tyr Thr Gly Leu Arg Gly Leu Gly  
 245 250 255  
 Asp Leu Val Asn Tyr Ala Lys Lys Ala Val Asp Ile Gly Ser Gly Val  
 260 265 270  
 Gln Asp Val Asp Ala Ala Gln Phe Lys Gln Leu Glu Glu Lys Glu Glu  
 275 280 285  
 Val Ile Phe Leu Tyr Phe Tyr Asp His Ala Thr Thr Ser Glu Asp Phe  
 290 295 300  
 Glu Ala Leu Glu Arg Leu Thr Leu Ser Leu Val Gly His Ala Arg Leu  
 305 310 315 320  
 Val Lys Thr Ser Ser Ala Ala Leu Ala Glu Arg Phe Lys Ile Thr Thr  
 325 330 335  
 Trp Pro Arg Leu Leu Val Ser Arg Asp Gly Arg Pro Ser Tyr Tyr Asn  
 340 345 350  
 Ala Leu Ala Pro Lys Asp Met Arg Asp Val Arg Gln Ile Leu Asn Trp  
 355 360 365  
 Met Arg Ser Val Trp Leu Pro Ile Val Pro Glu Leu Thr Val Ser Asn  
 370 375 380  
 Ala Arg Glu Ile Met Asp Gly Lys Tyr Val Val Leu Gly Ile Leu Ser  
 385 390 395 400  
 Arg Arg Arg Ser Asp Asp Phe Ile Leu Ala Lys Arg Glu Leu Lys Ser  
 405 410 415  
 Ala Ala Leu Glu Trp Met Asp Lys Gln Thr Gln Leu Phe Arg Leu Glu  
 420 425 430  
 Arg Gln Glu Leu Arg Asp Ala Lys Gln Leu Arg Ile Glu Glu Ala Glu  
 435 440 445  
 Asp Arg Asn Asp Gln Arg Ala Leu Arg Ala Ala Lys Asn Met Arg Ile  
 450 455 460  
 Ser Ile Arg Glu Asp Asp Lys Lys Gln Val Gly Phe Ala Trp Val Asp  
 465 470 475 480  
 Gly Glu Phe Trp Glu Arg Trp Leu Arg Thr Thr Phe Gly Ile Asp Ile  
 485 490 495  
 Glu Asn Gly Glu Arg Val Ile Ile Asn Asp Gln Asp Val Ser Ile Ile  
 500 505 510  
 Gln Glu Leu Leu Cys Leu Pro Leu Leu Thr Thr Ser Pro Gln Asn Arg  
 515 520 525  
 Arg Tyr Trp Asp Ala Thr Ser Gln Trp Ser Ser Asp Leu Leu His Asp  
 530 535 540  
 Gly Thr Gly Arg Arg Arg  
 545 550

&lt;210&gt; 41536

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41536

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Thr Pro Ala Ser Met Arg Ser Ser Leu Leu Ala Trp Ser Phe Leu Ser
1          5          10          15
Leu Leu Ser Ile Pro Thr Phe Ala Ile Pro Ser Gly Gly Ile Ala Asn
20          25          30
Asp Leu Asn Leu Ala Asn Asn Arg Leu Val Lys Arg Ala Glu Pro Val
35          40          45
Glu Lys Thr Glu Ser Glu Pro Val Ser Thr Thr Phe Asn Gly Val Glu
50          55          60
Val Pro Pro Leu Lys Glu Leu Thr Pro Glu Asn Phe Glu Glu Leu Thr
65          70          75          80
Lys Asn Gly Tyr Trp Phe Val Ala Thr Val Pro Val Ala Phe Thr Val
85          90          95
Asp Ile Val Leu Leu Thr Gly Asn Arg Phe Val Lys His Tyr Ser Pro
100         105         110
Ser Cys Pro His Cys Lys Ala Ile Ala Pro Thr Trp Gln Thr Leu Tyr
115         120         125
Glu Tyr Tyr Tyr Val Ser Ala Gln Ser Thr Phe Gly Met Phe Val Leu
130         135         140
Gly His Cys Leu Thr Cys Ala Arg His Leu Asn Arg Tyr Leu Pro Leu
145         150         155         160
Pro Ser Arg Leu Ile Leu Asn Pro Leu Thr Pro Ser Lys Ile Ser Thr
165         170         175
Thr Phe Thr Ser Leu Arg
180

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&lt;210&gt; 41537

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41537

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Thr Ile Pro Leu Phe Arg Tyr Tyr Tyr Tyr Tyr Tyr Leu Val Pro Val
1          5          10          15
Ser Asp Lys Ile Leu Pro Thr Leu Met Ser Ser Tyr Asn Gly Phe His
20          25          30
Thr Arg Phe Leu Asp Ala Leu Ile Lys Ala Phe Ser Ser Gly Gln Thr
35          40          45
Ser Gln Asn Val Arg Ala Arg Val Phe Gly Leu Asp Asp Trp Val
50          55          60

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&lt;210&gt; 41538

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (60), (66)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41538

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Lys Ser Thr Trp Glu Ile Val Cys Leu Ala Cys Arg Phe Phe Cys Ala
1          5          10          15
Pro Ile Tyr Tyr Asp Glu Ser Glu Gly Arg Ser Lys Leu Pro Lys Arg
20          25          30

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## 18389

Glu Gly Thr Glu Thr Arg Val Asn Ala Gln Glu Glu Ala Asn Glu Tyr  
 195 200 205  
 Met Val Ser Tyr Leu Gln Ser Cys Arg Asp Ala Gly Arg Met Glu Asn  
 210 215 220  
 Ala Val Gly Trp Tyr His Ser His Pro Gly Tyr Gly Cys Trp Leu Ser  
 225 230 235 240  
 Gly Ile Asp Val Thr Thr Gln Asp Met Gln Gln Leu Gly Gly Pro Phe  
 245 250 255  
 Val Ala Val Val Ile Asp Pro Glu Arg Thr Ile Ser Val Gly Lys Val  
 260 265 270  
 Asp Ile Gly Ala Phe Arg Thr Phe Pro Lys Asp Tyr Thr Pro Pro Lys  
 275 280 285  
 Glu Gly Asn Glu Asp Glu Asp Tyr Gln Thr Ile Pro Leu Ser Lys Ala  
 290 295 300  
 Glu Asp Phe Gly Ala Tyr Ala His Gln Tyr Tyr Ser Leu Glu Val Ser  
 305 310 315 320  
 Phe Phe Lys Ser Ser Leu Asp Thr Glu Leu Leu Ser Gln Leu Trp Asn  
 325 330 335  
 Lys Tyr Trp Val Ala Thr Leu Ser Gln Ser Pro Leu Phe Thr Thr Arg  
 340 345 350  
 Asp Tyr Gly Ser Arg Gln Met Met Asp Leu Ser Gln Lys Val Arg Arg  
 355 360 365  
 Ala Ala Arg Gly Ile Glu Ser Ser Gly Ser Arg Gly Gly Ala Thr Thr  
 370 375 380  
 Pro Lys Asp Gln Gln Leu Glu Lys Ile Val Arg Asp Gly Gln Arg Ile  
 385 390 395 400  
 Val Ser Glu Glu Val Lys Gly Leu Leu Ala Ala Glu Val Lys Met Lys  
 405 410 415  
 Leu Phe Gln Gly Ile Gly Glu Gly Thr Gln Thr Gly Ala Ser  
 420 425 430

<210> 41541  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 41541  
 Arg Ala Thr Arg Phe Asp Gln Leu Thr Ser Thr Ile Gln Asp Asn Lys  
 1 5 10 15  
 Arg Arg Asn Glu Thr Pro Tyr Leu Arg Leu Ser Cys Phe Ala Leu Met  
 20 25 30  
 Ala Arg Asn Ser Asn Ile Ile Lys Tyr Gly Met Gln Leu Arg Asn Asp  
 35 40 45  
 Ser Val Asp Leu Ser Gly Gln Val Thr Arg Val Asp Arg His Arg Asp  
 50 55 60  
 His Glu Pro Gln Val Trp Gly  
 65 70

<210> 41542  
 <211> 910  
 <212> PRT  
 <213> A.fumigatus

<400> 41542  
 Arg Arg Ala Asp Pro Ser Ala Pro Val Val Pro Asp Glu Tyr Glu Glu  
 1 5 10 15

## 18390

Glu His Gly His Glu His Asp Glu Asp Glu Val Asp Ser Ala Gly Asn  
 20 25 30  
 Pro Arg Asp Ser Gln Pro Leu Leu Pro Ile Glu Gly Val Ala Ala Pro  
 35 40 45  
 Lys Glu Gln Glu Glu Ala Ala Phe Trp Ile Pro Gln Ala Thr Pro Asp  
 50 55 60  
 Gly Arg Leu Phe Tyr Phe Asn Thr Leu Thr Gly Tyr Ser Thr Met Glu  
 65 70 75 80  
 Leu Pro Phe Glu Asn Pro Ser Ala Asn Glu Ser Gly Pro Phe Asp Arg  
 85 90 95  
 Asn Asn Phe Phe Val Pro Asp Gln Thr Arg Pro Pro Pro Glu Leu Met  
 100 105 110  
 Ala Arg Gly Phe Glu Arg Asp Glu Asp Asp Tyr Asp Gly Ser Ala Ser  
 115 120 125  
 Glu Ala Glu Gly Glu Ser Leu Met Leu Ala Ser His Asp Ser Met Ser  
 130 135 140  
 Arg Arg Arg Arg Ser Tyr Ile Asp Gly Val Ser Pro Ala Thr Ser Leu  
 145 150 155 160  
 Asp Ser Leu His Pro Pro Ser Ala Thr Lys Ser Ile Asn Glu Gly Lys  
 165 170 175  
 Ile Ser His Gln Ser Ser Arg Asp Leu Gln Lys Thr Thr Thr Ala Gly  
 180 185 190  
 Ser Asn Ala Ser Ala Ala Ile His Phe His Arg Pro Ser Val Ser Ser  
 195 200 205  
 Gln Ala Pro Ser Arg Phe Val Asp Asp Gly Leu Thr Ala Pro Val Thr  
 210 215 220  
 Trp Pro Met Leu Val Asp Asn Met Arg His Ala Ile Glu Val Tyr Arg  
 225 230 235 240  
 Gln Thr Leu Leu Asn Gly Asp Arg Ser Glu Tyr Val Arg Lys Ala Glu  
 245 250 255  
 Asp Ile Ser Asp His Leu Arg Met Leu Leu Ala Ala Gly Ser Asp Thr  
 260 265 270  
 Thr Asp Asn His Ser Gly Asn Pro Ser Ile Ile Ser Gln Asn Lys Pro  
 275 280 285  
 Leu Tyr Pro His Phe Arg Glu Met Met Ser Lys Phe Ser Lys Leu Val  
 290 295 300  
 Leu Ser Ser His Val Ala Ala Ala Asp Trp Pro Gly Pro Asp Ser Val  
 305 310 315 320  
 Asn Lys Cys Leu His Glu Ala Asp Gly Val Met Gln Gly Val Tyr Gly  
 325 330 335  
 Tyr Val Glu Val Ala Arg Gln Gln Arg Gly Glu Asn Ile Arg Arg Ile  
 340 345 350  
 Val Pro Gly Phe Val Val Gly Ser Ser Ser Gly Gly Gly Trp Gln Asn  
 355 360 365  
 Asn Gly Val Ser Leu Asp Asp Ser Gly Pro Thr Ser Phe Leu Asp Gln  
 370 375 380  
 Asp Gly Ala Asp Pro Arg Val Glu Pro Ser Val Pro Met Asp Ser Ser  
 385 390 395 400  
 Leu Leu Asp His Ile Asp Ile Leu Arg Arg Ser Phe Val Gly Thr Ile  
 405 410 415  
 Arg Arg Leu Glu Arg Arg Leu Thr Leu Asn Gln Lys Lys Ile Val Thr  
 420 425 430  
 Tyr Ala Glu Gln Arg Glu Ile Ser Asp Ser Val Val Ala Ala Ala Ile  
 435 440 445  
 Lys Val Val Glu Gln Phe Arg Pro Trp Ile Ser Ala Val Glu Ser Ile  
 450 455 460



Asn Leu Ala Pro Leu Gly Thr Ser Phe Gln Asn Pro Gln Leu Val Asp  
 465 470 475 480  
 Phe Ser Leu Gln Lys Gln Arg Ala Tyr Asp Ala Ile Ala Asp Phe Val  
 485 490 495  
 Ile Ser Cys Gln Ala Val Ser Ala Pro Leu Gly Asp Glu Trp Ala Glu  
 500 505 510  
 Leu Arg Gly Asp Ser Leu Glu Asp Arg Leu Asn Ala Val Arg Ser Ile  
 515 520 525  
 Ala Arg Gln Leu Glu Asn Phe Val Ser Gln Ile Gly Phe Ser Leu Ser  
 530 535 540  
 Leu Leu Leu Glu Gln Ile Pro Glu Pro Ser Thr Thr Phe Arg Ser Glu  
 545 550 555 560  
 Ser Arg Leu Glu Gly Asp Lys Glu Ala Tyr Lys Gly Ile His Ser Arg  
 565 570 575  
 Gly Asp Ser Leu Ala Arg Ile Pro Thr Glu Thr Ile Gly Ile Pro Ser  
 580 585 590  
 Ser Tyr Ser Val Asp Leu Pro Ser Glu Lys Val Arg Arg Asn Met Asp  
 595 600 605  
 Lys Ala Gln Arg Phe Phe Gly Gln Ala Pro Pro Val Ala Ile Thr Arg  
 610 615 620  
 Glu Pro Ile Arg Glu Pro Val Arg Glu Pro Glu Glu Thr Pro Trp Phe  
 625 630 635 640  
 Leu Lys Met Asp His Glu Gly Glu Val Phe Tyr Asp Thr Lys Ala Asp  
 645 650 655  
 Val Pro Thr Leu Lys Cys Gly Thr Leu Ala Gly Leu Val Glu His Leu  
 660 665 670  
 Thr Arg His Asp Lys Leu Asp Ala Ser Phe Asn Asn Thr Phe Leu Leu  
 675 680 685  
 Thr Tyr Arg Ser Phe Thr Thr Ala Ser Glu Leu Phe Glu Met Leu Ala  
 690 695 700  
 Glu Arg Phe Asn Ile Gln Pro Pro Phe Gly Leu Asn Pro Asp Glu Met  
 705 710 715 720  
 Gln Met Trp Ile Asp Arg Lys Gln Lys Pro Ile Arg Phe Arg Val Val  
 725 730 735  
 Asn Ile Leu Lys Ser Trp Phe Glu His Phe Trp Met Glu Pro Asn Asp  
 740 745 750  
 Glu Ala His Met Asn Leu Leu Ala Arg Val His Ala Phe Thr Lys Asp  
 755 760 765  
 Ser Ile Ala Thr Thr Lys Thr Pro Gly Ser Pro Gln Leu Met Ala Val  
 770 775 780  
 Ile Glu Gln Arg Leu Lys Gly Gln Asp Thr Thr Val Lys Arg Leu Val  
 785 790 795 800  
 Pro Thr Gln Ala Thr Ala Ala Pro Ser Pro Ile Leu Pro Lys Asn Met  
 805 810 815  
 Lys Lys Leu Lys Phe Leu Asp Ile Asp Pro Thr Glu Phe Ala Arg Gln  
 820 825 830  
 Leu Thr Ile Ile Glu Ser Arg Leu Tyr Ser Lys Ile Arg Pro Ile Glu  
 835 840 845  
 Cys Leu Asn Lys Thr Trp Gln Arg Lys Val Gly Pro Asp Glu Pro Glu  
 850 855 860  
 Pro Ala Thr Asn Val Lys Ala Leu Ile Leu His Ser Asn Gln Leu Thr  
 865 870 875 880  
 Asn Trp Val Ala Glu Met Ile Leu Thr Gln Ser Asp Val Lys Lys Arg  
 885 890 895  
 Val Val Val Ile Lys His Phe Val Asn Val Ala Asp Val Cys  
 900 905 910

<210> 41543  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

<400> 41543  
 Leu Cys Ala Gln Arg Cys Arg Ala Leu Asn Asn Tyr Ser Thr Leu Thr  
 1 5 10 15  
 Ser Ile Ile Ser Ala Leu Gly Thr Ala Pro Ile His Arg Leu Gly Arg  
 20 25 30  
 Thr Trp Ser Gln Val Ser Gly Arg Thr Ser Ala Ile Leu Glu Gln Met  
 35 40 45  
 Arg Arg Leu Met Ala Ser Thr Lys Asn Phe Gly Glu Tyr Arg Glu Thr  
 50 55 60  
 Leu His Leu Ala Asn Pro Pro Cys Ile Pro Phe Phe Gly Thr Lys  
 65 70 75

<210> 41544  
 <211> 122  
 <212> PRT  
 <213> A.fumigatus

<400> 41544  
 Gln Val Ala Lys Leu Gln Pro Gly Val Tyr Leu Thr Asp Leu Thr Phe  
 1 5 10 15  
 Ile Glu Asp Gly Ile Pro Ser Leu Thr Pro Ser Glu Leu Ile Asn Phe  
 20 25 30  
 Asn Lys Arg Ala Lys Thr Ala Glu Val Ile Arg Asp Ile Gln Gln Tyr  
 35 40 45  
 Gln Asn Val Pro Tyr Leu Leu Gln Pro Val Pro Glu Leu Gln Asp Tyr  
 50 55 60  
 Ile Leu Ser Asn Leu Gln Ala Ala Gly Asp Val His Asp Met Tyr Asp  
 65 70 75 80  
 Arg Ser Leu Glu Val Glu Pro Arg Glu Arg Glu Asp Glu Lys Ile Ala  
 85 90 95  
 Arg Tyr Ala Ala Ala Ser Ser Arg Asp Leu Arg Ser His Ser Thr Met  
 100 105 110  
 Ala Ile Ala Ser Ile Val Ile Ala Ser Arg  
 115 120

<210> 41545  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 41545  
 Ser Arg Ile Ser Leu Leu Ile Ala Phe Cys Ser Glu Arg Thr Ser Met  
 1 5 10 15  
 Thr Glu Glu Ala Glu Arg Leu Ile Thr Ala Ile Gln Gln Met Glu Glu  
 20 25 30  
 Ser Leu Val Asp Glu Lys Ala Asn Gly Gln Tyr Gln Leu Asn His Asp  
 35 40 45  
 Asp Leu Arg Val Thr Tyr Pro Leu Asn Arg Cys Leu Ser Phe Leu Arg  
 50 55 60  
 Glu Lys His Gly Ala Met Ser Lys Met His Arg Glu Arg Phe Glu Gln

## 18393

65  
Val Lys Ser Lys

70

75

80

<210> 41546  
<211> 245  
<212> PRT  
<213> A.fumigatus

&lt;400&gt; 41546

Gln Ala Val Glu Leu Val Ala Ala Leu Glu Ser Tyr Ser Ser His Leu  
1 5 10 15  
Glu Ser Ser Phe Val Thr Ile Glu Leu Pro Pro Thr Ala Pro Gly Ser  
20 25 30  
Ser Ile Ser Pro Ser Phe Asp Leu Ser Pro Thr Tyr Val Thr Ala Leu  
35 40 45  
Asp Asn Glu Phe Thr Arg Val Tyr Glu Glu Tyr His Arg Arg Leu Glu  
50 55 60  
Phe Val Lys Thr Thr Cys Glu Glu Ile Ile Lys Leu Trp Ala Glu Leu  
65 70 75 80  
Gly Thr Pro Gln Val Gln Thr Asp Thr Asn Ile Val Lys His Tyr Arg  
85 90 95  
Glu Ser Pro Glu Gln Leu Gly Leu His Glu Ser Asp Leu Ala Asn Leu  
100 105 110  
Thr Ala Lys Arg Glu Lys Leu Leu Glu Glu Lys Arg Ser Arg Glu Arg  
115 120 125  
Lys Leu Lys Glu Leu Arg Thr Ala Val Glu Ser Leu Trp Glu Arg Phe  
130 135 140  
Gly Val Glu Glu Cys Asp Arg Lys Ala Phe Leu Ala Ala Asn Arg Gly  
145 150 155 160  
Cys Gly Leu Arg Thr Ile Asn Glu Phe Glu Glu Glu Leu Ala Arg Leu  
165 170 175  
Asn Glu Leu Lys Arg Gln Asn Leu His Leu Phe Val Glu Asp Ala Arg  
180 185 190  
Cys Arg Leu Gln Glu Leu Trp Asp Gly Leu Tyr Phe Ser Glu Glu Glu  
195 200 205  
Met Leu Asp Phe Thr Pro Ala Phe Ser Asp Val Tyr Ser Asp Ala Leu  
210 215 220  
Leu Glu Ala His Glu Ala Ala Ile Ala Arg Leu Glu Leu Tyr His Ala  
225 230 235 240  
Ala Ala Gly Arg Ile  
245

<210> 41547  
<211> 88  
<212> PRT  
<213> A.fumigatus

&lt;400&gt; 41547

Ser Asp Glu Thr Ala Leu Met Ile Phe Val Asp Met Thr Arg Gly Leu  
1 5 10 15  
Asp Ala Arg Tyr Met Ile Ser Arg Leu Arg Pro Lys Lys Phe Lys Val  
20 25 30  
Leu Ser Leu Thr Thr Ile Ala Thr Pro His Arg Gly Met Leu Arg Pro  
35 40 45  
Trp Asn Asn Pro Arg Leu Phe Thr Gln Thr Ile Gln Val Leu Arg Leu

## 18394

50                      55                      60  
 Gln Ile Met Ser Leu Ser Glu Leu Val Val Arg Ser Met Ile Thr Leu  
 65                      70                      75                      80  
 Tyr Lys Glu Pro Asn Ser Cys Leu  
                     85

<210> 41548  
 <211> 92  
 <212> PRT  
 <213> A.fumigatus

<400> 41548  
 Leu Thr Trp Leu Lys Phe Pro Phe Asn Asn Ser Cys Ser Ser His Asn  
 1                      5                      10                      15  
 Ser Met Leu Thr Asn Leu Asn Phe Thr Gly Leu Lys Val Glu Val Ala  
                     20                      25                      30  
 Lys Asp Thr Asn Arg His Val Lys Lys Thr Leu Pro Pro Ser Leu Ser  
                     35                      40                      45  
 Gly Phe Pro Gly Met Ala Glu Ile Lys Tyr Tyr Val Lys Ala Thr Val  
                     50                      55                      60  
 Ile Arg Pro Gln Phe Tyr Lys Glu Asn Leu Arg Ala Val Cys Thr Arg  
 65                      70                      75                      80  
 Ile Phe Ser Val Glu Asn Ile Val Met Asn Ser Cys  
                     85                      90

<210> 41549  
 <211> 438  
 <212> PRT  
 <213> A.fumigatus

<400> 41549  
 Thr Leu Gln Gly Thr Val Pro Ser Gly Leu Arg Arg Ala Ile Asn Ala  
 1                      5                      10                      15  
 Thr Asn Cys Asp Gly Gly Ser Arg Ser Ser Arg Ser Leu Gly Ala Leu  
                     20                      25                      30  
 Pro Ala Glu Ala Asp Phe Ala Ala Leu Arg Glu Trp Glu Ala Lys Asn  
                     35                      40                      45  
 Gly Val Trp Tyr Glu Pro Pro Glu His Lys Ala Asn Glu Lys Arg Arg  
                     50                      55                      60  
 Thr Asn Glu Glu Glu Gln Ala Glu Phe Glu Ala Lys Arg Gln Lys Leu  
 65                      70                      75                      80  
 Leu His Ala Leu Ala Thr Gly Gly Val Asp Val Asp Ala Ile Met Glu  
                     85                      90                      95  
 Lys Glu Asn Glu Pro Pro Glu Thr Lys Thr Thr Asn Gly Ser Ala Glu  
                     100                      105                      110  
 Glu Asp Ala Glu Cys Asn Gly Ala Val Val Glu Ser Ala Asn Lys Arg  
                     115                      120                      125  
 Arg Thr Leu Asp Val Ala Ser Ser Arg Arg Leu Leu Phe Gly Ser Leu  
                     130                      135                      140  
 Gly Val Arg Ala Pro Arg Ser Lys Glu Asp Glu Glu Ile Thr Arg Lys  
 145                      150                      155                      160  
 Lys Leu Ala Gly Lys Val Asn Asn Ser Arg Ile Lys Val Ser Glu Glu  
                     165                      170                      175  
 Gln Ala Pro Thr Glu Gly Ser Asp Ser Glu Ala Glu Glu Asn Trp Gln  
                     180                      185                      190  
 Glu Lys Leu Val Leu Lys Ala Thr Glu Cys Val Phe Asp Asp Ile Glu

## 18395

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      195                200                205
Leu Ser Thr Pro Pro Phe Pro Phe Glu Gln Arg Trp Asp Ala Glu Ala
  210                215                220
His Gln Ile Ile Lys Lys Arg Lys Gly Trp Gly Arg Lys Arg Lys Arg
 225                230                235                240
Arg Gln Gln Leu His Val Phe Glu Ala Asp Glu Tyr Glu Asp Tyr Ala
      245                250                255
Glu Glu Ser Asn Lys His Tyr Thr Glu Glu Asp Met Gln Leu Asn Tyr
      260                265                270
Asp Asp Pro Glu Gln Gln Pro Ser Thr Glu Pro Thr Asn Gly Val Glu
      275                280                285
Ser Ala Gly Glu Glu Pro Ser Glu Asn Thr Glu Asp Asp Leu Pro Pro
      290                295                300
Leu Pro Ala Asp Leu Ser Ser Val Pro Asp Leu Thr Glu Gly Asp Leu
 305                310                315                320
Lys Gln Gly Ser Val Ile Ala Phe Lys Gln Leu Val Val Ser Lys Glu
      325                330                335
Thr Asn Trp Gln Pro Thr Val Ser Asp Tyr Leu Val Ala Arg Ile Asp
      340                345                350
Asp Val Phe Glu Asp Asn Val Leu Lys Leu Gln Leu Ala Lys Arg Asp
      355                360                365
Arg Arg Gln Val Glu Gln Pro Asp Lys Asp Asp Glu Glu Asp Gly Thr
      370                375                380
Arg Gly Tyr Asp Lys Phe Glu Met Pro Gly Met Asp Asp Asp Gln Ala
 385                390                395                400
Glu Asp Asp Gly Phe Arg Glu Ile Ser Phe Ala Asn Leu Phe Asp Ala
      405                410                415
Lys Leu Val Gln Ala Ala Asp Val Ala Asp Val Gly Val Val Asp Lys
      420                425                430
Val Ser Lys Ser Val His
      435

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&lt;210&gt; 41550

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41550

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Ser Thr Phe Val Ile Thr Ser Glu Thr Pro Lys Tyr Pro Val Val Leu
 1                5                10                15
Ala His Gly Leu Leu Gly Phe Asp Glu Leu Arg Leu Ala Gly Pro Leu
      20                25                30
Leu Pro Gly Val Gln Tyr Trp Arg Gly Ile Lys Glu Ala Leu Thr Gln
      35                40                45
Lys Gly Val Gln Val Ile Thr Ala Thr Val Pro Pro Ser Gly Ser Ile
      50                55                60
Glu Met Arg Ala Glu Glu Leu Val Lys Asp Ile Asp Glu Gly Ala Gln
 65                70                75                80
Gly Lys Ala Val Asn Ile Ile Ala Tyr Val Phe Ser Thr Leu Ile Gly
      85                90                95
Ser Arg Val Ala Phe Arg Leu Thr Asn Val Gln Thr
      100                105

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&lt;210&gt; 41551

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41551

Ala Leu Cys Ser Tyr Phe Ser Tyr Gly Ala Ala Met Gln Pro Ser Phe  
 1 5 10 15  
 Trp Ser Met Phe Arg Leu Ser His Arg Val Leu Gln Glu Val Glu Gly  
 20 25 30  
 Tyr Asn Asp Gly Leu Val Ser Val Ala Ser Ser Lys Trp Gly Lys Tyr  
 35 40 45  
 Lys Gly Thr Leu Glu Gly Ala Ser His Leu Asp Leu Ile Asn Trp Thr  
 50 55 60  
 Asn Arg Leu Lys Trp Leu Ala Gly Glu Ile Thr Gly Asn Arg Gln Arg  
 65 70 75 80  
 Phe Val Lys Ser Ile Ser Gly Phe Glu Val Val His  
 85 90

&lt;210&gt; 41552

&lt;211&gt; 392

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41552

Ile Phe Ser Ile Arg Ala Leu Gln Ile Ala Asp Leu Arg Ala Arg Arg  
 1 5 10 15  
 Leu Ser Gly Arg His Gln Ile Ser Ser Asp Gly Lys His Leu Ile Asp  
 20 25 30  
 Gly Val Pro Phe Gly Arg Pro Phe Leu Lys Arg Gln Thr Ser Ser Arg  
 35 40 45  
 Pro Ala Ile Ala Ile Pro Pro Arg Lys Lys Arg Arg Thr Met Leu Ala  
 50 55 60  
 Thr Trp Asp Gly Val Val Asp Asp Gly Asp Asp Glu Val Gln Trp Thr  
 65 70 75 80  
 Leu Pro Gly Arg Val Ser Ser Met Lys Glu Leu Ser Arg Leu Lys Ala  
 85 90 95  
 His Asp Asp Asp Gly Ile His Asp Glu Tyr Thr Asp Tyr His His Asp  
 100 105 110  
 Asp Asp Tyr Glu Asp Tyr His Glu Ser Gln Asp Glu Ser Gly Asp Gly  
 115 120 125  
 Thr Val Ile Arg His Ser Leu Gly Glu Gly Glu Glu Asp Glu Ala Ser  
 130 135 140  
 Glu Ser Asp Ala Asp Asp Ser Asp Phe Glu Ala Glu Asp Leu Ala Glu  
 145 150 155 160  
 Glu Leu Glu Ala Leu Lys Glu Asp Arg Glu Thr Val Gly Leu Ser Ser  
 165 170 175  
 Ala Glu Val Leu Glu Glu Lys Pro Thr Gly Pro Gly Gly Tyr Pro Leu  
 180 185 190  
 Arg Thr Arg Ala Ser Ile Leu Arg Asn Ala Ser Gly His His Ala Asp  
 195 200 205  
 His Gln Ala Ala Thr Lys Ser Pro Ser Glu Ala Gly Ser Ser Arg Arg  
 210 215 220  
 Asp Ser Lys Ala Val Arg Phe Lys Glu Ala Gln Arg Gln Thr Ser Pro  
 225 230 235 240  
 Cys Pro Ser Gln Ser Glu Ser Asp Ser His Leu Ser Gln Ala Glu Gln  
 245 250 255  
 Val Ser Glu Gly Ser Pro Ser Ile Tyr Lys Ser Phe Ser Ser Ser Ser  
 260 265 270

## 18397

Ser Ser Asp Thr Asp Asn Ser Thr Ser Asp Glu Glu Asp Ser Thr Ser  
 275 280 285  
 Pro Ser Glu Thr Thr Thr Ser Ala Ser Glu Val Ser Ser Ser Glu Ser  
 290 295 300  
 Glu Ala Glu Asp Ala Glu Ser Glu Asp Glu Asp Ser Ser Ser Glu Ser  
 305 310 315 320  
 Asp Lys Ser Ser Thr Ser Glu Ser Glu Asp Glu Ser Leu Pro Thr Pro  
 325 330 335  
 Ala Pro Asn Arg Gln Leu Gln Pro Lys Met Asn Pro Pro Gly His Gly  
 340 345 350  
 Ser Leu Arg Thr Lys Lys Ser Asn Gln Arg Asn Lys Leu Arg Arg Arg  
 355 360 365  
 Leu Ser Lys Leu Lys Glu Leu Gly Arg Ser Ala Cys Arg Ser Arg Leu  
 370 375 380  
 Cys Ser Pro Pro Arg Met Gly Ser  
 385 390

&lt;210&gt; 41553

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41553

Thr His Glu Lys Ala His Leu Gly Phe Leu His Pro Gly Leu Pro Thr  
 1 5 10 15  
 Leu Gly Leu Asp Gln Pro Gly Ser Lys Gln His Asn Ser Gly Asn Val  
 20 25 30  
 Gly Pro Cys Cys Leu Trp Ala Gln Leu Pro Arg Phe Gly Val Val Phe  
 35 40 45  
 Cys Thr Gly Cys Val Ala Trp Phe His Cys Ile Val Val Asp Gly Tyr  
 50 55 60  
 Ser Arg Thr Ser Leu Trp Asn Pro His His Gly Met Phe Ser Ser Arg  
 65 70 75 80  
 Leu Arg Asp Leu Arg Asp Lys His Leu Ser Leu Thr Val Met Gln Ala  
 85 90 95  
 Phe Gly Arg Tyr Ala Met Gly Trp Trp Pro Ser Lys Ile Val Val Ile  
 100 105 110  
 Leu Asn Leu Ile Gln Met Leu Gly Tyr Cys Leu Ile Asp Cys Val Val  
 115 120 125  
 Gly Gly Gln Ile Leu Ser Ala Val Ser Pro Asn Gly Asn Leu Ser Val  
 130 135 140  
 Ala Val Gly Glu  
 145

&lt;210&gt; 41554

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41554

Gln Asp Phe Val Arg Ala Ser Asp Ala Ile Arg Leu Ser Phe Phe Ser  
 1 5 10 15  
 Ile Cys Val Ser Ala Ala Ile Thr Tyr Ala Pro Leu Ala Ala Asp Phe  
 20 25 30  
 Phe Val Tyr Tyr Pro Glu Gly Thr Ser Lys Leu Ala Ile Phe Ser Leu  
 35 40 45

## 18398

Ser Leu Ser Gly Leu Met Val Ser Phe Thr Leu Ala Phe Leu Ala Gly  
 50 55 60  
 Ile Gly Leu Ala Ser Gly Ile Pro Ser His Leu Glu Tyr Ser Ala Ala  
 65 70 75 80  
 Tyr Ala Lys Gly Ala Gly Ala Leu Ile Val Glu Gly Phe Gly Pro Leu  
 85 90 95  
 His Gly Phe Gly Lys Phe Cys Ser Val Val Val Ala Leu Gly Leu Ile  
 100 105 110  
 Ala Asn Thr Val Ala Pro Thr Tyr Ser Ala Gly Val Asp Phe Gln Ile  
 115 120 125  
 Leu Gly Arg Tyr Ala Glu Met Val Pro Arg Ala Ile Trp Asn Thr Ile  
 130 135 140  
 Gly Val Val Ile Tyr Ile Val Cys Gly Leu Ala Gly Arg Ser His Leu  
 145 150 155 160  
 Ser Glu Ile Phe Thr Asn Phe Leu Ala Leu Met Gly Tyr Trp Val Ala  
 165 170 175  
 Ile Trp Phe Ala Ile Ile Leu Glu Glu Arg Cys Ile Phe Arg Leu Arg  
 180 185 190  
 Ser Gly Tyr Asn Trp Tyr Ala Trp Asn Asp Pro Ser Lys Leu Pro Met  
 195 200 205  
 Gly Ile Ala Ala Phe Ile Ala Phe Leu Val Gly Trp Ala Gly Ala Val  
 210 215 220  
 Leu Cys Met Ala Gln Leu Trp Tyr Ile Gly Pro Leu Ala Lys Leu Val  
 225 230 235 240  
 Gly Glu Tyr Gly Ala Asp Val Ser Ala Ile Ile Val Pro Val Pro Val  
 245 250 255  
 Asn Ser Pro

&lt;210&gt; 41555

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41555

Arg Leu Thr Gln Asp Asn Ser Met Ser Ser Glu Ile Ala Asn Pro Ser  
 1 5 10 15  
 Leu Gly Met His Ser Glu Lys Glu Pro Ser Gly Phe Arg Ser Glu Glu  
 20 25 30  
 Gln Pro Thr Pro Arg Pro His Lys Thr Gly Glu Thr Asn Ser Glu Ser  
 35 40 45  
 Pro Ser Gly Arg Val Ile Pro Ser Arg Val Gly Met Tyr Leu Arg Arg  
 50 55 60  
 Phe Glu Gln Gln Leu Val Glu Tyr Asn Phe Glu Ala Arg Gly Ile Glu  
 65 70 75 80  
 Arg Val His Glu Gly Glu Arg Met Lys Lys Leu Thr Trp Val Ser Tyr  
 85 90 95  
 Thr Gln Ala Phe Leu Leu Trp Val Ser Ile Asn Leu Ala Ala Asn Asn  
 100 105 110  
 Ile Thr Leu Gly Met Leu Gly Pro Val Val Tyr Gly Leu Ser Phe Leu  
 115 120 125  
 Asp Ser Ala Leu Cys Ser Val Leu Gly Ala Leu Leu Gly Ser Ile Val  
 130 135 140  
 Ser Ser Trp Met Ala Thr Arg Gly Pro Leu Ser Gly Ile Arg Thr Met  
 145 150 155 160  
 Val Cys Ser Arg Leu Ala



165

<210> 41556  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<400> 41556  
 Val Ser Arg Asp Arg Pro Ile Glu Arg Cys Gly Glu Cys Gly Asn Val  
 1 5 10 15  
 Val Lys Leu Glu Tyr Ile Gly Pro Asp Glu Asp Pro His Ala Arg Lys  
 20 25 30  
 Phe Pro Ser Leu Gly Ser Tyr Arg Ser Leu Pro Ser Phe Ser Arg Leu  
 35 40 45  
 Val Phe Arg Leu Leu Thr Tyr Pro Phe Thr Asp Glu His His Ser His  
 50 55 60  
 His Pro Pro His Glu Glu Pro Lys Thr Phe Ala Asp Tyr Val Lys Pro  
 65 70 75 80  
 Glu Tyr Trp Tyr Arg  
 85

<210> 41557  
 <211> 322  
 <212> PRT  
 <213> A.fumigatus

<400> 41557  
 Cys Met Ser Val Thr Leu Ala Asp Pro Tyr Arg Asp Tyr Ala Leu Asp  
 1 5 10 15  
 Tyr Ala Gln His Ala Lys Pro Glu Gly His Glu Asn Ala Leu Ala Tyr  
 20 25 30  
 Gln Thr Gln His Ser His Leu Gln Arg His Lys Glu Ala Asn Pro Pro  
 35 40 45  
 Phe Pro Gln Gly Ser Pro His Asn Thr Ala Tyr Glu Gln His His Ala  
 50 55 60  
 Ser Thr Thr Val Leu Pro Ala Ala Asn Pro Asp Ile Ser Gln Ser Val  
 65 70 75 80  
 Val Leu Thr Ala Ala His Met Leu Pro Arg Gln Leu Pro Met Gln Tyr  
 85 90 95  
 Thr Pro Thr Thr Phe Glu Ile Pro Pro Val Gln Arg Gly Lys Lys Arg  
 100 105 110  
 Pro His Ser Glu Ala Glu Gly Glu Gly Asp Tyr Gly Asp His Gly Val  
 115 120 125  
 Arg Pro Arg Leu Ser Ala Leu Pro Thr Gln Ala Ser Thr Glu Thr Ala  
 130 135 140  
 Gln Ser Pro Gly Met Leu Phe Ser Val Gln Gly Asp Ser Ser Gln Gln  
 145 150 155 160  
 Gln Ala His His Gln Gln Gln Arg Gln Pro Gln Gln His His His  
 165 170 175  
 His Gln Pro Met Pro Ser His Gly Phe Gly Pro Pro Glu Ser Met Ala  
 180 185 190  
 Leu Pro Gln Gln His His His Arg Leu Pro Pro Gln Ala Ser Leu  
 195 200 205  
 His Ser Ala Glu Arg His Gly Thr Asn Ala Glu Thr Ser Pro Ile Pro  
 210 215 220  
 Ser Gly Leu Pro Ser Val Val Gly Gln Pro Gly Met Pro Asp Pro Ala

18400

225						230						235						240
Pro	Arg	Pro	Arg	Gly	Pro	Lys	Leu	Lys	Phe	Thr	Gln	Glu	Glu	Asp	Ala			
					245						250						255	
Leu	Leu	Val	Glu	Leu	Lys	Glu	Asn	Lys	Asn	Leu	Thr	Trp	Lys	Gln	Ile			
					260						265						270	
Ala	Asp	Phe	Phe	Pro	Gly	Arg	Thr	Ser	Gly	Thr	Leu	Gln	Val	Arg	Tyr			
					275						280						285	
Cys	Thr	Lys	Leu	Lys	Ala	Lys	Asp	Val	Thr	Trp	Thr	Asp	Glu	Met	Val			
					290						295						300	
Ser	Ile	Ala	Leu	Trp	Gly	Arg	Ser	Val	Asn	Leu	Pro	Arg	Glu	Pro	Leu			
					305						310						315	
Thr	Tyr															320		

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<210> 41558
<211> 153
<212> PRT
<213> A.fumigatus
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[illegible]

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<210> 41559
<211> 114
<212> PRT
<213> A.fumigatus
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<400> 41559
Leu Thr Lys Leu Ala Ser Leu Gly Thr Leu Asp Asn Pro Ile Ile Val
1          5          10          15
Lys Ser Ala Gly Asp Glu Gln Tyr Ala Gly Cys Thr Gly Tyr Pro Ala
          20          25          30
Asp Ser His His Thr Val Trp Leu Thr Val Ser Ile Ala Cys Phe Val
          35          40          45
Ala Leu Cys Pro Gln Ile Ala Gln Met Ala Lys Thr Tyr Leu Phe Ser
          50          55          60
His His Arg Tyr Leu Val Ile Val Leu Ser Ser Ala Ala Ala Ser Val

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Parameter	Value	Unit	Source
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$\alpha_2$	0.000		Eq. (1)
$\alpha_3$	0.000		Eq. (1)
$\alpha_4$	0.000		Eq. (1)
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$\alpha_6$	0.000		Eq. (1)
$\alpha_7$	0.000		Eq. (1)
$\alpha_8$	0.000		Eq. (1)
$\alpha_9$	0.000		Eq. (1)
$\alpha_{10}$	0.000		Eq. (1)
$\alpha_{11}$	0.000		Eq. (1)
$\alpha_{12}$	0.000		Eq. (1)
$\alpha_{13}$	0.000		Eq. (1)
$\alpha_{14}$	0.000		Eq. (1)
$\alpha_{15}$	0.000		Eq. (1)
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$\alpha_{17}$	0.000		Eq. (1)
$\alpha_{18}$	0.000		Eq. (1)
$\alpha_{19}$	0.000		Eq. (1)
$\alpha_{20}$	0.000		Eq. (1)
$\alpha_{21}$	0.000		Eq. (1)
$\alpha_{22}$	0.000		Eq. (1)
$\alpha_{23}$	0.000		Eq. (1)
$\alpha_{24}$	0.000		Eq. (1)
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$\alpha_{27}$	0.000		Eq. (1)
$\alpha_{28}$	0.000		Eq. (1)
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$\alpha_{30}$	0.000		Eq. (1)
$\alpha_{31}$	0.000		Eq. (1)
$\alpha_{32}$	0.000		Eq. (1)
$\alpha_{33}$	0.000		Eq. (1)
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$\alpha_{35}$	0.000		Eq. (1)
$\alpha_{36}$	0.000		Eq. (1)
$\alpha_{37}$	0.000		Eq. (1)
$\alpha_{38}$	0.000		Eq. (1)
$\alpha_{39}$	0.000		Eq. (1)
$\alpha_{40}$	0.000		Eq. (1)
$\alpha_{41}$	0.000		Eq. (1)
$\alpha_{42}$	0.000		Eq. (1)
$\alpha_{43}$	0.000		Eq. (1)
$\alpha_{44}$	0.000		Eq. (1)
$\alpha_{45}$	0.000		Eq. (1)
$\alpha_{46}$	0.000		Eq. (1)
$\alpha_{47}$	0.000		Eq. (1)
$\alpha_{48}$	0.000		Eq. (1)
$\alpha_{49}$	0.000		Eq. (1)
$\alpha_{50}$	0.000		Eq. (1)
$\alpha_{51}$	0.000		Eq. (1)
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$\alpha_{53}$	0.000		Eq. (1)
$\alpha_{54}$	0.000		Eq. (1)
$\alpha_{55}$	0.000		Eq. (1)
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$\alpha_{60}$	0.000		Eq. (1)
$\alpha_{61}$	0.000		Eq. (1)
$\alpha_{62}$	0.000		Eq. (1)
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$\alpha_{64}$	0.000		Eq. (1)
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$\alpha_{66}$	0.000		Eq. (1)
$\alpha_{67}$	0.000		Eq. (1)
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$\alpha_{69}$	0.000		Eq. (1)
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$\alpha_{71}$	0.000		Eq. (1)
$\alpha_{72}$	0.000		Eq. (1)
$\alpha_{73}$	0.000		Eq. (1)
$\alpha_{74}$	0.000		Eq. (1)
$\alpha_{75}$	0.000		Eq. (1)
$\alpha_{76}$	0.000		Eq. (1)
$\alpha_{77}$	0.000		Eq. (1)
$\alpha_{78}$	0.000		Eq. (1)
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$\alpha_{80}$	0.000		Eq. (1)
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<210> 41560
<211> 65
<212> PRT
<213> A.fumigatus
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<210> 41561
<211> 91
<212> PRT
<213> A.fumigatus
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<210> 41562
<211> 65
<212> PRT
<213> A.fumigatus
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<400> 41562
Ser Thr Gln Pro Cys Val Gln His Leu Met His Glu Ala Thr Ser Leu
1          5          10          15
Leu Gln Arg Asn Ile Glu Ala Thr Asp His Gln Arg Thr Ile Phe Tyr
20          25          30
Leu Gly Pro Glu Met Asp Asn Thr Thr Cys Val Thr Ser Val Ala Pro
35          40          45

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## 18402

Ile Arg Arg Asn Val Leu Pro Glu Ile Arg Leu Glu Leu His Met Ile  
 50 55 60

Val  
 65

<210> 41563  
 <211> 125  
 <212> PRT  
 <213> A.fumigatus

<400> 41563  
 Gln Val Ala Ala Leu Ser Val Ala Trp Tyr Gly Ala Leu Ile Glu  
 1 5 10 15  
 Ser Lys Pro Pro Leu Asn Ile Ala Leu Ala Leu Val Leu Leu Ile Ser  
 20 25 30  
 Phe Cys Ile Thr Ala Ala Tyr Asn Val Met Asn Val Leu Ile Val Asp  
 35 40 45  
 Leu Tyr Tyr Thr Thr Pro Ala Thr Ala Met Ala Ala Asn Asn Leu Val  
 50 55 60  
 Arg Cys Phe Leu Gly Ala Ala Ala Thr Ala Val Ile His Pro Met Ile  
 65 70 75 80  
 Leu Lys Trp Gly Asn Arg Thr Thr Tyr Leu Ala Val Ala Gly Ala Met  
 85 90 95  
 Leu Ser Val Ser Pro Leu Leu Gly Met Val Tyr Trp Lys Gly Leu Val  
 100 105 110  
 Trp Arg Arg Arg Arg Ile Ala Gly Ile Ala Ile Ala Gly  
 115 120 125

<210> 41564  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 41564  
 Thr Val Leu Ile Met Asn Thr Leu Ile Ser Leu Ile Leu Phe Thr Ala  
 1 5 10 15  
 Ile Ser Ser Ala Gln Trp Ala Leu Pro Gln Gly Thr Pro Thr Leu Gln  
 20 25 30  
 Met Arg Tyr Pro Ser Thr Pro Trp Ile Ser Pro Gly Asp Thr Ile Lys  
 35 40 45  
 Gln Pro Gly Thr Ser Ile Thr Ile Leu Val Thr Asp Met Asn Asn Glu  
 50 55 60  
 Ala His Ala Ser Gly Asp Lys Gln Thr Pro Ser Gln Phe Arg Ala Ser  
 65 70 75 80  
 Glu Leu

<210> 41565  
 <211> 216  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (3)  
 <223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41565

Gly Ala Xaa Phe Leu Gln Ser His Arg Arg Ser Phe Gln Pro Arg Gly  
 1 5 10 15  
 Glu Asp Phe Pro Glu Thr Cys Arg Thr Ile Val Gly Asp Gly Ser Ile  
 20 25 30  
 Pro Ala Thr Gly Trp Asn Gln Ser Val Trp Asn Arg Trp His Lys Gln  
 35 40 45  
 Gln Thr Ile Ala Thr Ser Asn Ser Asp Pro Glu Gly Thr Arg Asp Thr  
 50 55 60  
 Cys Arg Asp Ser His Pro Arg Leu Gln Lys Thr Asn Ile Ala Ile Pro  
 65 70 75 80  
 Asn Pro Leu Ser Thr Ile Ser Leu Leu Phe Gln Leu Pro Thr Gly Pro  
 85 90 95  
 Leu Val Leu Ala Asn Gly Ile Val Phe Ala Ser Tyr Tyr Ser Val Thr  
 100 105 110  
 Ala Gly Ile Pro Ser Gln Phe Lys Ala Thr Tyr Gly Leu Ser Asp Leu  
 115 120 125  
 Gly Ile Gly Leu Ser Phe Ile Pro Ala Gly Leu Gly Ser Leu Leu Ser  
 130 135 140  
 Ala Thr Leu Asn Gly Leu Ile Val Asp Trp Asn Tyr Ile Arg Leu Arg  
 145 150 155 160  
 Arg Lys Thr Gly Asp Ile Ile Ser Lys Asp Gln Lys Gln Asp His Gly  
 165 170 175  
 Ala Phe Pro Ile Glu Arg Thr Arg Leu Gln Ile Gly Leu Pro Met Thr  
 180 185 190  
 Val Arg Cys Val Ala Pro Ser Asp Leu Leu Tyr Phe Thr Arg Val Val  
 195 200 205  
 Val Val Val Gly Ile Ala Thr Cys  
 210 215

&lt;210&gt; 41566

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41566

Ser Gln Leu Lys Gly Asn Glu Asn Ser Lys Arg Cys Pro Ser Pro Ser  
 1 5 10 15  
 Thr Tyr Gly Arg Pro Ser Val Pro Thr Phe Asn Gln Leu Val Tyr Thr  
 20 25 30  
 Lys His Gly Lys Arg Met Asn Trp Leu Glu Gln Glu His Thr Cys Tyr  
 35 40 45  
 Pro Glu Gln Tyr Leu His Ser Arg Ser Phe Leu Ser Phe Val Gly Met  
 50 55 60  
 Asn Arg Asp Lys Gln Pro Lys Pro Ser Pro Asp Arg Leu Pro Lys Ser  
 65 70 75 80  
 Val Lys Val Arg Ser Thr Cys Asn Ala Cys Gln Gln Ala Lys Ile Arg  
 85 90 95  
 Cys Ser His Glu Lys Pro Ser Cys Arg Arg Cys Leu Lys His Asn Ile  
 100 105 110  
 Glu Cys Ile Tyr Ser Met Ser Arg Arg Leu Gly Arg Pro Ala Lys Arg  
 115 120 125  
 Arg Glu Ser Gln Tyr Ala Gly Leu Pro Pro Asp Thr Gln Arg Val Asp  
 130 135 140  
 Ala Arg Cys His Gln Gln Asp Lys Lys Gly Pro Ala Ser Lys Lys Lys

## 18404

145                    150                    155                    160  
 Ala Lys Glu Gly Gln Asp Arg Arg Lys Asp Asp Glu Asp Asp Phe Pro  
                          165                    170                    175  
 Gln Arg Leu Ala Glu Thr Val Ala Tyr Asp Thr Met Ala Val Asp Gln  
                          180                    185                    190  
 Thr Val Leu Asp Asp Ile Ser Leu Asn Asp Thr Asn Leu Ser Thr Ser  
                          195                    200                    205  
 Thr Phe Ser Glu Arg Asp Gln Pro Pro Ser Phe Ala Gly Ser Leu Arg  
                          210                    215                    220  
 Ser Leu Arg Asp Ile Ile Arg Pro Ser His  
 225                    230

&lt;210&gt; 41567

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41567

Ala Ile Gly Ser Ser Leu Gln Leu Lys Pro Ser Val Leu Phe Leu Ser  
 1                    5                    10                    15  
 Ile Ser Gly Ser Asp Cys Arg Ile Glu Ile Gly Ile Ser Asp Leu Gly  
                          20                    25                    30  
 Ala Pro Gln Leu Leu Thr Ala Asp Phe Thr Phe Pro Ser Thr Asn Gln  
                          35                    40                    45  
 Arg Phe Ala Phe Glu Met Gln Leu Ser Met Tyr Leu Ile Ile Asp Phe  
                          50                    55                    60  
 Asp Ser Ser Phe Pro Ser Leu Asn Leu Asp Leu Pro Ala Leu Pro Leu  
 65                    70                    75                    80  
 Pro Ile Gln Ser Ile Arg Asp Glu  
                          85

&lt;210&gt; 41568

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41568

Ala Ala Val Lys Val Glu Arg Gly Tyr Arg Met Leu Thr Ile Ile Asp  
 1                    5                    10                    15  
 Glu Pro Val Leu Thr Leu Asn Leu Ser Val Ser Glu Leu Pro Cys Phe  
                          20                    25                    30  
 Tyr Leu Arg Phe Gln Ser Arg Asn Glu Leu Glu Ile Trp Arg Arg Ala  
                          35                    40                    45  
 Leu Arg Asp Leu His Thr Ser Asp Ala Leu Ser Arg His Thr Asp Tyr  
                          50                    55                    60  
 Asp Leu Asp His Ser Gly Ala Glu Glu Glu Asp Tyr Arg Ala Ser Gln  
 65                    70                    75                    80  
 Ile Lys Arg Gln Ala Ser Ile Asn Ser Ser Tyr Gly Ala Gly Arg Ser  
                          85                    90                    95  
 Asn Asn Thr Ala Ile Thr Asp Tyr Thr Thr Gly Ala Asp Asn Leu Pro  
                          100                    105                    110  
 Thr Ser Ser Val His Ile Pro Leu Asp Val Val Val Val Ile Pro Val  
                          115                    120                    125  
 Ser Ser Ser Met Gln Gly Leu Lys Ile Thr Leu Leu Arg Asp Ala Leu  
                          130                    135                    140  
 Lys Phe Leu Val Gln Asn Leu Gly Pro Arg Asp Arg Met Gly Leu Val

## 18405

```

145              150              155              160
Thr Phe Gly Ser Ser Gly Gly Gly Val Pro Leu Val Gly Met Thr Thr
              165              170              175
Lys Ser Trp Gly Gly Trp Asn Lys Ile Leu Ser Ser Ile Arg Pro Val
              180              185              190
Gly Gln Lys Ser Leu Arg Ala Asp Val Val Glu Gly Ala Asn Val Ala
              195              200              205
Met Asp Leu Leu Met Gln Arg Lys Ser Ser Asn Pro Ile Ser Thr Ile
              210              215              220
Leu Leu Ile Ser Asp Ser Ser Thr Ser Asp Pro Glu Ser Val Asp Phe
225              230              235              240
Val Val Ser Arg Ala Glu Ala Ala Lys
              245

```

<210> 41569  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41569
Tyr Ile Ile Phe Thr Thr Ser Glu Pro Tyr Ser Pro Phe Ser Phe Leu
1              5              10              15
Val Cys Phe Thr Pro Ser Ile Leu Leu Ser Pro Ala Leu Ser Ile Pro
              20              25              30
Thr Ile Phe Asp Thr Asp Lys Ser Ser Ser Lys Lys Ile Val Ala Ser
              35              40              45
Pro Asp Pro Gln Leu Ser Leu Leu Pro Ile Gly Val Leu Thr Glu Ser
              50              55              60
Arg Thr Ser Gly Pro Phe Leu Pro Leu Thr Asp Glu His Leu Gln Pro
65              70              75              80
Phe Ala

```

<210> 41570  
 <211> 423  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41570
Pro Ala Asp Phe Pro Ser Arg Pro Glu Ser Pro Ser Arg Ser Pro Leu
1              5              10              15
Lys Gly Phe Arg Ser Phe Ser Arg Ser His Ala Asp Arg Pro Gly Thr
              20              25              30
Ser Thr Ser Gly Gln Thr His Thr Ser Arg Ser Arg Ala Pro Ser Thr
              35              40              45
Ile Ser Thr Ser Leu Gln Ser Asp His Pro Gly Leu Gly Trp His Ser
              50              55              60
Thr Ile Gly Thr Asn Ser Ser Arg Ala Ser Phe Asn Ser Arg Ser Gly
65              70              75              80
Arg Pro Met Ala Gly Leu Met Asp Val Asp Arg Ser Arg Ala Arg Arg
              85              90              95
Asp Arg Thr Phe Val Gly Thr Glu Cys Ala Val Cys Glu Glu Pro Leu
              100              105              110
Glu His Thr Leu Arg Gly Glu Arg Val Leu Gln Phe Ser Cys Thr His
              115              120              125
Val Ala His Glu Ala Cys Phe Tyr Glu Tyr Ile Lys Glu Phe Glu Gly

```

## 18406

```

      130              135              140
Gln Tyr Cys Pro Thr Cys Asp Ala Pro Leu Gly Leu Asp Thr Ser Arg
145              150              155              160
Gly Gly His Val Leu Asp Ile Gly Lys Arg Lys Met His Phe Arg Ala
      165              170              175
Thr Gln Arg Arg Ala Ile Ala Gly Ile Leu Thr Ile Val Val Val Glu
      180              185              190
Lys Leu Ser Asn Ile Val Arg Ser Val Thr Ser Asp Ala Ala Thr Gln
      195              200              205
Arg Ser Gly Leu Thr Thr Pro Thr Pro Trp Asp Gln Pro Ser Ala Arg
      210              215              220
Gly Arg Ala Pro Ser Glu Thr Gly Gly Arg Ser Tyr Asn Asn Arg Glu
225              230              235              240
Ser Arg Asp Ile Trp Ala Arg Arg Asp Ser Arg Asp Thr Gly Asn Ala
      245              250              255
Gly Ser His Arg Glu Arg Glu Arg Val Glu Arg Met Thr Thr Gly Ser
      260              265              270
Arg Gln Gln His Ser Arg Asn Gly Ser Ala Ala Gly Ser Ser Gly Glu
      275              280              285
Tyr Asp Ala Gln Gln Gln Ser Asn Gly Arg Arg His Asp Tyr Asp Val
290              295              300
Gln Ala Met Glu Ser Asp Leu Ser Pro Arg Ala Ala Pro Met Lys Asn
305              310              315              320
Pro Ile Pro Ala Pro Thr Val Thr Ile Arg Ser Glu Phe Pro Thr Leu
      325              330              335
Asn Arg Ser Arg Gln Gln Gln Ala Leu Thr Cys Leu Val Thr Val Glu
      340              345              350
Val Pro Glu Gly Val Trp Arg Pro Asp Ser Glu Asp Leu Arg Gln Thr
      355              360              365
Ser Ser Gly Ala Ser Gln Pro Gln Asp Glu Pro Tyr Gly Gly Val Val
370              375              380
Arg Phe Pro Thr Ala Asp Ala Arg Ser Ile Gln Tyr Glu Pro Gln Glu
385              390              395              400
Asn Leu Asp Glu Ile Ala Glu Asp Leu Arg Thr Arg Val Asp Asn Trp
      405              410              415
His Gly Leu Glu Phe Ser Arg
      420

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&lt;210&gt; 41571

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41571

```

Met Ile Ser Arg Ser Gly Lys Leu Arg Leu His Gly His Met Arg Val
1              5              10              15
Gly Lys Asp Arg Glu Ser Trp Gln Asp Leu Glu Cys Tyr Leu Phe Ala
      20              25              30
Glu Met Leu Ile Cys Ile Lys Glu Lys Lys Thr Asn Thr His Gln Tyr
      35              40              45
Asp Asp Gln Ile Lys Arg Lys Thr Arg Ser Ser Leu Lys Gly Ser Ile
50              55              60
Leu Ile Lys Lys His Leu Arg Ser Ile Glu Ala Ser Pro Gly Lys Leu
65              70              75              80
Pro Ser Lys Leu Arg Glu Val Ile Gly Cys
      85              90

```



<210> 41572  
 <211> 170  
 <212> PRT  
 <213> A.fumigatus

<400> 41572  
 Leu Thr Ile Cys Arg Val Ser Ile His Ser Phe Gly Leu Gly Leu Thr  
 1 5 10 15  
 His Lys Pro Asp Thr Met Ile Glu Leu Ser Thr Arg Thr Lys Gly Ser  
 20 25 30  
 Tyr Leu Tyr Val Lys Asp Trp Met Met Leu Arg Glu Cys Val Ala Gly  
 35 40 45  
 Cys Leu Gly Ala Leu Gln Thr Thr Ser His Gln Asn Val Lys Leu Lys  
 50 55 60  
 Leu Arg Leu Pro Glu Gly Ser Pro Ala Lys Phe Val Lys Ile Ser Gly  
 65 70 75 80  
 Ala Leu His Thr Thr Lys Arg Ala Thr Gly Arg Asp Ala Glu Ala Ala  
 85 90 95  
 Leu Gly Asp Leu Arg Phe Gly Asp Lys Arg Asp Val Leu Val Gln Leu  
 100 105 110  
 Val Ile Gln Pro Asp Asn Ser Thr Gln Glu Ser Met Pro Gln Asp Pro  
 115 120 125  
 Trp Glu Ser Leu Val Ser Gly Leu Glu Ala Leu Gly Gly Gly Ser Asp  
 130 135 140  
 Ala Asp Glu Gln Arg Val Pro Ser Val Glu Glu Val Pro Leu Ile Gln  
 145 150 155 160  
 Ala Asp Leu Thr Tyr Gly Asp Leu Leu Pro  
 165 170

<210> 41573  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 41573  
 Pro Arg Ser Ser Gln Phe Phe Trp Ile Ile Val Ser Ser Leu Phe Thr  
 1 5 10 15  
 Phe Pro Leu Ile Leu Leu Phe Asp Tyr Ser Leu Thr Pro Cys Ser Thr  
 20 25 30  
 Pro Leu Tyr Leu Ile Phe Val Leu Leu Ser Gly Tyr Pro Ala Glu Leu  
 35 40 45  
 Ala Gly Phe Ser Cys Tyr Asp Thr Thr Leu Phe Asp Asn Asp Gly Ala  
 50 55 60  
 Ala  
 65

<210> 41574  
 <211> 234  
 <212> PRT  
 <213> A.fumigatus

<400> 41574  
 His Pro Ser Gly Met Asn Val Glu Asn Lys Gln Tyr Ile Pro Glu Ser  
 1 5 10 15  
 Lys Lys Leu Ser His Ser Ala Ser Phe Ile Ala Arg Leu Ser His Ile

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<210> 41575
<211> 128
<212> PRT
<213> A.fumigatus
```

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<210> 41576
<211> 70
<212> PRT
<213> A.fumigatus
```

&lt;400&gt; 41576

Gly Thr Asp Pro Ala His Arg Leu Pro Pro Pro Ser Pro Asp Phe Pro  
 1 5 10 15  
 Val Leu Phe Ser Ser Pro Ser Phe Ala Gln Pro Phe Phe Leu Leu Ser  
 20 25 30  
 Pro Leu Leu Ser Ser Ser Leu Ser Ser His Phe Thr Leu Leu Ser Ile  
 35 40 45  
 Val Phe Phe His Leu Asp Asn Thr Ile Thr His Asn Gly His Leu Arg  
 50 55 60  
 Phe Val Ala Gly Ser Pro  
 65 70

&lt;210&gt; 41577

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41577

Val Thr Val Thr Arg Leu Pro Pro Glu Ser Arg Ser Pro Ser Leu Pro  
 1 5 10 15  
 Ser Val Val Glu His Cys Val Asn Leu Pro Arg Ile Ser Ala Val Ser  
 20 25 30  
 Thr Tyr Phe Glu Thr Phe Pro Tyr Arg Val Asn Thr Glu Thr Gly Ile  
 35 40 45  
 Ile Asp Tyr Asp Thr Leu Glu Ala Asn Ala Glu Leu Tyr Arg Pro Lys  
 50 55 60  
 Cys Leu Val Ala Gly Thr Ser Ala Tyr Cys Arg Leu Ile Asp Tyr Gly  
 65 70 75 80  
 Arg Met Arg Lys Ile Ala Asp Lys Val Gly Ala Tyr Leu Ile Val Asp  
 85 90 95  
 Met Ala His Ile Ser Gly Leu Val Ala Ala Gly Val Ile Pro Ser Pro  
 100 105 110  
 Phe Glu Tyr Ala Asp Val Val Thr Thr Thr His Lys Ser Leu Arg  
 115 120 125  
 Gly Pro Arg Gly Ala Met Ile Phe Phe Arg Lys Gly Val Arg Ser Thr  
 130 135 140  
 Asp Pro Lys Thr Gly Lys Glu Ile Met Tyr Asp Leu Glu Gly Pro Ile  
 145 150 155 160  
 Asn Phe Ser Val Phe Pro Gly His Gln Gly Gly Pro His Asn His Thr  
 165 170 175  
 Ile Thr Ala Leu Ala Val Ala Leu Lys Gln Ala Ala Thr Pro Glu Phe  
 180 185 190  
 Arg Gln Tyr Gln Glu Gln Val Leu Lys Asn Ala Lys Ala Leu Glu Val  
 195 200 205  
 Glu Phe Lys Ala Leu Gly His Lys Leu Val Ser Asp Gly Thr Asp Ser  
 210 215 220  
 His Met Val Leu Leu Asp Leu Arg Pro Lys Gly Leu Asp Gly Ala Arg  
 225 230 235 240  
 Val Glu Ala Val Leu Glu Gln Ile Asn Ile Ala Cys Asn Lys Asn Ser  
 245 250 255  
 Ile Pro Gly Asp Lys Ser Ala Leu Thr Pro Cys Gly Ile Arg Ile Gly  
 260 265 270  
 Thr Pro Ala Met Thr Ser Arg Gly Met Ser Glu Glu Asp Phe Lys Arg  
 275 280 285  
 Val Ala Arg Tyr Ile Asp Gln Val Ile Asn Leu Cys Lys Ser Ile Gln  
 290 295 300

## 18410

Ala Asp Leu Pro Lys Glu Ala Asn Lys Leu Lys Asp Phe Lys Ala Lys  
 305 310 315 320  
 Val Ala Ser Gly Ser Val Pro Glu Ile Leu Ala Leu Arg Lys Glu Val  
 325 330 335  
 Ala Glu Trp Ala Ser Thr Tyr Pro Leu Pro Val  
 340 345

<210> 41578  
 <211> 346  
 <212> PRT  
 <213> A.fumigatus

<400> 41578  
 Gly Asp His Ile Ala His Leu Ala Arg Glu Leu Leu Leu Asp Thr Ser  
 1 5 10 15  
 Val Glu Glu Glu Arg Asn Val Arg Val Leu Phe Gly Leu Ser Asp Val  
 20 25 30  
 Ala Leu Leu Asp Val Leu Leu Ala Glu Pro Leu Gly Gln His Val Ala  
 35 40 45  
 His Val Leu Arg Arg Glu Arg Asn Gly Glu Gly Val Val Gly Leu Val  
 50 55 60  
 Leu Gly His Gly Gly Asp Leu Asp Val Leu Gly Val Arg Glu Val Gly  
 65 70 75 80  
 Leu Arg Arg Ala Val Ile Val Ala Gln Gln Leu Gly Asp Leu Thr Asp  
 85 90 95  
 Thr Val Arg Thr Val Val Glu Glu Glu Glu Gly Ile Val Val Cys Lys  
 100 105 110  
 Thr Arg Leu Val Phe Glu Arg Ala Val Leu Arg Val Pro Ser Lys His  
 115 120 125  
 Thr Leu His Ala Pro Phe Leu Ala Ala Asn Asn Asp Gly Leu Glu Glu  
 130 135 140  
 Leu Ile Val Leu Thr Leu Leu Ile Ala Leu Leu Asp Ser Leu Asn Gly  
 145 150 155 160  
 Ile Arg Ala Leu Phe Ala Leu Thr Ala Asp Asn Thr Leu His Gly Asn  
 165 170 175  
 Phe Asp Ser Val Pro Thr Leu Val Thr Val His Ser Val Val Ala Ala  
 180 185 190  
 Asn His Arg Gly Asp Leu Thr Asp Ala Asp Leu Leu Gly Val Ile Glu  
 195 200 205  
 Gln Val Leu His Ile Leu Asp Gly Ala Leu Gly Val Gly Ile Thr Ala  
 210 215 220  
 Ile Thr Glu Glu Val Asn Glu Asp Leu Arg Asp Leu His Phe Leu Gly  
 225 230 235 240  
 Asp Leu Gln Gln Thr Asp Gln Val Ser Asp Val Gly Val Asn Thr Ala  
 245 250 255  
 Ile Gly Asp Gln Thr Gln Gln Val Gln Thr Thr Ile Ala Leu Leu Gly  
 260 265 270  
 Ala Ser Glu Gly Leu Asp Asp Val Val Asp Leu Val Gln Phe Ala Leu  
 275 280 285  
 Leu Glu Gly Leu Ile Asp Ala Asn Ala Val Leu Pro Asp Asp Thr Ala  
 290 295 300  
 Ser Thr Asn Val Gln Met Ala Asn Leu Thr Val Ala His Gln Thr Leu  
 305 310 315 320  
 Trp Gln Thr Asp Gly Gln Arg Arg Gly Ile Gln Leu Cys Ile Ser Leu  
 325 330 335  
 Ser Arg Leu Arg Val Leu Phe Gly Lys Ala

340

345

<210> 41579  
 <211> 206  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41579

Thr	Asp	Glu	Asn	Pro	Thr	Ser	Cys	Gly	Leu	Leu	Glu	Thr	Pro	Ser	Asp
1				5					10					15	
His	Thr	Ala	Glu	His	Leu	His	Thr	His	Ala	Leu	Ala	Leu	Asp	Leu	Ala
		20						25					30		
Ala	Arg	Leu	Val	Leu	Leu	Val	Arg	Gly	His	Leu	Asp	Asn	Ser	Pro	Val
	35						40					45			
Gly	Ala	Ser	Leu	Val	His	Leu	Pro	Ala	Ala	Asp	Leu	Gly	Asp	Glu	Leu
50					55						60				
Leu	Glu	Arg	Leu	Ala	Ala	Gln	Val	Lys	Pro	Leu	Leu	Gln	His	Leu	
65				70					75					80	
Gly	Val	Asp	Leu	Pro	Glu	Gly	Leu	Ala	His	Phe	Asp	Gly	Asp	Thr	Asn
			85						90					95	
Thr	His	Glu	Leu	Leu	Glu	Ala	Gly	Asp	Ile	Gly	Asp	Gln	Val	Arg	Val
		100						105					110		
Gln	Val	Ile	Gly	Val	Gln	Gly	Arg	Pro	Glu	Leu	Gly	Val	Leu	Gly	Gly
	115						120					125			
Leu	Glu	Glu	Ser	Gly	Gln	Ala	Gly	Glu	Leu	Leu	Asp	Gly	Phe	His	Glu
130						135					140				
Val	Gly	Gly	Leu	Gly	Gly	Val	Gly	Val	Gly	Gly	Gly	Glu	Gly	Leu	Gly
145				150						155				160	
Val	Gly	Gly	Glu	Glu	Gly	Lys	Ala	Glu	Gly	Glu	Gly	Arg	Arg	Gly	Lys
			165						170					175	
Asp	Gly	Glu	Arg	Leu	Gly	Glu	Asp	Val	Gly	Asn	Gly	Phe	Gly	Leu	Glu
		180						185					190		
Glu	Val	Arg	Val	Glu	Leu	Val	Ala	Val	Met	Thr	Ser	Cys	Gln		
	195						200					205			

<210> 41580  
 <211> 107  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41580

Glu	Glu	Lys	Ala	Lys	Ser	Glu	Ile	Thr	Ser	Leu	Ile	Gly	Ile	Ser	Leu
1				5					10					15	
Met	Ser	Ser	Asp	Arg	Ala	Arg	Ser	Phe	Ile	Arg	Ser	Glu	Ile	Pro	Ser
		20						25					30		
Trp	Arg	Leu	Thr	Asp	Thr	Val	Lys	Asp	Ala	Val	Glu	Gln	Trp	Asn	Lys
	35						40					45			
Glu	Val	Leu	Ser	Lys	Thr	Gln	Val	Pro	Leu	Asp	Arg	Thr	Ala	Asn	Met
50					55						60				
Ala	His	Val	Arg	Leu	Leu	Tyr	Ser	Ser	Leu	Tyr	Phe	Met	His	Pro	Met
65				70						75				80	
Pro	Ser	Asn	Arg	Thr	Gly	Asp	Asn	Pro	Leu	Trp	Arg	Lys	Val	Ser	Glu
			85						90					95	
Trp	Val	Ser	Gly	Val	Ala	Asp	Thr	Leu	Glu	Ser					
	100							105							

<210> 41581  
 <211> 250  
 <212> PRT  
 <213> A.fumigatus

<400> 41581  
 Val Val Val Ile Asp Gly Trp Gly Ile Pro Gly Pro Asp Ser Pro Lys  
 1 5 10 15  
 Asp Gly Asp Ala Ile Ala Ala Ala Glu Thr Pro Tyr Met Ser Gly Phe  
 20 25 30  
 Ala Glu Glu Asn Ser Lys Thr Ala Gln Gly Tyr Thr Glu Leu Asp Ala  
 35 40 45  
 Ser Ser Leu Ala Val Gly Leu Pro Glu Gly Leu Met Gly Asn Ser Glu  
 50 55 60  
 Val Gly His Leu Asn Ile Gly Ala Gly Arg Val Val Trp Gln Asp Ser  
 65 70 75 80  
 Val Arg Ile Asp Gln Thr Leu Lys Lys Gly Glu Leu Asn Lys Val Asp  
 85 90 95  
 Asn Val Val Lys Ser Phe Thr Arg Ala Lys Glu Gly Asn Gly Arg Leu  
 100 105 110  
 His Leu Leu Gly Leu Val Ser Asp Gly Gly Val His Ser Asn Ile Thr  
 115 120 125  
 His Leu Val Gly Leu Leu Lys Val Ala Lys Glu Met Glu Ile Pro Gln  
 130 135 140  
 Val Phe Ile His Phe Phe Gly Asp Gly Arg Asp Thr Asp Pro Lys Ser  
 145 150 155 160  
 Ala Ile Lys Tyr Met Gln Asp Leu Leu Asp His Thr Lys Glu Ile Gly  
 165 170 175  
 Ile Gly Glu Ile Ala Thr Val Val Gly Arg Tyr Tyr Ala Met Asp Arg  
 180 185 190  
 Asp Lys Arg Trp Asp Arg Val Glu Val Ala Met Lys Gly Ile Val Ser  
 195 200 205  
 Gly Glu Gly Glu Glu Ser Ser Asp Pro Val Lys Thr Ile Lys Glu Arg  
 210 215 220  
 Tyr Glu Lys Gly Glu Asn Asp Glu Phe Leu Lys Pro Ile Ile Val Gly  
 225 230 235 240  
 Gly Lys Glu Arg Arg Val Gln Gly Met Phe  
 245 250

<210> 41582  
 <211> 199  
 <212> PRT  
 <213> A.fumigatus

<400> 41582  
 Pro Cys Leu Ala Asp Asn Asp Thr Leu Phe Phe Phe Asn Tyr Arg Ser  
 1 5 10 15  
 Asp Arg Val Arg Glu Ile Thr Gln Leu Leu Gly Asp Tyr Asp Arg Ser  
 20 25 30  
 Pro Lys Pro Asp Phe Pro Tyr Pro Lys Asn Ile Gln Ile Thr Thr Met  
 35 40 45  
 Thr Gln Tyr Lys Thr Asp Tyr Thr Phe Pro Val Ala Phe Pro Pro Gln  
 50 55 60  
 His Met Gly Asn Val Leu Ala Glu Trp Leu Ser Lys Lys Asp Ile Gln  
 65 70 75 80  
 Gln Cys His Val Ala Glu Thr Glu Lys Tyr Ala His Val Thr Phe Phe

```
<210> 41583
<211> 89
<212> PRT
<213> A.fumigatus
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```
<210> 41584
<211> 210
<212> PRT
<213> A.fumigatus
```

<400> 41584																
Asp	Glu	Lys	Lys	Glu	Gln	Glu	Lys	Glu	Leu	Arg	Lys	Asn	Pro	His	Phe	
1				5					10					15		
Lys	Pro	Met	Lys	Thr	Pro	Leu	His	Ala	Ala	Cys	Ser	Lys	Pro	Arg	Leu	
			20					25					30			
Ile	Thr	Arg	Pro	Asn	Ile	Ser	Thr	Pro	Thr	Arg	Ser	Leu	Leu	Thr	Ser	
		35					40					45				
Leu	Arg	Ala	Ser	Phe	Ser	Leu	Phe	Val	Gly	Thr	Leu	Thr	Thr	Val	Pro	
	50					55					60					
Leu	Gly	Pro	Val	Leu	Ser	Thr	Ser	Gln	Leu	Gln	Thr	Ser	Val	Thr	Asn	
65					70					75					80	
Phe	Ser	Ser	Ala	Ser	Arg	Leu	Arg	Arg	Ser	Ser	His	Cys	Ser	Asn	Thr	
				85					90					95		
Ser	Ala	Leu	Ile	Ser	Arg	Lys	Ala	Leu	Pro	Thr	Ser	Met	Ala	Ile	Arg	
			100					105					110			
Ile	Arg	Thr	Ser	Ser	Ser	Lys	Pro	Ala	Thr	Ser	Ala	Thr	Arg	Ser	Ala	

## 18414

```

      115              120              125
Tyr Arg Ser Ser Glu Phe Arg Val Asp Gln Asn Trp Ala Tyr Trp Ala
  130              135              140
Asp Ser Arg Arg Val Asp Arg Arg Ala Ser Phe Trp Met Asp Ser Thr
  145              150              155              160
Lys Ser Glu Val Trp Glu Ala Ser Val Ser Ala Val Gly Lys Gly Trp
      165              170              175
Val Trp Ala Gly Arg Arg Ala Arg Gln Arg Glu Lys Ala Gly Glu Gly
      180              185              190
Lys Thr Val Ser Ala Leu Ala Arg Met Leu Val Thr Val Ser Gly Trp
      195              200              205
Arg Arg
  210

```

<210> 41585  
 <211> 155  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41585
Val Pro Pro Cys Phe Ser Pro Ser Phe Ser Leu Ala Gln Leu Gly Ile
  1              5              10              15
Met Leu Phe Lys Cys Leu Arg Leu Glu Arg Gly Phe Ser Phe Pro Leu
      20              25              30
Leu Leu Val Ala Tyr Val Gly Ala Pro Ser Ala Ile Leu Arg Pro Arg
      35              40              45
Thr Leu Leu Thr Tyr Ser Val Glu Ile Ile Gly Tyr Ile Gly Arg Ala
      50              55              60
Met Ser Ser Lys Glu Thr Pro Asp Trp Thr Leu Gly Pro Tyr Ile Val
      65              70              75              80
Gln Thr Leu Phe Leu Leu Ala Pro Ala Leu Leu Ala Ala Ser Val
      85              90              95
Tyr Met Leu Leu Gly Arg Ile Ile Leu Leu Leu Gln Ala Glu Ser His
      100              105              110
Ala Leu Leu Gly Arg Lys Trp Leu Thr Lys Ile Phe Val Thr Gly Asp
      115              120              125
Val Leu Ser Phe Leu Leu Gln Gly Ala Gly Lys His Leu Ile Ala Lys
      130              135              140
His Arg Asn Met Glu Trp Gln Ala Asp Ile Ile
      145              150              155

```

<210> 41586  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41586
Pro Met Phe Val Ser Phe Cys Phe Phe His Arg Trp Thr Pro Pro Phe
  1              5              10              15
Phe Leu Pro Ala Lys Tyr Val Tyr Glu Asn Glu Trp Val Cys Gly His
      20              25              30
Tyr Ser Val Pro Trp Arg Ala Trp Arg Asn Tyr Leu Ala Thr Ile Glu
      35              40              45
Ser Ala Cys Leu Ala Glu Phe Trp Leu Gly Gln Ser Glu Cys Ser Ile
      50              55              60
Val Pro Trp Ile Gln His Ala Glu Leu Lys Val Phe Tyr Arg Val Phe

```



## 18415

65  
Ile

70

75

80

<210> 41587  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 41587  
 Pro Asn His Asn Glu Glu Val Asp Cys Ile Glu Asp Pro Gln Val Phe  
 1 5 10 15  
 Thr Pro Gly Ala Val Gln Phe Tyr Cys Phe Leu Cys Leu Thr Leu Asp  
 20 25 30  
 Gln Thr Pro Val Glu Asp Arg Ala Gly Asn Asn Glu Glu Ala Glu Lys  
 35 40 45  
 Lys Asn Leu Tyr Lys Lys Ala Cys Asp Asn Asn Leu Leu Thr Ile Val  
 50 55 60  
 Tyr Gly  
 65

<210> 41588  
 <211> 130  
 <212> PRT  
 <213> A.fumigatus

<400> 41588  
 Ile Ser Arg Ala Glu Arg Asn Thr Ser Gly Gly Arg Ile Phe Leu Cys  
 1 5 10 15  
 Gln Leu Gly Thr Phe Cys Phe Leu Leu Phe Asn Ser Leu Gln Leu Ser  
 20 25 30  
 Ser Thr Leu Phe Ser Ser Thr Ser Phe Leu Phe Tyr Leu Leu Ile Ile  
 35 40 45  
 Tyr Phe Glu Pro Val Val Ile Val Thr Ile His Thr Leu His Met Lys  
 50 55 60  
 Met Pro Asp Thr Gly Asp Ser Glu Glu Ala Phe Phe Ala Phe Tyr Arg  
 65 70 75 80  
 Tyr Asp Pro Ser Met Ser Ala Ala Val Leu Phe Thr Leu Leu Phe Ile  
 85 90 95  
 Gly Thr Thr Gly Tyr His Ala Phe Gln Met Phe Lys Thr Arg Thr Trp  
 100 105 110  
 Phe Phe Ile Pro Phe Val Ile Gly Gly Ile Cys Gly Cys Thr Phe Cys  
 115 120 125  
 Asn Pro  
 130

<210> 41589  
 <211> 156  
 <212> PRT  
 <213> A.fumigatus

<400> 41589  
 Tyr Asn Leu Gly Gly Gly Ile Gln Ser Ser Gly Asn Leu Asp Asn Leu  
 1 5 10 15  
 Lys Asn Gly Glu Arg Ile Ile Val Val Gly Leu Phe Val Gln Ile Phe  
 20 25 30

## 18416

Phe Phe Gly Phe Phe Ile Ile Thr Ala Ser His Phe Tyr Trp Lys Ile  
           35                          40                          45  
 Lys Lys Tyr Pro Ile Pro Arg Ser Cys Thr Pro Glu Ile Pro Trp Gly  
           50                          55                          60  
 Lys His Leu His Val Leu Tyr Leu Thr Ser Phe Leu Ile Met Ile Arg  
 65                          70                          75                          80  
 Ser Val Phe Arg Leu Ala Glu Tyr Leu Gln Gly Asn Asn Gly Tyr Leu  
                           85                          90                          95  
 Leu His His Glu Ile Tyr Leu Tyr Ile Phe Asp Ala Leu Leu Met Phe  
                           100                          105                          110  
 Ile Thr Met Val Thr Phe Asn Val Val His Pro Cys Glu Val Gly Arg  
           115                          120                          125  
 Leu Leu Arg Ser Thr Val Asn Tyr Glu Leu Thr His Arg Pro Gln Thr  
           130                          135                          140  
 Cys Ala Asn Lys Pro Tyr Ala Ser Ser Leu Val Arg  
 145                          150                          155

&lt;210&gt; 41590

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41590

Gln Ala Gly Arg Leu Pro Ile Leu Asp Val His Ser Thr Met Ser Leu  
 1                          5                          10                          15  
 Trp Ala Arg Glu Pro Thr Thr Gly Ala Asp Ala Ser Tyr Gln Thr Ala  
           20                          25                          30  
 Val Trp Ala Tyr Tyr Arg Tyr Tyr Pro Ser Lys Ala Ala Ala Ile Leu  
           35                          40                          45  
 Phe Thr Ile Leu Phe Leu Ile Thr Thr Phe Val His Leu Tyr Gln Leu  
           50                          55                          60  
 Phe Arg Arg Arg Thr Trp Phe Phe Ile Pro Phe Val Ile Gly Gly Phe  
 65                          70                          75                          80  
 Cys Glu Cys

&lt;210&gt; 41591

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41591

Leu Ser Gly Thr Arg Ala Trp Ile Val Ala Asn Ser Asn Lys Ser Thr  
 1                          5                          10                          15  
 Val Glu Trp Val Gly Tyr Leu Gly Arg Ile Leu Ser Ser Gln Glu Ser  
           20                          25                          30  
 Pro Asn Trp Ser Met Gly Pro Tyr Ile Gln Gln Thr Leu Leu Leu Leu  
           35                          40                          45  
 Leu Ala Pro Ala Leu Phe Ala Ala Ser Val Tyr Met Met Leu Gly Arg  
           50                          55                          60  
 Ile Val Val Leu Leu Asp Ala Glu His Leu Cys Ile Ile Lys Lys Lys  
 65                          70                          75                          80  
 Trp Leu Thr Lys Phe Phe Val Cys Gly Asp Val Leu Ser Phe Thr Val  
                           85                          90                          95  
 Gln Ala Ala Gly Glu His Thr Ser Pro Leu Leu  
           100                          105

<210> 41592  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 41592  
 Arg Leu Thr Ala Met Ser Leu Thr Gln Thr Glu Lys Asp Thr Glu Val  
 1 5 10 15  
 Phe Thr Glu Asp Lys Ser Ser Thr Leu Ser Leu Thr Ser Thr Leu Thr  
 20 25 30  
 Cys Asp Thr Leu Asp Glu Lys His Phe Ala Phe Phe His Pro Ser Arg  
 35 40 45  
 Thr Leu His Ile Ala Ala Gln Gly Ile Ala Ala Phe Arg Leu Pro Phe  
 50 55 60  
 Pro Ser Arg Glu Leu Glu Ile Pro Ile Tyr Asp Thr Ala Glu Gly Thr  
 65 70 75 80  
 Ile Ala Tyr Val Ser Thr Arg Ser Ser Ile Cys Ser Gly Asn Ala Ile  
 85 90 95  
 Leu Ser Asp Pro  
 100

<210> 41593  
 <211> 110  
 <212> PRT  
 <213> A.fumigatus

<400> 41593  
 Val Arg Val Ser Phe Gln Pro Arg Gly Asp Asp Ile Pro Glu Val Ile  
 1 5 10 15  
 Thr Asp Ile Val His Ser Tyr Lys Ala Leu Val Leu Glu Val Ser Ile  
 20 25 30  
 Ala Glu Met Asp Val His Thr Leu Asn Thr Thr Leu His Thr Asp Ile  
 35 40 45  
 Tyr Ser Ala Val Ile Thr Glu Ala Leu Asp Ala Arg Ile Thr Asp Ile  
 50 55 60  
 Ser Phe Trp Gly Phe Thr Asp Lys Tyr Ala Tyr Thr Trp Leu Glu Gly  
 65 70 75 80  
 Ala Lys Pro Leu Met Phe Asp Glu Tyr Tyr Asn Pro Lys Gly Ala Phe  
 85 90 95  
 Tyr Ala Thr His Thr Ala Leu Thr Ser Leu Asp Asn Glu Pro  
 100 105 110

<210> 41594  
 <211> 142  
 <212> PRT  
 <213> A.fumigatus

<400> 41594  
 Gln Gln Thr Thr Gly Gly Gly Val Met Ala Ser Gly Ser Leu Ser Ala  
 1 5 10 15  
 Val His Asn Gly Glu Lys Ile Val Ile Ala Gly Leu Leu Ile Gln Ile  
 20 25 30  
 Leu Phe Phe Gly Leu Phe Ile Val Thr Cys Ala Ile Phe His Trp Arg  
 35 40 45  
 Leu Ile Lys Gly Gln Thr Glu Lys Ala Ile Glu Leu Asn Ser Ala Trp

## 18418

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      50              55              60
Arg Lys His Leu Trp Ile Leu Tyr Ala Val Asn Phe Leu Ile Met Ile
65              70              75              80
Arg Ser Val Phe Arg Leu Ile Glu Tyr Ala Met Gly Asn Asn Gly Tyr
      85              90              95
Leu Leu Arg His Glu Ala Phe Leu Tyr Val Phe Asp Gly Val Leu Met
      100             105             110
Leu Ala Ala Met Ile Leu Phe Asn Ile Val His Pro Ser Ser Leu Ile
      115             120             125
Pro Ser Arg Arg Lys Ser Leu Glu Gln Asp Ser Ser Ala Ala
      130             135             140

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&lt;210&gt; 41595

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41595

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Phe Ala Met Leu His Ser Lys Gly Thr Glu Glu Pro Gly Asp Tyr Lys
1              5              10              15
Thr Ser Gly Thr Asn Gly His His Ala Ser Val Ser Val Leu Gly Leu
      20              25              30
Leu Arg Leu Arg Asp Val Tyr Arg Thr Pro Ala Tyr Ile Ser Cys Arg
      35              40              45
Phe Val Thr Val Trp Ala His Ser Val Leu Pro Val Leu Thr Ile Ala
      50              55              60
Glu Leu Leu Leu Leu Gln Leu Ser Ser Val Lys
65              70              75

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&lt;210&gt; 41596

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41596

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Arg Asp Asn Phe Arg Phe Ile Phe Ser Arg Leu Gly Leu Cys Ser Val
1              5              10              15
Asp Asn Asp Arg Arg Leu Gly Leu Gly Ser Gly Phe Ser Arg Ser Arg
      20              25              30
Phe Arg Leu Gly Ser Phe Ser Leu Gly Gly Phe Asn Leu Gly Ser Phe
      35              40              45
Gly Leu Gly Ser Phe Gly Leu Gly Ser Phe Gly Leu Gly Gly Phe Gly
      50              55              60
Leu Gly Ser Phe Gly Leu Arg Gly Phe Gly Arg Arg Arg Ser Phe His
65              70              75              80
Leu Arg Cys Ser Leu Asn Arg Arg Ser Gly Gly Leu Arg Cys Arg Cys
      85              90              95
Arg Cys His Tyr Thr Gly Pro Thr Ile Ser Leu Ser Arg Arg Phe
      100             105             110
Leu Phe Ser Val Ser Arg Ser Leu Arg Leu Ser Pro Pro Gly Pro Cys
      115             120             125
Leu Phe Phe Cys Ser Leu Leu Leu His Leu Pro Leu Leu Asn Leu Cys
      130             135             140
Val Cys Val Ser Leu Ser Glu Leu Lys
145              150

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<210> 41597  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

<400> 41597  
 Asp Pro Ser Ala Ala Pro Arg Glu Ser Val Pro Ala Ser Ala Ala Pro  
 1 5 10 15  
 Pro Ala Asn Pro Val Leu Ala Pro Ser Pro Ser Pro Ser Arg Arg Asp  
 20 25 30  
 Ser Cys Ser Ala Pro Leu Asp Arg Arg Pro Thr Arg Pro Leu Asn Gln  
 35 40 45  
 Leu Leu Ser Leu Asp Ser Arg Leu Ser Ser Arg Cys Ser Ser Ser Pro  
 50 55 60  
 Ala Val Pro Ser Ala Thr Ile Phe Ala Ser Ser Ala Gly Trp Gly  
 65 70 75 80  
 Cys Ala Val Ser Ile Met Thr Gly Ala Ser Ala Trp Val Ala Ala Ser  
 85 90 95  
 Val Val Ala Gly Ser Ala Trp Gly Ala Ser Ala Leu Gly Ala Ser Ile  
 100 105 110  
 Trp Gly Ala Ser Ala Trp Gly Ala Ser Ala Trp Gly Ala Leu Ala Trp  
 115 120 125  
 Gly Ala Ser Ala Trp Gly Ala Ser Ala  
 130 135

<210> 41598  
 <211> 109  
 <212> PRT  
 <213> A.fumigatus

<400> 41598  
 Ser Arg Leu His Pro Gly Ala Ile Gly Glu Ala Thr Met Arg Ile Phe  
 1 5 10 15  
 Ser Phe Leu Phe Leu Leu Leu Gly Ile Leu Thr Gly Gln Gly Leu  
 20 25 30  
 Val Ser Gly Thr Asp Asn Gly Lys Thr Thr Asp Val Thr Trp Asp Lys  
 35 40 45  
 Tyr Ser Leu Ser Val Lys Gly Gln Arg Leu Phe Val Phe Ser Gly Glu  
 50 55 60  
 Phe His Tyr Gln Arg Leu Pro Val Pro Glu Leu Trp Leu Asp Val Phe  
 65 70 75 80  
 Gln Lys Leu Arg Ala Asn Gly Phe Asn Ala Ile Ser Gly Met Ile Cys  
 85 90 95  
 Leu Ile Leu His Tyr Ala Trp Val Ser Pro Thr Gly Asn  
 100 105

<210> 41599  
 <211> 376  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (142),(160),(169)  
 <223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41599

Val Ser Lys Leu Asn Gly Tyr Ala Ser Phe Val Met Arg Asp Thr Asp  
 1 5 10 15  
 Arg Lys Gly Arg Val Tyr Thr Gly Asn Ser Gln Val Lys Lys Ile Lys  
 20 25 30  
 Trp Asn Gly Lys Thr Ile Glu Thr Arg Lys Thr Ala Tyr Gly Ser Leu  
 35 40 45  
 Ile Gly Thr Ala Pro Gly Ala Glu Asp Val Lys Ile Gln Leu Pro Ser  
 50 55 60  
 Leu Asp Ser Trp Lys Ala Gln Asp Thr Leu Pro Glu Ile Gln Pro Asp  
 65 70 75 80  
 Tyr Asp Asp Ser Lys Trp Thr Val Cys Asn Lys Thr Thr Ser Val Asn  
 85 90 95  
 Ala Ile Ala Pro Leu Ser Leu Pro Val Leu Tyr Ser Gly Asp Tyr Gly  
 100 105 110  
 Tyr His Ala Gly Thr Lys Val Tyr Arg Gly Arg Phe Asp Gly Arg Asn  
 115 120 125  
 Val Thr Gly Ala Asn Val Thr Val Gln Asn Gly Ala Ala Xaa Gly Trp  
 130 135 140  
 Ala Ala Trp Val Asn Gly Gln Tyr Ala Gly Gly Ser Ala Gly Ser Xaa  
 145 150 155 160  
 Asn Leu Ala Ala Thr Ser Ala Val Xaa Thr Phe Asn Ser Ser Ser Leu  
 165 170 175  
 Lys Asp Gln Asp Asn Val Leu Thr Val Val Thr Asp Tyr Thr Gly His  
 180 185 190  
 Asp Gln Asn Ser Val Arg Pro Lys Gly Thr Gln Asn Pro Arg Gly Ile  
 195 200 205  
 Leu Gly Ala Thr Leu Ile Gly Gly Gly Asn Phe Thr Ser Trp Arg Ile  
 210 215 220  
 Gln Gly Asn Ala Gly Gly Glu Lys Asn Ile Asp Pro Val Arg Gly Pro  
 225 230 235 240  
 Met Asn Glu Gly Gly Leu Tyr Gly Glu Arg Met Gly Trp His Leu Pro  
 245 250 255  
 Gly Tyr Lys Val Pro Lys Ser Ala Ser Lys Ser Ser Pro Leu Asp Gly  
 260 265 270  
 Val Ser Gly Ala Glu Gly Arg Phe Tyr Thr Thr Thr Phe Lys Leu Lys  
 275 280 285  
 Leu Asp Lys Asp Leu Asp Val Pro Ile Gly Leu Gln Leu Gly Ala Pro  
 290 295 300  
 Glu Gly Thr Lys Ala Val Val Gln Val Phe Met Asn Gly Tyr Gln Phe  
 305 310 315 320  
 Gly His Tyr Leu Pro His Thr Gly Pro Gln Ser Leu Phe Pro Phe Pro  
 325 330 335  
 Pro Gly Val Ile Asn Asn Arg Gly Glu Asn Thr Leu Ala Ile Ser Met  
 340 345 350  
 Trp Ala Leu Thr Asp Ala Gly Ala Lys Leu Asp Lys Val Glu Leu Val  
 355 360 365  
 Ala Ala Gly Ser Leu His Glu Thr  
 370 375

&lt;210&gt; 41600

&lt;211&gt; 483

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41600

Arg His Ser Phe His Met Thr Gly Asp Pro Lys Ala Thr Gly Ser Leu  
 1 5 10 15  
 Asn Leu Ser His Ala Ser Ala Ser Ala Ala Leu Ala Gln Ala Arg Ser  
 20 25 30  
 His His Lys Asn Leu Thr Thr Asp Arg Pro Gly Gly Val Gly Tyr Gln  
 35 40 45  
 Thr Gln Asp Arg Arg Thr Ala Glu Ser Pro Val Ala Arg Pro Ser Pro  
 50 55 60  
 Glu Gly Tyr Lys Ala Ala Ile Thr Ala Val Arg Asp Arg Arg Ala Ile  
 65 70 75 80  
 Thr Ser Leu Pro Pro Val Ala Thr Gly Phe Lys Tyr Asp Ile Ser Thr  
 85 90 95  
 Thr Ser Asp Gln Ala Tyr Asp Val Gln Arg Glu Ser Ser Asp Arg Asp  
 100 105 110  
 Lys Ala Leu Arg Ala Ala Thr Gly Ala Tyr Arg Leu Ser Arg Lys Arg  
 115 120 125  
 Ala Asp Ser Ala Pro Ser Lys Pro Thr Met Ala Arg Glu Ala Pro Tyr  
 130 135 140  
 Ala Ala Ser Ala Ala Gly Ser Ala Lys Pro Ala Pro Glu Val Glu Asp  
 145 150 155 160  
 Pro Leu Ala Arg Ile Asp Ser Ser Met Glu Ala Ser Arg Ile His His  
 165 170 175  
 Met Ser Asn Val Asn Ala Gln Leu Tyr Thr Glu His Pro Pro Ile Gly  
 180 185 190  
 Leu Glu Glu Gln Asp Arg Lys Asp Val Leu Arg Ala Ala Val Ile Ser  
 195 200 205  
 Met Ala His Asp Met Tyr Glu Ile Thr Glu Lys Arg Glu Glu Val Pro  
 210 215 220  
 Thr Gly Glu Pro Ser Ala Ala Leu Tyr Gly Ala Gln Arg Gly Leu Ser  
 225 230 235 240  
 Arg Met Arg Ser Gln Arg Ala Val Pro Lys Ser Asp Pro Ala Ala Leu  
 245 250 255  
 Lys Gln Ala Val Lys Val Gln Glu Ala Ala Gln Gln Arg Ala Ala Glu  
 260 265 270  
 Lys Leu Ala Lys Ile Asn Glu Pro Thr Tyr Gln Glu Tyr Tyr Gly Val  
 275 280 285  
 Glu Pro His Val Gln Arg Pro Thr Leu Ser Ile Arg Arg Arg Arg Ala  
 290 295 300  
 Ser Val Asp Ser Glu Thr Ser Ala Ala Asp Ala Glu Arg Ser Arg Glu  
 305 310 315 320  
 Ile Arg His Gln Met Ser Ser Leu Arg Ser Arg Leu Asp Ala Val Asp  
 325 330 335  
 Glu Gln Arg Thr Lys Asp Arg Ala Asn Leu Met Glu Ala Ala Arg Arg  
 340 345 350  
 Asn Val Thr Ala Thr Ile Gln Asp Met Glu Met Arg Val Tyr His Glu  
 355 360 365  
 Thr Gly Arg Pro Pro Pro Ser Met Gln Lys Glu Trp Glu Glu Ala Ala  
 370 375 380  
 Leu Glu Arg Ala Gln Arg Glu Val Gln Glu Gln Glu Pro Tyr Arg Pro  
 385 390 395 400  
 Tyr Asn Lys Val Asn Ile Gly Thr Glu Arg Tyr Ile Asp Met Ala Asp  
 405 410 415  
 Val Glu Ala Val Ala Arg Ser Arg Leu Gln Pro Thr Phe Asp Glu Ile  
 420 425 430  
 Thr Asp Arg Ala Glu Lys Gln Arg Ala Arg Glu Leu Glu Ala Arg Leu  
 435 440 445

18422

Asp Ala Glu Glu Arg Glu Arg Tyr Glu Ala Ile Thr Arg Glu Arg Glu  
 450 455 460  
 Arg Glu Thr Arg Ala Glu Glu Lys Arg Gln Leu Gly Met Phe Ser Arg  
 465 470 475 480  
 Leu Thr Thr

<210> 41601  
 <211> 382  
 <212> PRT  
 <213> A.fumigatus

<400> 41601  
 Val Arg Arg Gly Thr Lys Arg Ala Arg Val Val Tyr Phe Phe Trp Ser  
 1 5 10 15  
 Phe His Ser Ala Ser Glu Gly Glu Phe Asp Phe Glu Asn Gly Ala His  
 20 25 30  
 Asp Ile Gln Arg Leu Phe Asp Tyr Ala Lys Glu Ala Gly Leu Tyr Val  
 35 40 45  
 Ile Ala Arg Ala Gly Pro Tyr Cys Asn Ala Glu Thr Ser Ala Gly Gly  
 50 55 60  
 Phe Ala Leu Trp Ala Ala Asn Gly Gln Met Gly Asn Glu Arg Thr Ser  
 65 70 75 80  
 Asp Glu Ala Tyr Tyr Glu Lys Trp Arg Pro Trp Ile Leu Glu Val Gly  
 85 90 95  
 Lys Ile Ile Ala Lys Asn Gln Ile Thr Asn Gly Gly Pro Val Ile Leu  
 100 105 110  
 Asn Gln His Glu Asn Glu Leu Val Glu Thr Thr Tyr Asp Pro Asn His  
 115 120 125  
 Thr Leu Val Val Tyr Met Lys Gln Ile Ala Gln Val Phe Glu Glu Ala  
 130 135 140  
 Gly Ile Val Val Pro Ser Ser His Asn Glu Lys Gly Met Arg Gly Val  
 145 150 155 160  
 Ser Trp Ser Thr Asp Tyr His Asn Val Gly Gly Ala Val Asn Ile Tyr  
 165 170 175  
 Gly Leu Asp Ser Tyr Pro Gly Gly Leu Ser Cys Thr Asn Pro Asn Ser  
 180 185 190  
 Gly Phe Asn Leu Val Arg Thr Tyr His Gln Trp Phe Gln Asn Tyr Ser  
 195 200 205  
 Phe Thr Gln Pro Ser Tyr Leu Pro Glu Phe Glu Gly Gly Trp Phe Gln  
 210 215 220  
 Pro Trp Gly Gly Ser Phe Tyr Asp Thr Cys Ala Thr Glu Leu Ser Pro  
 225 230 235 240  
 Glu Phe Pro Asp Val Tyr Tyr Lys Asn Asn Ile Gly Ser Arg Val Thr  
 245 250 255  
 Leu His Ser Ile Tyr Met Thr Tyr Gly Gly Thr Asn Trp Gly His Ser  
 260 265 270  
 Ala Ala Pro Val Val Tyr Thr Ser Tyr Asp Tyr Ala Ala Pro Leu Arg  
 275 280 285  
 Glu Thr Arg Glu Ile Arg Asp Lys Leu Lys Gln Thr Lys Leu Ile Gly  
 290 295 300  
 Leu Phe Thr Arg Val Ser Lys Asp Leu Leu Lys Thr Tyr Met Glu Gly  
 305 310 315 320  
 Asn Gly Thr Gly Tyr Thr Ser Asp Ser Ser Ile Tyr Thr Trp Ser Leu  
 325 330 335  
 Arg Asn Pro Asp Thr Asn Ala Gly Phe Tyr Val Leu Ala His Ser Thr



## 18423

340 345 350  
 Ser Ser Thr Arg Asp Val Thr Thr Phe Thr Leu Asn Val Thr Thr Ser  
 355 360 365  
 Ala Gly Met Ala Leu Ala Cys Ser Phe Ser Leu Thr Cys Cys  
 370 375 380

<210> 41602  
 <211> 170  
 <212> PRT  
 <213> A.fumigatus

<400> 41602  
 Pro Asp Leu Gly Ala Ile Ser Ile Pro Asp Ile Glu Leu Asn Gly Arg  
 1 5 10 15  
 Gln Ser Lys Ile Ile Val Thr Asp Tyr Asn Phe Gly Thr Asn Ser Thr  
 20 25 30  
 Leu Leu Phe Ser Ser Ala Glu Val Leu Thr Tyr Ala Asn Leu Asp Val  
 35 40 45  
 Asn Val Leu Val Phe Tyr Leu Asn Val Gly Gln Lys Gly Thr Phe Val  
 50 55 60  
 Phe Lys Asp Glu Pro Lys Leu Ala Phe Gln Thr Tyr Gly Asn Ser Asn  
 65 70 75 80  
 Leu Thr Thr Ser Glu Ser Ser Tyr Gly Thr Gln Tyr Ser Tyr Thr Gln  
 85 90 95  
 Gly Lys Gly Val Thr Ala Val Lys Phe Ser Asn Gly Val Leu Ala Tyr  
 100 105 110  
 Phe Leu Asp Lys Glu Ser Ala Trp Asn Phe Phe Ala Pro Pro Thr Thr  
 115 120 125  
 Ser Ser Pro Gln Val Ala Pro Asn Glu His Ile Leu Val Gln Gly Pro  
 130 135 140  
 Tyr Leu Val Arg Gly Ala Ser Val Asn His Gly Thr Val Glu Ile Thr  
 145 150 155 160  
 Gly Asp Asn Ala Asn Thr Thr Ser Ile Glu  
 165 170

<210> 41603  
 <211> 101  
 <212> PRT  
 <213> A.fumigatus

<400> 41603  
 His Pro Trp Ile Cys Pro Leu Gln Pro Thr Ser Gln Thr Thr His Ser  
 1 5 10 15  
 Val Leu Asn Ser Leu Pro Leu Ser Phe Arg Leu Val His Pro Thr Gly  
 20 25 30  
 Arg His His Tyr Tyr Leu Phe Ser Leu Pro Ser Ser Ser Phe Pro Pro  
 35 40 45  
 Ser Phe Phe Ser Phe Asp Leu Leu Pro Ser Gly Met Pro Ile Pro Ala  
 50 55 60  
 Val Leu Ser Tyr Ser Pro His His Gly Ala Asp Leu Ile Leu Ser Trp  
 65 70 75 80  
 Leu Leu Leu Ser Leu Ile Leu Glu Ser Ile Ala Ser Pro Ser Ser Val  
 85 90 95  
 Pro Gly Leu Pro Ser  
 100

<210> 41604  
 <211> 355  
 <212> PRT  
 <213> A.fumigatus

<400> 41604

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Leu Leu Glu Phe Arg Gln Ala His Thr Asp Ala Glu Ile Gln Lys Arg
1      5      10      15
Gln Met Lys Glu Lys Thr Thr Glu Glu Lys Thr Trp Ser Trp Trp Arg
      20      25      30
Lys Ser Lys Arg Thr Arg Asp Thr Glu Gln Lys Pro Ser Ala Glu Thr
      35      40      45
Asp Tyr Arg Gly Pro Ser Val Val Ala Pro Ala Pro Ala Pro Gln Pro
      50      55      60
Thr Thr Pro Pro Val Glu Ala Ala Ser Gln Val Glu Ala Ala Pro Ala
      65      70      75      80
Ala Glu Ala Pro Gln Ala Glu Ala Pro Gln Ala Glu Ala Pro Gln Ala
      85      90      95
Lys Ala Pro Gln Ala Glu Ala Pro Gln Ala Glu Ala Pro Gln Ile Glu
      100      105      110
Ala Pro Lys Ala Glu Ala Pro Gln Ala Glu Pro Ala Thr Thr Glu Ala
      115      120      125
Ala Thr Gln Ala Glu Ala Pro Val Ile Ile Asp Thr Ala Gln Pro Gln
      130      135      140
Pro Ala Glu Asp Glu Ala Lys Ile Val Ala Leu Gly Thr Ala Gly Glu
      145      150      155      160
Glu Glu His Arg Leu Glu Arg Arg Glu Ser Arg Leu Lys Ser Trp Phe
      165      170      175
Lys Gly Arg Val Gly Arg Arg Ser Asn Gly Ala Glu His Glu Ser Leu
      180      185      190
Arg Glu Gly Glu Gly Glu Gly Ala Arg Thr Gly Phe Ala Gly Gly Ala
      195      200      205
Ala Leu Ala Gly Thr Asp Ser Arg Gly Ala Ala Leu Gly Ser His Pro
      210      215      220
Val Thr Gly Asn Asp Leu Ala Thr Val Gln Gln Arg Met Ser Val Asp
      225      230      235      240
Glu Gly Ser Leu Gly Asn Asp Ala Thr Arg Arg Gly Ser Ser Gly Val
      245      250      255
Ala Glu Gln Thr Gly Glu Asn Arg Lys Pro Ser Arg Leu Arg Ser Ser
      260      265      270
Phe Met Lys Ile Val Ser Gly Gly Ser Gln Asp Asn Lys Thr Asn Gly
      275      280      285
Val Ser Lys Pro Ser Asp Asp His Arg Thr Ala Ser Glu Pro Ala Glu
      290      295      300
Ile Gly Val Arg Asn Pro Glu Gly Ser Asn Ala Ser Thr Ala Thr Lys
      305      310      315      320
Glu Glu Leu Arg Glu Ser Ala Ala Glu His Gly Leu Pro Ala Pro Pro
      325      330      335
Ala Ile Gly Lys His Ala Thr Asn Gly Ser Arg Glu Ser Arg Phe Ser
      340      345      350
Glu Asp Leu
      355

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<210> 41605  
 <211> 1061  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41605

```

Ile Leu Leu Leu Arg Pro Ser Ser Gly Leu Ser Asp Val Ser Gly Ala
1      5      10      15
Lys Ala Ala Ile Ser Met Phe Lys Tyr Ser Val Ser Arg Thr Cys Leu
      20      25      30
Ala Asn Glu Ala Tyr Arg Ile His Glu Tyr Asn Thr Ser Phe Thr Ile
      35      40      45
Leu Thr Phe Leu Pro Tyr Tyr Thr Thr Pro Leu Phe Leu Asn Leu Leu
      50      55      60
Ala Ile Leu Pro Glu Asp Leu Thr Pro Thr Phe Lys Val Leu Ile Pro
65      70      75      80
Tyr Lys Lys Ser Ser Ile Asn Pro Pro Arg His Pro Leu Val His Ser
      85      90      95
Ala Thr Thr Asn Lys Pro Phe Leu Ala Ala Leu Asn Ser Tyr Val Leu
      100      105      110
Gln Val Ser Arg Gln Gln Ala His His Ala Leu Leu Ala Phe Trp
      115      120      125
Ala Gly Val Tyr Thr Glu Ala Val Ala Gly Met Leu Asp Ala Ser Arg
      130      135      140
Ser Gly Arg Arg Glu Ile Glu Lys Gln Lys His Glu Asp Ile Val Ile
145      150      155      160
Ser Val Leu Pro Ile Leu Asn Asp Gly Phe Ala Met Lys Asn Val Ser
      165      170      175
Glu Leu Ile Ile Gly Cys Tyr Met Val Ser Val Val Leu Ala Gln Lys
      180      185      190
Ala Ser Leu Gln Asp Lys Val Leu Asp Ser Leu Met Glu Ala Val Ala
      195      200      205
Gly Ser Trp Thr Glu Glu Thr Val Glu Ser Gly Leu Val Cys Leu Ala
      210      215      220
Val Leu Ala Gln Gln Lys Pro Glu Thr Lys Leu Pro Arg Arg Ala Leu
225      230      235      240
Lys Ala Ile Leu Arg Leu Asp Asp Ile Phe Lys Arg Leu Thr Glu Leu
      245      250      255
Ala Thr Gln Tyr Lys Thr Ser His Leu Leu Gly Val Val Ala Gly
      260      265      270
Cys Leu Asp Asp Leu Pro Arg Gln Lys Asp Thr Ala Arg Leu Asp Leu
      275      280      285
Leu Ser Gln Ile Phe Gln Asn Gln Leu Leu Gly Glu Pro Glu Met Ser
      290      295      300
Lys Ala Met Ala Leu Val Leu Glu Ala Thr Ser Ser Val His Lys Asp
305      310      315      320
Gly Ala Met Ser Leu Asp Ala Gln Ala Arg Leu Ala Asp Leu Val Gln
      325      330      335
Val Phe Ser Gln Ser Glu Ser Leu Arg Pro Thr Phe Gln Lys Thr Ile
      340      345      350
Ala Glu Ser Ser Phe Asp Ile Ala Ala Leu Glu His Asn Leu Gln Thr
      355      360      365
Val Ile Asp Thr Ala Pro Ala Pro Arg Thr Val Glu Asp Val Glu Met
      370      375      380
Glu Asp Val Glu Lys Glu Glu Glu Gln Asp His Phe Ser Ser Thr Val
385      390      395      400
Glu Ser Leu Ser Gly Glu Lys Leu Phe Lys Gly Ser Phe Leu Ser Thr
      405      410      415
Gln Ser Ile Pro Leu Phe Glu Lys Leu Ala Gln Ala Phe Thr Leu Ala

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				420					425					430			
Ile	Gly	Ser		Lys	Glu	Lys	Cys	Gln	Thr	Phe	Ser	Asp	Leu	Ala	Ala	Leu	
				435				440					445				
Gly	Lys	Asn	Glu	Ala	Glu	Lys	Ser	Pro	Gln	Tyr	Leu	Ser	Phe	Phe	Ile		
				450			455				460						
Arg	Val	Phe	Ser	Gly	Pro	Tyr	Ser	Met	Gly	Thr	Arg	Val	Thr	Ala	Leu		
465					470					475					480		
Asn	Met	Ile	Thr	Ser	Phe	Leu	Thr	Ser	Thr	Glu	Ser	Thr	Asn	Leu	Asp		
				485					490					495			
Phe	Gln	Ala	Leu	Leu	Pro	Phe	Leu	Leu	Val	Thr	Leu	Thr	Asp	Pro	Ser		
				500				505					510				
Glu	Arg	Val	Arg	Arg	Glu	Ala	Ala	Ala	Ala	Leu	Ala	Ala	Val	Gly	Ser		
				515			520				525						
Leu	Tyr	Lys	Lys	Asn	Arg	Lys	Gly	Glu	Asp	Ile	Trp	Ala	Arg	Asp	Asn		
	530					535					540						
Leu	Tyr	Gly	Gln	Pro	Lys	Asp	Ile	Lys	Trp	Leu	Pro	Thr	Arg	Asp	Ala		
545					550					555					560		
Gln	Lys	Val	Phe	Glu	Arg	Ala	Val	Leu	Pro	Ser	Leu	Glu	Glu	Cys	Ile		
				565					570					575			
Phe	Asp	Ala	Thr	His	Ile	Gly	Lys	Val	Leu	Glu	Asn	Thr	Leu	Arg	Gly		
			580					585					590				
Val	Ser	Val	Asp	Ala	Asn	Ala	Ser	Glu	Leu	Lys	Lys	Pro	Leu	Arg	Leu		
			595				600					605					
Ala	Phe	Phe	Thr	Phe	Leu	Cys	Ser	His	Ala	Ile	Glu	Leu	Pro	Leu	Phe		
	610					615					620						
Thr	Pro	Lys	Leu	Gly	Leu	Leu	Asn	Ile	Leu	Asn	Arg	Ile	Asp	Lys	Ala		
625					630						635				640		
Gly	Gly	Thr	Thr	Arg	Thr	Lys	Glu	Leu	Glu	Pro	Leu	Leu	Lys	Thr	Trp		
				645					650					655			
Arg	Gly	Phe	Ser	Glu	Arg	Glu	Val	Gln	Asp	Ile	Cys	Glu	Lys	Glu	Arg		
			660					665					670				
Val	Pro	Val	Ser	Asp	Val	Glu	Arg	Gln	Met	Val	Ala	Ile	Val	Thr	Pro		
			675				680					685					
Lys	Glu	Lys	Asp	Ser	Ile	Met	Ile	Leu	Leu	Ser	Asn	Val	Ser	Ser	His		
	690					695					700						
Ser	Glu	Ser	Leu	Arg	Pro	Ser	Phe	Ile	Ala	Ala	Val	Phe	Gly	Arg	Ile		
705					710					715					720		
Lys	Asp	Ile	Trp	Ala	Arg	Val	Ala	Glu	Asp	Arg	Gln	Thr	Val	Ala	Ala		
				725					730					735			
Glu	Gln	Leu	Phe	Asp	Ile	Ser	Leu	Gly	Leu	Ser	Asp	Leu	Pro	Leu	Val		
			740					745				</					

## 18427

865                      870                      875                      880  
 Lys Ala Gln Phe Asp Thr Ser Val Ile Arg Ala Asp Leu Val Val Asp  
                                  885                      890                      895  
 Cys Val Arg Thr Thr Glu Ser Pro Gln Val Gln Asn Ala Ala Leu Leu  
                                  900                      905                      910  
 Leu Val Ala Gly Leu Ser Val Ile Ala Pro Glu Leu Val Leu His Ser  
                                  915                      920                      925  
 Val Met Pro Ile Phe Thr Phe Met Gly Ser Ser Val Leu Arg Lys Asp  
                                  930                      935                      940  
 Asp Asp Tyr Ser Val Ser Val Ile Asp Gln Thr Ile Asp Gln Val Val  
 945                      950                      955                      960  
 Pro Ala Leu Ile Gln Ser Leu Arg Asp Gln Lys Arg Asp Val Val Ser  
                                  965                      970                      975  
 Gly Thr Ser Glu Leu Leu Leu Ser Phe Thr Ala Ala Phe Glu His Ile  
                                  980                      985                      990  
 Pro Ser His Arg Arg Leu Arg Leu Phe His Ala Leu Ile Thr Lys Leu  
                                  995                      1000                      1005  
 Gly Thr Gln Asp Phe Leu Phe Ala Val Leu Ala Met Leu Ala Asn Arg  
                                  1010                      1015                      1020  
 Tyr Ala Met Asp Lys Asp Val Leu Val Leu Met Thr Gly Leu Val Ser  
 1025                      1030                      1035                      1040  
 Asp Ala Ser Ala Pro Val Glu Leu Thr Val Arg Val Val Ile Pro Arg  
                                  1045                      1050                      1055  
 Phe Trp Thr Ile Tyr  
                                  1060

&lt;210&gt; 41606

&lt;211&gt; 432

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41606

Gln Val Ser Phe Leu Met Pro Val Leu Leu Ser Ser Leu Pro Tyr Val  
 1                      5                      10                      15  
 Leu Ser Ser Arg Val Ser Gly Leu Phe Thr Asp Ser Lys Gln Thr Tyr  
                                  20                      25                      30  
 Ser Lys Phe Leu Gly Leu Val Ser Asp Ser Leu Lys Pro Lys Pro Gly  
                                  35                      40                      45  
 Ile Ser Gln Val Leu Leu Gly Ile Gly Ser Asp Asp Gly Arg Glu Pro  
                                  50                      55                      60  
 Gln Lys Val Ala Val Asp Leu Leu Arg Asp Leu Ala Tyr Leu Phe Arg  
 65                      70                      75                      80  
 His Cys Ser Leu Lys Val Lys Met Ala Lys Thr Phe Ala Ser Glu Asp  
                                  85                      90                      95  
 Glu Glu Ala Ile Arg Gln Leu Arg Ser Thr Phe Ser Gln Ile Leu Glu  
                                  100                      105                      110  
 Gln Val Leu Thr Ile Gly Asp Ser Val Gln Ser Met Lys Leu Val Ser  
                                  115                      120                      125  
 Gln Ala Asn Gly Asp Val Leu Ala Ala Leu Phe Gly Thr Leu Thr Leu  
                                  130                      135                      140  
 Val Asp Phe Leu Asp Thr Ile Glu Val Leu Leu Glu Arg Pro Asn Asp  
 145                      150                      155                      160  
 Glu Leu Arg Arg Lys Val Leu Arg Leu Leu Glu Gly Arg Leu Arg Gln  
                                  165                      170                      175  
 Asn Pro Glu Arg Asp Ser Ala Ser Gln Ile Arg Val Leu Asp Phe Leu  
                                  180                      185                      190

## 18428

Pro Thr Leu Val Asp Ile Ile Arg Asn Ser Thr Asp Ile Leu Leu Lys  
 195 200 205  
 His Ala Ala Val Ala Cys Ile Asp Arg Ile Ala Glu Lys Tyr Gly Lys  
 210 215 220  
 Lys Asp Pro Ser Arg Val Ile Gly Ala Ala Gln Val Val Ala Ser Glu  
 225 230 235 240  
 Ala Cys Ile Gly Gln Thr Asp Asp Arg Ile Arg Ile Met Gly Val Leu  
 245 250 255  
 Cys Leu Ala Ser Met Ala Glu Thr Leu Gly Gln Val Met Ile Pro Ala  
 260 265 270  
 Leu Pro Glu Ala Leu Ser Arg Ser Leu Ala Leu Leu Glu Leu Ser Leu  
 275 280 285  
 Glu Glu Gly Lys Glu Asn Ser Arg Leu His Asp Ala Val Phe Ser Leu  
 290 295 300  
 Phe Ser Ala Leu Phe Val His Ile Pro Tyr Met Ile Ser Gly Pro His  
 305 310 315 320  
 Leu Asp Lys Ile Leu Leu Ser Phe Lys Ser Ala Asn Ala Glu Glu  
 325 330 335  
 Cys Glu Asp Asp Ser Arg Gln Glu Ala Leu Lys Met Met Ala Arg Lys  
 340 345 350  
 Val Asp Met Ala Ala Thr Leu Gly Ala Val Asp Arg Asn Trp Gln Tyr  
 355 360 365  
 Ala Val Gln Ala Gly Pro Val Ala Thr Lys Glu Thr Leu Glu Val Val  
 370 375 380  
 Ser Leu Ala Val Glu Lys His Pro Lys Ser Ala Thr Gly Lys Asn Ile  
 385 390 395 400  
 Gly Val Leu Ser Ser Ile Leu Phe Lys Ala Phe Asp Leu Arg Arg Glu  
 405 410 415  
 Gln Leu Ala Leu Gly Ala Asn Ala Thr Phe Asp Ala Ala Asp Val Asp  
 420 425 430

&lt;210&gt; 41607

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41607

Ser Asp Cys Pro Ile Lys Tyr Lys Ile Leu Ser Thr Met Ala Ser Ser  
 1 5 10 15  
 Leu Ala Ala Gln Leu Ser Gln Ile Ala Ala Lys Ser Thr Asn Gln Leu  
 20 25 30  
 Asp Leu Lys Ala Gln Arg Ile Ala His Ser Gln Ser Leu Ile Phe Asp  
 35 40 45  
 Arg Lys Val Ala Ser Ile Gln Asp Phe Asp Thr Val Tyr Gln Ile Cys  
 50 55 60  
 Tyr Glu Gly Phe Gln Glu Leu Cys Gln Leu Asp Ser Arg Phe Thr Ala  
 65 70 75 80  
 Phe Glu Arg Thr Ile Phe Ser Glu Gln Ser Lys Ala Glu Asp Arg Thr  
 85 90 95  
 Gln Leu Thr Ala Ala Gln Asn Lys Glu Leu Asp Val Ala Leu Glu Ala  
 100 105 110  
 Phe Leu Ala Leu Val Gly Gly Arg Leu Leu Leu Asn Pro Ala Ile Lys  
 115 120 125  
 Ala Val Glu Trp Leu Val Arg Arg Phe Arg Cys Glu Ser Gly Asn Leu  
 130 135 140  
 Asn Val Gln Val Leu Gly Phe Ser Asp Val Phe Gly

## 18429

145

150

155

&lt;210&gt; 41608

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41608

Cys Ser Pro Lys Glu Lys Lys Ser Ile Pro Arg Phe Ala Ser Phe Lys  
 1 5 10 15  
 Pro Pro Pro Ala Pro Pro Pro Lys Ala Asp Arg Pro Ser Asp Arg Arg  
 20 25 30  
 Ser His Glu Leu Ala His Arg Asp Glu Lys Ser Lys His His Ser Arg  
 35 40 45  
 His Arg Ser His Arg Asp Arg Ser Arg Ser Arg Glu Arg Arg Arg Glu  
 50 55 60  
 Arg Lys Glu His His Pro Thr Arg Arg Asp Ala Glu Gln Arg Asp Leu  
 65 70 75 80  
 Glu Pro Thr Arg Glu Pro Val Arg Ala Pro Lys Thr Ile Val Lys Glu  
 85 90 95  
 Gly Glu Asp Glu Ala Ser Asp Leu Tyr Val Ile Asp Arg Lys Gly Asp  
 100 105 110  
 Lys Tyr Asn Leu Ile Tyr Gly Thr Leu His Arg Tyr Asn Val Pro Leu  
 115 120 125  
 Tyr His Arg Val Arg Arg Gly Asn Val Leu Gly Leu Pro Thr Ser Tyr  
 130 135 140  
 Arg Ile Asp Arg  
 145

&lt;210&gt; 41609

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41609

Glu Gly Arg Gly Ser Val Gly Ser Ala Phe Glu Arg Pro Glu Glu Glu  
 1 5 10 15  
 Phe Thr Pro Gly Leu Ser Thr Ser Ser Val Leu Arg Arg Ile Glu Leu  
 20 25 30  
 Ser Val Leu Phe Leu Leu Phe Phe Ser Pro Gln Ile Ile Leu Ile Ile  
 35 40 45  
 Thr Val Ile Ile Ala Arg Gln Ala Arg Ala Leu Thr Ser Leu Ser Cys  
 50 55 60  
 Ser Phe Leu Leu Ser Pro His Ser Ser Phe Phe Ser Pro Leu Ser Leu  
 65 70 75 80  
 Asp His Val Ser Ser Gln Leu Ser Phe Tyr Leu Ser Ser Ser Pro Leu  
 85 90 95  
 Ile Gly Asn Ala Leu Ser Leu Tyr Leu Leu Ala Ser Thr Asp Arg Tyr  
 100 105 110  
 Phe Ser Ser Pro Asp Ile Leu Asp Thr Ile Phe Gly Asn Gln Tyr His  
 115 120 125

&lt;210&gt; 41610

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41610

```

Arg Tyr Leu Met Met Ala Ser Gln Val Gln Ser Ser Asp Val Asn Gly
1          5          10          15
Gly Ala Lys Ser Leu Ala Ala Met Leu Glu Glu Glu His Ala Arg Asn
          20          25          30
Glu Ala His Lys Val Thr Val Glu Asp Thr Val Asp Glu Glu Asp Leu
          35          40          45
Leu His Pro Pro Pro Ser Leu Gly Lys Asp Gln Gln Thr Val Pro Ala
          50          55          60
Gln Pro Thr Ala Ala Ile Glu Glu Ala Val Ala Thr Thr Pro Ser Ala
          65          70          75          80
Ser Asn Ala Ala Pro Lys Arg Ser Pro Ala Phe Asp Val Arg Ser Glu
          85          90          95
Glu Leu Phe Pro Ala Leu Gly Ser Gly Pro Lys Pro Lys Ala Pro Ala
          100          105          110
Ala Ala Thr Trp Gly Ala Arg Pro Ser Ala Ala Ala Ala Leu Ala Asn
          115          120          125
Gly Ala Ala Gly Arg Pro Gln Ser Ser Met Phe Val Leu Ser Thr Phe
          130          135          140
Leu Tyr Cys Gly Leu Leu
          145          150

```

&lt;210&gt; 41611

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (325)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41611

```

Gln Ser Val Arg Ile Pro Ile Pro Thr Ser Ala Arg Ala His Ile Ile
1          5          10          15
Gly Arg Gln Gly Ala Ile Val Gln Asp Ile Gln Gln Arg Thr Gly Ala
          20          25          30
Arg Val Gln Val Pro Arg Ala Asp Asp Ser Ala Ala Lys Asp Asp Glu
          35          40          45
Asp Asp Asn Asp Thr Ile Asp Val Leu Ile Glu Gly Asp Ala Val Ala
          50          55          60
Ala Glu Met Ala Arg Arg Glu Ile Glu Ala Ile Val Lys Glu Arg Ala
          65          70          75          80
Ser Asn Met Ser Leu Arg Leu Lys Ser Ile Pro Ala Glu Phe Phe Pro
          85          90          95
Phe Ile Ala Gly Ala His Asn Ala Asn Leu Lys Ala Ile Glu Glu Arg
          100          105          110
Thr Lys Ala Gln Val His Val Pro Arg Tyr Asp Thr Trp Gln Ser Gln
          115          120          125
Pro Pro Pro Gln Glu Ala Glu Pro Gly Arg Val Gln Phe Val Pro Ala
          130          135          140
Pro Asp Lys His Ile Gln Ile Thr Gly Glu Arg Thr Ala Ala Gln Glu
          145          150          155          160
Ala Arg Ala Glu Ile Glu Arg Leu Ala Ala Asp Leu Gln Arg Arg Leu
          165          170          175

```



## 18431

```

Thr Leu Arg Gln Leu Ala Ile Asn Arg Gly Gln His Gln Phe Ile Leu
      180                      185                      190
Gly Asp Gly Ala Asn Ala Leu His Asp Phe Leu Ala Asp Thr Gly Cys
      195                      200                      205
Ala Ile Val Leu Pro Pro Ala Ser Asp Asp Ser Glu Phe Leu Thr Ile
      210                      215                      220
Thr Gly Pro Gln Asp Cys Ile Glu Ala Gly Ile Asn Arg Ala Met Glu
225                      230                      235                      240
Leu Ala Thr Ser Met Gln Met Ala Ser Ile Asp Leu Ser Arg Gln His
      245                      250                      255
Pro Asn Ala Pro Ser Gly Pro His Ala His Ala Arg Ala Leu Thr Arg
      260                      265                      270
Tyr Leu Gln Gln Arg Gln Ile Ile Arg Gln Leu Glu Gln Met Tyr Asp
      275                      280                      285
Ala Arg Ile Ala Leu Pro Pro Ser Ala Asp Gly Pro Val Thr Trp Glu
      290                      295                      300
Val Tyr Ser Arg Asp Gly Lys Asn Thr Ile Arg Ala Arg Ser Asp Ile
305                      310                      315                      320
Met Asn Leu Val Xaa Ala His Pro Pro Ala Arg Leu Arg Tyr Val Ser
      325                      330                      335
Val Asp Pro Tyr Tyr His Pro Tyr Leu Glu Ser His Gly Leu Gly Lys
      340                      345                      350
Leu Arg Asn Glu Tyr Gly Val His Leu Leu Val Pro Asp Glu Leu Asp
      355                      360                      365
Asn Ser Asp Val Val Leu Val Gln Glu Gly Thr Ser Ala Ala Asn Ser
      370                      375                      380
Leu Pro Glu Ile Pro Arg Gln Arg Pro Ser Pro Ala Glu Val Gly Cys
385                      390                      395                      400
Leu

```

&lt;210&gt; 41612

&lt;211&gt; 241

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41612

```

Gly Trp Cys Ala Thr Met Gly Pro Gly Thr Gly Leu Arg Gln Val Ala
1           5           10           15
Ile Ser Arg Tyr Ser Leu Gly Phe Tyr Pro Ser Ser Ile Ile Ala Ala
      20           25           30
Leu Asn Val Ile Glu Gln Leu Gly Trp Ala Ser Val Asn Cys Ile Thr
      35           40           45
Gly Gly Leu Ala Leu Ser Ala Val Ser Asp Gly Arg Val Ser Ile Ala
      50           55           60
Val Gly Val Val Ile Val Ala Cys Val Ser Phe Leu Phe Ser Phe Val
65           70           75           80
Gly Leu Arg Gly Val Leu Met Tyr Glu Gln Tyr Ala Trp Ile Leu Phe
      85           90           95
Phe Ile Ile Phe Met Ile Ile Tyr Gly Glu Ser Ala His Arg Ala Asn
      100          105          110
Leu Ala Ala Pro Ala Thr Val Thr Gly Leu Thr Arg Ser Gly Asn Ala
      115          120          125
Leu Thr Leu Ile Gly Val Val Tyr Gly Ser Ser Ala Ser Trp Ser Ser
      130          135          140
Ile Val Ser Asp Phe Tyr Val His Tyr Pro Ala Asn Thr Pro Lys Ile

```

## 18432

```

145          150          155          160
Lys Ile Phe Leu Tyr Thr Thr Leu Gly Ile Thr Ile Pro Thr Cys Ile
          165          170          175
Gly Met Leu Leu Gly Ala Cys Ile Ser Ser Ala Leu Asp Thr Asn Pro
          180          185          190
Glu Trp Ala Ala Ala Tyr Glu Asn Gly Ile Gly Glu Ile Leu Lys Thr
          195          200          205
Ile Ile Tyr Pro Arg Gly Phe Ala Arg Phe Leu Leu Val Leu Leu Val
          210          215          220
Leu Ser Gly Ser Met Cys Tyr Phe Phe Arg Glu Leu Tyr Ser Ala Pro
225          230          235          240
Ala

```

```

<210> 41613
<211> 168
<212> PRT
<213> A.fumigatus

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```

<400> 41613
Tyr Ser Ser Leu Val Gly Val Asn Cys Ile Ala Ile Tyr Ser Gly Ala
1          5          10          15
Leu Ser Ala Gln Leu Leu Ala Lys Pro Phe Ala Lys Leu Pro Arg Ala
          20          25          30
Val Trp Ser Phe Leu Val Phe Val Cys Ile Leu Leu Leu Gly Ile Ala
          35          40          45
Gly Arg Asp His Leu Leu Asp Val Leu Glu Asn Phe Leu Ser Leu Leu
          50          55          60
Gly Tyr Trp Asn Thr Ser Phe Phe Val Ile Leu Phe Thr Glu His Tyr
          65          70          75          80
Leu Phe Arg Gly Gly Ser Leu Ser Asn Tyr Asp Leu Asp Ala Trp Asn
          85          90          95
Thr Pro Ser Arg Met Pro Val Gly Tyr Ala Gly Leu Thr Ala Phe Leu
          100          105          110
Cys Gly Ala Ala Gly Trp Ile Val Gly Met Val Glu Thr Tyr Tyr Val
          115          120          125
Gly Ala Ile Ala Lys Met Ile Gly Gln Asp Gly Gly Asp Val Ala Asn
          130          135          140
Glu Leu Ala Phe Val Phe Thr Ser Val Thr Tyr Ile Pro Leu Arg Lys
145          150          155          160
Leu Glu Leu Lys Tyr Val Gly Arg
          165

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<210> 41614
<211> 85
<212> PRT
<213> A.fumigatus

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```

<400> 41614
Ser Ser His Ser Ala Ala Val Ser Glu Ala Ile His Ser Asn Gln Asp
1          5          10          15
Arg Ser Met Asp Val Pro Lys Asp Arg Leu Cys His Lys Ser Ala Ala
          20          25          30
Arg Leu Ile Gln Ile Val Leu Ser Leu Ser Val Phe Tyr Phe Ser Phe
          35          40          45
Ala Gly Lys Pro Gln Ser Leu Lys Gly Leu Ser Gln Thr Leu Lys Ser

```

Variable	Mean	SD	Median	Mode	Range	Skewness	Kurtosis	Shapiro-Wilk	Normality
Age	35.2	12.5	32.0	30.0	20-55	0.15	2.10	0.98	Normal
Gender	1.2	0.4	1.0	1.0	1-2	0.05	0.10	0.99	Normal
Education	12.5	2.0	12.0	12.0	10-15	0.10	1.80	0.97	Normal
Income	1500	500	1200	1000	500-2500	0.20	2.50	0.95	Normal
Marital Status	1.5	0.5	1.0	1.0	1-2	0.05	0.10	0.99	Normal
Occupation	2.5	1.0	2.0	2.0	1-4	0.10	1.80	0.97	Normal
Health Status	1.8	0.8	1.5	1.5	1-3	0.15	2.10	0.98	Normal
Stress Level	3.0	1.5	2.5	2.0	1-5	0.20	2.50	0.95	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Resilience	3.5	1.2	3.0	3.0	2-5	0.15	2.10	0.98	Normal
Emotional Stability	4.5	0.8	4.5	4.5	4-5	0.05	0.10	0.99	Normal
Self-Esteem	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Resilience	3.5	1.2	3.0	3.0	2-5	0.15	2.10	0.98	Normal
Emotional Stability	4.5	0.8	4.5	4.5	4-5	0.05	0.10	0.99	Normal
Self-Esteem	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Resilience	3.5	1.2	3.0	3.0	2-5	0.15	2.10	0.98	Normal
Emotional Stability	4.5	0.8	4.5	4.5	4-5	0.05	0.10	0.99	Normal
Self-Esteem	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Resilience	3.5	1.2	3.0	3.0	2-5	0.15	2.10	0.98	Normal
Emotional Stability	4.5	0.8	4.5	4.5	4-5	0.05	0.10	0.99	Normal
Self-Esteem	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Resilience	3.5	1.2	3.0	3.0	2-5	0.15	2.10	0.98	Normal
Emotional Stability	4.5	0.8	4.5	4.5	4-5	0.05	0.10	0.99	Normal
Self-Esteem	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Resilience	3.5	1.2	3.0	3.0	2-5	0.15	2.10	0.98	Normal
Emotional Stability	4.5	0.8	4.5	4.5	4-5	0.05	0.10	0.99	Normal
Self-Esteem	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Resilience	3.5	1.2	3.0	3.0	2-5	0.15	2.10	0.98	Normal
Emotional Stability	4.5	0.8	4.5	4.5	4-5	0.05	0.10	0.99	Normal
Self-Esteem	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Resilience	3.5	1.2	3.0	3.0	2-5	0.15	2.10	0.98	Normal
Emotional Stability	4.5	0.8	4.5	4.5	4-5	0.05	0.10	0.99	Normal
Self-Esteem	4.0	1.0	4.0	4.0	3-5	0.05	0.10	0.99	Normal
Life Satisfaction	4.0	1.0	4.0	4.0	3-5	0.05			

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<210> 41615
<211> 77
<212> PRT
<213> A.fumigatus
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```
<210> 41616
<211> 109
<212> PRT
<213> A.fumigatus
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```
<210> 41617
<211> 98
<212> PRT
<213> A.fumigatus
```

```

<400> 41617
Ser Thr Leu Ala Thr Leu Val Met Ala Phe Gln Pro Pro Pro Thr Asp
1          5          10          15
Val Ser Val Ile Val Thr Thr Pro Gly Thr Ala Thr Gly Ser Glu Pro
20          25          30
Arg Phe Leu Thr Glu Arg Arg Val Thr Pro Thr Trp Thr Val Leu Gln
35          40          45

```

## 18434

Leu Lys Ser Lys Leu Glu Thr Met Thr Gly Ile Pro Thr Asn Cys Gln  
 50 55 60  
 Arg Leu Leu Leu Lys Ala Pro Gly Arg Ala Asp Gln Cys Val Asp Gly  
 65 70 75 80  
 Asp Asp Ser Ile Ile Gly Asn Trp Gly Leu Thr Lys Gly Cys Glu Ile  
 85 90 95  
 Glu Val

<210> 41618  
 <211> 123  
 <212> PRT  
 <213> A.fumigatus

<400> 41618  
 Arg Leu Phe Arg Leu Phe Thr Asp Arg Gly Met Ala Gly Ile Ala Val  
 1 5 10 15  
 Ser Arg Arg Ala Ile Ile Leu Pro Ser Ser Pro Pro His Val Arg Arg  
 20 25 30  
 Gly Thr Ile Arg Tyr Val Gly Pro Val Pro Thr Ile Pro Phe Pro Gly  
 35 40 45  
 Val Asp Val Thr Ser Glu Glu Thr Ser Asp Leu Gly Pro Gln Pro Ile  
 50 55 60  
 Trp Val Gly Ile Glu Leu Asp Glu Pro Thr Gly Lys Asn Asp Gly Ser  
 65 70 75 80  
 Val Gly Gly Arg Arg Tyr Phe Thr Cys Pro Asn Lys Thr Gly Val Phe  
 85 90 95  
 Val Lys Pro Glu Lys Val Glu Val Gly Asp Phe Pro Pro Leu Asp Leu  
 100 105 110  
 Phe Asp Asp Leu Asp Asp Glu Met Glu Glu Ile  
 115 120

<210> 41619  
 <211> 382  
 <212> PRT  
 <213> A.fumigatus

<400> 41619  
 Ile Asn Leu Pro Val Leu Glu Leu Ile Ser Ser Leu Asp Phe Val Pro  
 1 5 10 15  
 Ala Ala Asn Met Gly Glu Ser Gly Leu Ser Val Ala Gly Thr Pro Asp  
 20 25 30  
 Ala Trp Thr Ser Ala Gly Ser Phe Ile Pro Pro Ser Ile Asp Arg Ala  
 35 40 45  
 Arg Leu Leu Ser Gly Glu Ser Tyr Ala Tyr Tyr Ser Pro Phe Pro Leu  
 50 55 60  
 Ala Ser Thr Gly Arg Ser Ser Gln Val Thr Gly Asp Asn His Thr Ile  
 65 70 75 80  
 Thr Ala Asp Phe Ser Thr Pro Ser Thr Ser Ser Ser Pro Ser Tyr Phe  
 85 90 95  
 Val Leu Gly Val Asp Glu Ala Gly Arg Gly Pro Val Leu Gly Pro Met  
 100 105 110  
 Val Tyr Ser Ala Phe Tyr Ile Pro His Thr Leu His His Ser Leu Leu  
 115 120 125  
 Ala Arg Asp Tyr Ser Phe Asn Asp Ser Lys Val Leu Thr Pro Gly Val  
 130 135 140

## 18435

Arg Ala Asn Leu Met Arg Leu Leu Cys Thr Ala Gly Asn Pro Leu His  
 145 150 155 160  
 Ala Ser Cys Gly Trp Ala Thr Lys Val Leu Ser Ala Arg Asp Ile Ser  
 165 170 175  
 Ala Gly Met Met Arg Pro Thr Ser Gly Ala Tyr Asn Leu Asn Ala Gln  
 180 185 190  
 Ala Met Asp Ala Thr Val Glu Ile Ile Arg Gly Ile Val Glu Glu Arg  
 195 200 205  
 Arg Val Asp Ile Arg Glu Val Tyr Ile Asp Thr Ile Gly Asn Pro Ala  
 210 215 220  
 Thr Tyr Gln Gln Lys Leu Glu Arg Ile Phe Pro Thr Leu Lys Ile Thr  
 225 230 235 240  
 Val Ala Lys Lys Ala Asp Ala Leu Tyr Pro Cys Val Ser Ala Ala Ser  
 245 250 255  
 Val Val Ala Lys Val Thr Arg Asp Met Ala Leu Glu Phe Cys His Glu  
 260 265 270  
 Ala Val Tyr Gly Leu Gln Arg Tyr Glu Ala Pro Ser Met Glu Val Ala  
 275 280 285  
 Thr Asp Ser Trp Gly Ser Gly Tyr Pro Ser Asp Ser Lys Cys Val Ser  
 290 295 300  
 Trp Leu Arg Asn His Met Asp Pro Ile Phe Gly Trp Gly Asn Glu Cys  
 305 310 315 320  
 Arg Phe Ser Trp Gly Thr Ala Lys Glu Met Leu Glu Leu Lys Gly Gly  
 325 330 335  
 Thr Arg Val Asp Trp Pro Val Glu Glu Glu Gly Ala Ala Pro Ile Lys  
 340 345 350  
 Asp Phe Leu Leu Thr Thr Ala Arg Asn Ala Lys Arg Thr Glu Gln Asp  
 355 360 365  
 Glu Leu Arg Glu Trp Phe Gly Arg Arg Ser Thr Glu Val Leu  
 370 375 380

<210> 41620  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 41620  
 Ala Val His Ser Gly Val Gln Leu Leu Ser Leu Tyr His Asp Ser Phe  
 1 5 10 15  
 Val Ser Pro Gly His Cys Glu Thr Ser Phe Asn Ser Ser Ala Ala Gly  
 20 25 30  
 Ser Asn Thr Ser Phe Ser Ile Tyr Lys Ile Leu Asp Ile Ser Phe Gly  
 35 40 45  
 Ser Leu Ser Ser Gly Gly Ser Tyr Ala Ser Asp Gly Thr Ile His  
 50 55 60

<210> 41621  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<400> 41621  
 Ser Trp Glu Val Ser Asn Ala Gly Ala Tyr Leu Leu Arg Asn Pro Pro  
 1 5 10 15  
 Ser Phe Arg Gln Gly Asn Pro Asp His Gly Thr Gly Cys Arg Arg Thr  
 20 25 30

## 18436

Gly Val Thr Leu Lys Glu Gly Lys Arg Asp Glu His Gly Met Glu Glu  
 35 40 45  
 Ile Asp Gly Ile Phe Ser Ser Pro Glu Lys Ser Pro Glu Ala Tyr Gly  
 50 55 60  
 Asn Asn Thr Thr Ile Gly Ser Asp Gly Met Ser Met Asp Glu Gly Val  
 65 70 75 80

<210> 41622

<211> 428

<212> PRT

<213> A.fumigatus

<400> 41622

Ser Thr Ser Ser Asp Leu Ser Pro Thr Met Leu Ile Leu Cys Leu Val  
 1 5 10 15  
 Thr Gly Asn Gly Leu Gly Pro Ala Asp Phe Leu Gly Gly Thr Asn Gly  
 20 25 30  
 Gly Arg Ala Ser Phe Leu Pro Pro Val Ala Arg Ser Pro Met Lys  
 35 40 45  
 Ser Gly Leu Ser Gly Ser Pro Arg Arg Thr Pro Gly Leu Arg Ser Ser  
 50 55 60  
 Ala Ser Pro Gln Arg Asp Ile Leu Ser Ser Ser Pro Ser Asp Gly Lys  
 65 70 75 80  
 Gly Leu Gly Ser Ala Lys Gly Glu Thr Arg Arg Asp Val Ser Pro Leu  
 85 90 95  
 Thr Asn Arg Ser Ile Asn Ala Pro Ser Leu Asn His Val Asn Gly Leu  
 100 105 110  
 Arg Asn Asn Lys Gly Ile Asn Lys Thr Ala Asp Thr Thr Val Thr Val  
 115 120 125  
 Asp Phe Ser Asp Ser Asp Ala Asn Ser Gln Met Asn Gly Asp Glu Asn  
 130 135 140  
 Ala Asn Ala Phe Glu His Met Arg Asn Asp Tyr Asp Asp Ile Thr Asp  
 145 150 155 160  
 Ala Gly Asp Asp Thr Leu Ala Glu Asp Gln Gln Asp Asp Ser Glu Arg  
 165 170 175  
 Val Asn Arg Val Asp Ile Gly Ile Ser Ser Tyr Thr Ala Ala Gly Ser  
 180 185 190  
 Arg Lys Thr Glu Arg Ser Arg Ile Ala Pro Lys Thr Lys Lys Leu Ala  
 195 200 205  
 Gln Thr Glu Lys Thr Gly Ser Gln Asp Val Thr Gln Lys Ser Glu Thr  
 210 215 220  
 Ser Glu Gln Gly Asn Val Gln Lys Arg Lys Arg Pro Gly Arg Pro Pro  
 225 230 235 240  
 Lys Ser Gln Lys Met Asn Asn Asp Glu Asp Asp Thr Val Gly Gln Arg  
 245 250 255  
 Pro Ser Lys Lys Ser Lys Thr Ala Ser Gln Thr Gly Gln Gly Leu Lys  
 260 265 270  
 Ser Ser Gly Asn Pro Met Leu Asp Lys Val Val Glu Asn Tyr Val Asn  
 275 280 285  
 Arg Thr Gly Pro Leu Lys Gly Arg Ser Leu Tyr Ile Leu Lys Arg Glu  
 290 295 300  
 Ile Pro Thr Asp Gly Ser Ala Thr His Thr Arg Ser Gly Arg Val Ser  
 305 310 315 320  
 Val Arg Pro Leu Ala Tyr Trp Lys Asn Glu Arg Cys Val Tyr Gly Asp  
 325 330 335  
 Gly Glu Ala Ala Glu Gly His Arg Tyr Pro Leu Ser Thr Ile Lys Glu

## 18437

```

          340          345          350
Ile Ile Arg Thr Glu Glu Leu Glu Pro Glu Lys Arg Lys Val Ser Lys
          355          360          365
Arg Arg Ser Ser Lys Lys Ser Lys Ser Arg Lys Gly Arg Asp Asp Asp
          370          375          380
Ser Asp Asn Glu Asp Asp Asp Tyr Val Asp Pro Trp Glu Lys Glu Gly
385          390          395          400
Gly Val Leu His Gly Tyr Val Arg Lys Trp Asp Pro Asp Thr Gln Ala
          405          410          415
Gly Ser Ile Glu Glu Glu Val Leu Gly Lys Tyr Leu
          420          425

```

&lt;210&gt; 41623

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (14)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41623

```

Ser Ile Leu Ala Asn Ile His Met Leu Thr Ile Phe Phe Xaa Glu Gln
1          5          10          15
Ser Ile Leu Ala Phe Ser Ser Phe Arg Ser Ile Met Ile Ala Ser Ser
          20          25          30
Pro Arg Val Ile Ala Arg Leu Pro Ser Thr Val Pro Arg Pro Ala Pro
          35          40          45
Thr Pro His Ser Arg Tyr Thr Lys Tyr Trp Ile Ser His Ser Ala Leu
          50          55          60
Tyr His Gln Val Ala Leu Thr Leu Gln Met Val Arg Tyr Thr Glu Leu
65          70          75          80
Leu Trp Glu Met Ile Ala Arg Arg Arg Gly Glu Lys Val Arg Trp Arg
          85          90          95
Val Val Val Leu Ile Glu Ile Ile Lys Ala Thr Cys Arg Leu Leu Leu
          100          105          110
Leu Arg Leu Thr Asn Ser Arg Pro Leu Val Ser Pro Pro Leu Pro Glu
          115          120          125
Arg Glu Val Asp Pro Arg Ser Thr Glu Glu Glu Ala Ser Asp Trp Asn
          130          135          140
Gly Met Gln Thr Pro Val Ser Glu Arg Ser Ala Asp Leu Ser Trp Thr
145          150          155          160
Met Pro Arg Thr Gly Leu Ser Leu Pro Ser Leu Pro Asp Ala Asn Asp
          165          170          175
Ile Ser Asn Phe Leu Ile Ser Lys Val Leu Thr Ala Asp Asp Ile Lys
          180          185          190
Pro Pro Lys Ser Leu Leu His Arg Val Ser Gly Gln Gly Gln Leu Ala
          195          200          205
Glu Val Leu His Ile Leu Arg Pro Val Ile Tyr Ala Leu Ala Leu Gln
210          215          220
Arg Trp Arg Gln Asp Lys Arg Ser Trp Arg Pro Trp Leu Ile Gly Phe
225          230          235          240
Ala Met Glu Tyr Gly Cys Arg Gln Leu Ala Lys Ser Asp Phe Arg Glu
          245          250          255
Arg Val Ala Gly Gly Leu Arg Gly Leu Thr Gly Leu Glu Arg Glu Glu

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## 18438

260 265 270  
 Leu Arg Lys Arg Gly Trp Ala Met Gly Trp Trp Leu Met Arg Ser Ala  
 275 280 285  
 Phe Tyr Glu Asn Ile Thr Lys Tyr Ala Ile Pro Gly Leu Ser Phe Gly  
 290 295 300  
 Val Lys Glu Thr Thr Ser  
 305 310

<210> 41624  
 <211> 111  
 <212> PRT  
 <213> A.fumigatus

<400> 41624  
 Pro Arg Val Ile Val Asp Ile Ala Tyr Ala Pro Ser Gly Ile Glu Thr  
 1 5 10 15  
 Arg Asp Val Lys Asp Ser Thr Phe Arg Phe Ala Lys Leu Leu Ser Ser  
 20 25 30  
 Pro Phe Ile Gly Ser Gly Ile Val Glu Leu Pro Pro Gly Gly Val Lys  
 35 40 45  
 Lys Pro Lys Asn Ser Lys Lys Met His Met Val Phe Tyr Val Cys His  
 50 55 60  
 Gly Arg Val Gln Val Asp Ile Ser Gly Val Gln Phe Ser Ala Gly Lys  
 65 70 75 80  
 Gly Cys Val Phe Gln Val Pro Arg Gly Lys Glu Pro Leu Gln Gly Val  
 85 90 95  
 Leu Ala Leu Cys Leu Ala Pro Leu Gln Phe Ile Ala His Ala Asp  
 100 105 110

<210> 41625  
 <211> 115  
 <212> PRT  
 <213> A.fumigatus

<400> 41625  
 Gly Cys His His Cys Ala Glu Asp Ser Gly Ile Gly Thr Tyr Ala Lys  
 1 5 10 15  
 Ser Gln Asn Leu Asp Gly Asn Ala Ser Ser Glu Gln Gly Gln Pro Thr  
 20 25 30  
 Ser Ala Val Leu Pro His Leu Gly Asn Leu Leu His Leu Thr Thr Gly  
 35 40 45  
 Lys Gly Lys Leu Gly Val Thr Asp Leu Phe Val Ser Phe Thr Tyr Leu  
 50 55 60  
 Gln Ser Ser Glu Leu Ala Lys Ile Ile Val Thr Val Ser Arg Ala His  
 65 70 75 80  
 Asp Asp Gly Lys Arg Ala Gly Ile Pro Leu Val Lys Ile Asp Leu Ile  
 85 90 95  
 Ile Ile Ser Leu His His Pro Tyr Trp Arg Gly Glu Ser Ala Thr Ala  
 100 105 110  
 Pro Met Asp  
 115

<210> 41626  
 <211> 439  
 <212> PRT  
 <213> A.fumigatus



&lt;400&gt; 41626

```

Pro Leu Leu Val Val Leu Gln Thr Arg His Asp Pro Gly Leu His Arg
1          5          10          15
Gly Arg Arg Thr Tyr Val Ser Asp Cys Pro Leu Ser Ile Ile Gly His
20          25          30
Leu Thr Cys Ser Ser Ser Thr Arg Leu Pro Phe Ser Arg Trp Gly Gln
35          40          45
Cys Pro Pro Arg Ala Gly Ile Gly Arg Leu Asp Ala Val Tyr Gly Ser
50          55          60
Ala Asp His Leu Trp Leu Leu Leu Ala Arg Leu Thr Asp Phe Gly Tyr
65          70          75          80
Arg Asp Arg Lys Arg Lys Leu His Val Ala Arg Thr Thr Gly Gln Asp
85          90          95
Trp Arg Pro Gly Pro Ser Leu His Lys Phe Met Ser Arg Phe Ala Lys
100          105          110
Gly Ser Ala Thr Val Pro Arg Gly Pro Pro Pro Gly Ser Ala Gln Asn
115          120          125
Arg Gly Pro Glu Pro Asn Arg Gln Ser Pro Val Asp Gly Pro Ser Ala
130          135          140
Gly Arg Glu Asn Ser Pro Pro Met Tyr Gly Met Val Pro Pro Arg Gly
145          150          155          160
Pro Thr Arg Leu Pro Ser Ala Phe Ala Ser Thr Ala His Arg Ser Leu
165          170          175
Ser Pro Gly Lys Asp Glu Glu Gly Asp Val Met Ser Tyr Lys Asp Ala
180          185          190
Glu Ser Glu Trp Glu Asp Ile Arg Ala Ala Phe Asp Thr Phe Ala Gly
195          200          205
Ala Leu Gly Pro Asp Phe Leu Pro Leu Pro Ala Asp Thr Ile Pro Pro
210          215          220
Ile Ala Thr Pro Phe Gly Pro Ala Leu Gln Tyr Arg Thr His Thr Val
225          230          235          240
Ala Val Leu Trp Gly Phe Tyr Tyr Ala Gly Arg Ile Leu Leu His Arg
245          250          255
Leu His Pro Ser Met Pro Pro Ala Met Met Val Ala Ala Gly Val Ala
260          265          270
Ala Pro Thr Thr Ala Asp Tyr Ala Gln Ile Ile Gly Lys Val Ala Ala
275          280          285
Gly Ile Tyr Phe Pro Gln Trp Phe Asn Val Glu Ala Gly Lys Leu Ser
290          295          300
Pro Thr Leu Gly Ala Cys Leu Ile Glu Met Thr Val Pro Ile Phe Phe
305          310          315          320
Ala Ala Val Gln Phe Val Asp Ala Ala Gln Arg Ser Trp Thr Ile Ser
325          330          335
Lys Leu Arg Asp Val Ser Arg Leu Thr Gly Trp Lys Ser Ser Glu Ala
340          345          350
Ile Ala Leu Gly Cys Glu Asn Ala Trp Ala Val Ala Ala Lys Gln Gly
355          360          365
Arg Gly Pro Pro Tyr Glu Arg Thr Gln Glu Asn Leu Arg Lys Arg Pro
370          375          380
Lys Glu Asp Pro Ser Pro Asn Glu Gly Val Ser Glu Glu His His Ala
385          390          395          400
Gly Val Asn Thr Glu Arg Arg Leu Val Thr Ile Ser Lys Ser Met His
405          410          415
Val His Trp Ala Met Gly Leu Leu Ser Leu Glu Asp Asp Val Leu Ile
420          425          430

```

Met Glu Thr Asp Asp Arg Arg  
435

<210> 41627

<211> 224

<212> PRT

<213> A.fumigatus

<400> 41627

```

Pro Phe Leu Leu Tyr Ser Ser Gln Tyr Ser Asn Glu Ala Tyr Asp Tyr
1      5      10      15
Pro Pro Asn Ile Arg Glu Ser Phe Asn Asp Leu Gly Arg Thr Ile Ser
      20      25      30
Glu Lys Val Gln Leu Leu Ser Gln Ala Ser Ser Pro Ala Glu Ala Gln
      35      40      45
Ala Ala Leu Val Ala Pro Pro Ser Ala Lys Pro Gln Pro Lys Thr Phe
      50      55      60
Asn His Ala Ile Ala Arg Ala Ser Leu Ala Gly Ser Gln Thr Leu Ala
65      70      75      80
Gln Val His Pro Gly Glu Asp Pro Leu Ala Thr Ala Leu Glu Lys Tyr
      85      90      95
Ala Leu Ala Ser Glu Lys Val Gly Glu Ala Arg Leu Ala Gln Asp Ala
      100     105     110
Gln Ile Gln Ser Arg Phe Leu Ala Gly Trp Asn Thr Thr Leu Asn Thr
      115     120     125
Asn Leu Met Phe Ala Ala Lys Ala Arg Lys Asn Val Glu Asn Ala Arg
      130     135     140
Leu Met Leu Asp Ser Ile Lys Ala Arg Arg Lys Ala Ala Ala Gly Gly
145     150     155     160
Asp Leu Asp Asn Leu Ser Glu Glu Ala Arg Ala Glu Ile Glu Gln Ala
      165     170     175
Glu Asp Glu Phe Val Gly Gln Thr Glu Glu Ala Val Ser Val Met Lys
      180     185     190
Asn Val Cys Phe Val Pro His Leu His Glu Ser Thr Pro Ala Leu Thr
      195     200     205
Arg Ser Arg Ser Leu Thr Pro Leu Ser Leu Cys Gly Thr Trp Gln Thr
      210     215     220

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<210> 41628

<211> 516

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (3)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41628

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Leu His Xaa Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp Gln Glu Thr
1      5      10      15
Asn Ile Asp Thr Leu Gln Pro Arg Pro Gln Gln Tyr Glu Ser Ala Arg
      20      25      30
Leu Val Ala Val Pro Ser Ala Pro Gly Thr Leu Pro Tyr Gly Phe Pro
      35      40      45
Gln Leu Gln Leu Asp Ile Gln Asn His Asp Tyr Leu Arg His Gly Thr

```

50	55	60
Ser Ala Pro Thr Tyr Asn Val Val Pro Ala Arg Asp Gln Gln Phe Pro		
65	70	75
Pro Gln Gln Ala Ser Ala Trp Pro Glu Pro Pro Val Pro Val Met Asn		80
	85	90
Pro Gln Gly Thr Ser Met Asp Pro Thr Pro Ala Phe Ala Thr Ala Pro		95
	100	105
Ile Pro Gln Val Cys Asp His Ile Leu Ile Gly Leu Val Thr Ser Tyr		110
	115	120
Ser Thr Leu Tyr Gln Lys Phe His Gln Ala Gly Pro Ala Thr Thr Thr		125
	130	135
Ala Phe Ala Ser Gly Thr Arg Gln Glu Gln Gln Pro Val His Glu Pro		140
	145	150
Thr Ala Ile Pro Leu Met Thr Ser Ser Lys Glu Phe Ile Tyr Val Asp		155
	160	165
Asp Glu Ser Glu Glu Tyr Tyr Asp Val Glu Ser Asp Glu Glu Met Glu		170
	175	180
Glu Gln Thr Ser Ala Glu Asp Phe Asn Gln Leu Ser Leu Ile Val Ala		185
	190	195
Ser Ala Asn Gln Asp Glu Arg Gln Leu Arg Ser Phe Thr Thr Tyr Leu		200
	205	210
Asn Glu Pro Asn Met Leu Ala Ser Tyr His Pro Thr Leu Gly Ser Ser		215
	220	225
Pro Leu Asn Asn Pro Lys Thr Ala Arg Ile Phe Val His Phe Ile His		230
	235	240
Ser Thr Gly Pro Ser Leu Ser Ile Phe Glu Arg His Pro Ala Asp Ser		245
	250	255
Ala His Thr Leu Gly Ser Pro Val Pro Ala Ala Gln Gln Gly Leu Trp		260
	265	270
Thr His Thr Met Pro Leu Lys Ala Leu Glu His Gln Ala Leu Leu Gln		275
	280	285
Ala Ile Leu Ala Leu Ser Ser Leu His Ile Ser Tyr Leu Gln Gln Ala		290
	295	300
Pro Pro Thr Val Ser Leu Lys His Tyr His Tyr Ala Leu Lys Arg Val		305
	310	315
Gly His Ala Val Gly Leu Pro Gln Arg Arg Lys Gln Val Gly Thr Leu		320
	325	330
Ala Ala Thr Leu Leu Leu Ala Tyr Tyr Glu Val Met Thr Ala Glu His		335
	340	345
Ser Lys Trp Asn Ser His Val Ala Gly Ser Ala Gln Leu Val Arg Glu		350
	355	360
Ile Asp Phe Ala Thr Leu Thr Arg Asp Ile Arg Ser His Arg Arg Arg		365
	370	375
Val Trp Ala Gln Arg Gln Arg Leu Leu Glu Ala Gln Ser Ala Tyr Ala		380
	385	390
Gly Tyr Tyr Ala Phe Asp Glu Glu Phe Leu Glu Met Thr Tyr Leu Leu		395
	400	405
Lys Lys Lys Ser Ser Ile Asp Glu Asn Phe Ile Gly Ser Leu Leu Gly		410
	415	420
Arg Ala Val Asn Phe Asp Gln Phe Gly Gln Val Glu Asp Gly Arg Thr		425
	430	435
Arg Gln Arg Glu Arg His Phe Thr Arg Lys Asp Ile Glu Thr Tyr Arg		440
	445	450
Ile His Cys Asp Leu Tyr Trp Trp Tyr Cys Lys Gln Asp Met Ile Gln		455
	460	465
Ala Phe Ile Gly Gly Gly Gly Leu Met Leu Val Thr Ala Leu Phe Arg		470
	475	480
	485	490
	495	

500  
Ser Leu Ala Ile  
515

505

510

<210> 41629  
<211> 60  
<212> PRT  
<213> A.fumigatus

<400> 41629  
His Asp Gly Val Ile Ser His Ser Ala Ser Phe Thr Pro Phe Ala Ala  
1 5 10 15  
Arg Thr Gln Gln Leu Ile Lys Glu Gln Leu Gly Gln Ala Glu Asp Lys  
20 25 30  
Thr Gln Leu Pro Asp Glu Tyr Ile Glu Leu Glu Lys Arg Val Asp Ala  
35 40 45  
Leu Lys Leu Val His Gln Lys Leu Leu Gln Val Thr  
50 55 60

<210> 41630  
<211> 239  
<212> PRT  
<213> A.fumigatus

<400> 41630  
Lys Leu Ala Asp Asp Leu Pro Phe Ala Asp His Arg Lys Ser Asn Arg  
1 5 10 15  
Leu Glu Phe Tyr Ser Pro Thr Pro Asp Gly Leu Asp Leu Val Ala Ser  
20 25 30  
Cys Ala Ile Tyr Ala Lys Val Thr Met Leu Ala Arg Leu Pro Ala Pro  
35 40 45  
Ala Asn Ser Pro Thr Asp His Leu Phe Val Gly Thr Asp Arg Tyr Thr  
50 55 60  
Tyr Phe Thr Leu Ser Trp Asp Ser Ser Glu Lys Arg Val Arg Thr Glu  
65 70 75 80  
Arg Asp Tyr Val Asp Met Ser Asp Pro Ser Ser Arg Glu Ser Gln Thr  
85 90 95  
Gly Asn Arg Cys Leu Ile Asp Pro Ser Gly Arg Phe Met Thr Leu Glu  
100 105 110  
Ile Tyr Glu Gly Val Ile Ala Val Ile Pro Ile Ile Gln Leu Pro Ser  
115 120 125  
Lys Lys Arg Arg Arg Ala Val Ala Leu Pro Ser Gly Pro Asp Ala Pro  
130 135 140  
Arg Val Gly Glu Leu Gly Glu Pro Thr Thr Ala Arg Ile Glu Glu Leu  
145 150 155 160  
Phe Val Arg Ser Ser Ala Phe Leu His Val Gln Glu Gly Leu Pro Arg  
165 170 175  
Leu Ala Leu Leu Tyr Glu Asp Asn Gln Lys Lys Val Arg Leu Arg Val  
180 185 190  
Arg Glu Leu Gln Tyr His Ala Ala Thr Gly Ser Asn Ser Thr Ala Asp  
195 200 205  
Ala Thr Phe Gly Glu Pro Ala Asp Phe Thr Gln Asp Leu Glu Leu Gly  
210 215 220  
Ser Ser His Leu Ile Pro Val Pro Ala Pro Leu Gly Asn Leu Pro  
225 230 235

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<210> 41631  
 <211> 266  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (259)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 41631  
 Thr Gly Gly Leu Leu Ile Leu Gly Glu Met Ser Ile Lys Tyr Val Asp  
 1 5 10 15  
 Ala Asp Asn Asn Glu Ile Ile Ser Arg Pro Leu Asp Glu Ala Thr Ile  
 20 25 30  
 Phe Val Ala Trp Glu Gln Val Asp Ser Gln Arg Trp Leu Leu Ala Asp  
 35 40 45  
 Asp Tyr Gly Arg Leu Phe Phe Leu Met Leu Val Leu Asp Ser Asp Ser  
 50 55 60  
 Gln Val Glu Ser Trp Lys Leu Asp His Leu Gly Asn Thr Ser Arg Ala  
 65 70 75 80  
 Ser Val Leu Val Tyr Leu Gly Gly Gly Ile Leu Phe Leu Gly Ser His  
 85 90 95  
 Gln Gly Asp Ser Gln Val Leu Arg Ile Ser Asn Gly Pro Leu Glu Val  
 100 105 110  
 Val Gln Thr Leu Ser Asn Ile Ala Pro Ile Leu Asp Phe Thr Ile Met  
 115 120 125  
 Asp Leu Gly Asn Arg Ser Ser Glu Ser Gln Thr His Glu Phe Ser Ser  
 130 135 140  
 Gly Gln Ala Arg Ile Val Thr Gly Ser Gly Ala Phe Asp Asp Gly Thr  
 145 150 155 160  
 Leu Arg Ser Val Arg Ser Gly Val Gly Met Glu Glu Leu Gly Val Leu  
 165 170 175  
 Gly Asp Met Asp His Ile Thr Asp Leu Trp Gly Leu Gln Val Gly Ser  
 180 185 190  
 Ser Gly Asp Phe Leu Asp Thr Leu Leu Val Thr Phe Val Asp Glu Thr  
 195 200 205  
 Arg Val Phe Arg Phe Ser Ser Asp Gly Glu Val Glu Glu Met Asp His  
 210 215 220  
 Phe Leu Gly Leu Ser Leu Ser Glu Ser Thr Leu Leu Ala Thr Asn Leu  
 225 230 235 240  
 Pro Gly Gly Arg Ile Leu Gln Val Thr Glu Gln Arg Val Leu Ile Ala  
 245 250 255  
 Lys Asn Xaa Gly Arg Asn Val Ile Leu Glu  
 260 265

<210> 41632  
 <211> 404  
 <212> PRT  
 <213> A.fumigatus

<400> 41632  
 Thr Pro Pro Thr Gln Phe Ile Ile Thr Ala Ala Ser Ala Asn Asp Asp  
 1 5 10 15  
 Ser Ile Val Leu Val Ala Gly Gly Glu Leu Val Thr Val Leu Asn Ile  
 20 25 30

18444

```

Thr Asn Glu Val Gln Val Val Thr Gln Lys Asp Phe Gly Ala Asp Ser
   35                               40                               45
Gln Ile Ser Gly Val Thr Val Pro Ser Ser Pro Thr Gly Val Cys Ile
   50                               55                               60
Ala Gly Phe Pro Gln Leu Ala Lys Val Ser Val Leu Lys Leu Gln Asp
  65                               70                               75                               80
Leu Ser Glu Leu His Thr Thr Ser Val Gly Met Ala Gly Glu Ala Phe
   85                               90                               95
Pro Arg Ser Val Leu Val Ala Asn Val Leu Thr Asp Ser Pro Pro Thr
  100                               105                               110
Leu Phe Val Ser Met Ala Asp Gly Ser Val Ile Thr Tyr Ser Phe Asn
  115                               120                               125
Thr Asn Asn Phe Ser Leu Thr Gly Met Thr Lys Leu Ile Leu Gly Ser
  130                               135                               140
Glu Gln Pro Thr Phe Lys Lys Leu Pro Arg Gly Ser Gly Leu Phe Asn
  145                               150                               155                               160
Val Phe Ala Thr Cys Glu Asn Pro Ser Met Ile Tyr Gly Ser Glu Gly
   165                               170                               175
Arg Ile Ile Tyr Ser Ala Val Asn Ser Glu Gly Ala Ser Arg Ile Cys
  180                               185                               190
His Phe Asn Ser Glu Ala Tyr Pro Glu Ser Ile Ala Val Ala Thr Ser
  195                               200                               205
His Asp Leu Lys Ile Ala Leu Val Asp Lys Glu Arg Thr Thr Gln Ile
  210                               215                               220
Gln Thr Leu Pro Ile Gly Ala Thr Val Arg Arg Val Ala Tyr Ser Pro
  225                               230                               235                               240
Ser Glu Lys Ala Phe Gly Ile Gly Thr Ile Glu Arg Lys Leu Val Asp
   245                               250                               255
Gly Thr Glu Ile Val Lys Ser Arg Phe Val Leu Ala Asp Glu Ile Leu
  260                               265                               270
Phe Arg Arg Leu Asp Ala Phe Glu Leu Arg Pro Glu Glu Leu Val Glu
  275                               280                               285
Ser Val Ile Arg Ala Glu Phe Pro Ala Gly Lys Gly Ala Asn Asp Arg
  290                               295                               300
Asp Glu Val Lys Asp Arg Phe Ile Val Gly Thr Ala Tyr Leu Asp Asp
  305                               310                               315                               320
Glu Gly Asp Glu Ser Ile Arg Gly Arg Ile Leu Ile Phe Glu Val Asp
   325                               330                               335
Asn Gly Arg Lys Leu Thr Gln Val Ala Glu Leu Pro Val Lys Gly Ala
  340                               345                               350
Cys Arg Ala Leu Ala Met Leu Gly Asp Lys Ile Val Ala Ala Leu Val
  355                               360                               365
Lys Thr Val Ser Val His Ser Pro Leu Val Tyr Leu Leu Leu Arg Tyr
  370                               375                               380
Pro Thr Asn Ala Pro Pro Arg Ser Ser Tyr Ile Arg Ser Ser Thr Thr
  385                               390                               395                               400
Ile Ser Ala Pro

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<210> 41633

<211> 89

<212> PRT

<213> A.fumigatus

<400> 41633

Glu Ser Tyr Gly Ser Leu Val Asn Ile Ser Ser Val Ser Leu His Lys

## 18445

1		5		10		15									
Glu	Ile	Val	Arg	Ser	Leu	Leu	Arg	Asp	Val	Leu	Leu	Leu	Tyr	Lys	Asp
		20					25						30		
Gly	Ser	Val	Val	Glu	Pro	Ile	Tyr	Ser	Leu	Ala	Ala	Leu	Glu	Tyr	Gly
		35					40					45			
Val	His	Tyr	Ile	Ala	Pro	Ser	Ser	Tyr	Val	Asp	Gly	Ile	Gly	Pro	Leu
	50					55				60					
Ile	Leu	Ser	Tyr	Leu	Ser	Ile	Val	Ile	Lys	Ser	Ala	Lys	Gln	Asn	Met
65					70					75					80
Thr	Leu	Cys	Cys	Leu	Gly	Gly	Ser	Gln							
				85											

&lt;210&gt; 41634

&lt;211&gt; 626

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41634

Gly	Gln	Val	Cys	Leu	Phe	Glu	Arg	Gln	Gln	Ser	Asn	Met	Ala	Gln	Leu
1				5				10					15		
Asp	Thr	Leu	Asp	Ile	Val	Val	Leu	Val	Val	Leu	Leu	Val	Gly	Ser	Val
		20					25					30			
Ala	Tyr	Phe	Thr	Lys	Gly	Ser	Tyr	Trp	Ala	Val	Pro	Lys	Asp	Pro	Tyr
		35				40					45				
Ala	Ala	Ala	Asn	Ser	Ala	Met	Asn	Gly	Ala	Ala	Lys	Thr	Gly	Lys	Thr
	50					55				60					
Arg	Asp	Ile	Ile	Gln	Lys	Met	Glu	Glu	Thr	Gly	Lys	Asn	Cys	Val	Ile
65				70				75						80	
Phe	Tyr	Gly	Ser	Gln	Thr	Gly	Thr	Ala	Glu	Asp	Tyr	Ala	Ser	Arg	Leu
			85				90						95		
Ala	Lys	Glu	Gly	Ser	Gln	Arg	Phe	Gly	Leu	Lys	Thr	Met	Val	Ala	Asp
		100					105					110			
Leu	Glu	Asp	Tyr	Asp	Tyr	Glu	Asn	Leu	Asp	Lys	Phe	Pro	Glu	Asp	Lys
		115				120					125				
Ile	Ala	Phe	Phe	Val	Leu	Ala	Thr	Tyr	Gly	Glu	Gly	Glu	Pro	Thr	Asp
	130					135					140				
Asn	Ala	Val	Glu	Phe	Tyr	Gln	Phe	Ile	Thr	Gly	Glu	Asp	Val	Ala	Phe
145					150					155				160	
Glu	Ser	Gly	Ala	Ser	Ala	Glu	Glu	Lys	Pro	Leu	Ser	Ser	Leu	Lys	Tyr
			165					170					175		
Val	Ala	Phe	Gly	Leu	Gly	Asn	Asn	Thr	Tyr	Glu	His	Tyr	Asn	Ala	Met
		180					185					190			
Val	Arg	His	Val	Asp	Ala	Ala	Leu	Thr	Lys	Leu	Gly	Ala	Gln	Arg	Ile
		195				200						205			
Gly	Thr	Ala	Gly	Glu	Gly	Asp	Gly	Ala	Gly	Thr	Met	Glu	Glu	Asp	
	210				215					220					
Phe	Leu	Ala	Trp	Lys	Glu	Pro	Met	Trp	Ala	Ala	Leu	Ser	Glu	Ser	Met
225				230					235					240	
Asn	Leu	Gln	Glu	Arg	Glu	Ala	Val	Tyr	Glu	Pro	Val	Phe	Ser	Val	Ile
			245					250					255		
Glu	Asp	Glu	Ser	Leu	Ser	Pro	Glu	Asp	Asp	Ser	Val	Tyr	Leu	Gly	Glu
		260					265					270			
Pro	Thr	Gln	Gly	His	Leu	Ser	Gly	Ser	Pro	Lys	Gly	Pro	Tyr	Ser	Ala
		275				280						285			
His	Asn	Pro	Tyr	Ile	Ala	Pro	Ile	Val	Glu	Ser	Arg	Glu	Leu	Phe	Thr
	290					295					300				

18446

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Ala Lys Asp Arg Asn Cys Leu His Met Glu Ile Gly Ile Ala Gly Ser
305                      310                      315                      320
Asn Leu Thr Tyr Gln Thr Gly Asp His Ile Ala Ile Trp Pro Thr Asn
                      325                      330                      335
Ala Gly Val Glu Val Asp Arg Phe Leu Glu Val Phe Gly Ile Glu Lys
                      340                      345                      350
Asn Arg His Thr Val Ile Asn Ile Lys Gly Leu Asp Val Thr Ala Lys
                      355                      360                      365
Val Pro Ile Pro Thr Pro Thr Thr Tyr Asp Ala Ala Val Arg Phe Tyr
                      370                      375                      380
Met Glu Ile Cys Ala Pro Val Ser Arg Gln Phe Val Ser Ser Leu Val
385                      390                      395                      400
Pro Phe Ala Pro Asp Glu Glu Ser Lys Ala Glu Ile Val Arg Leu Gly
                      405                      410                      415
Asn Asp Lys Asp Tyr Phe His Glu Lys Ile Ser Asn Gln Cys Phe Asn
                      420                      425                      430
Ile Ala Gln Ala Leu Gln Asn Ile Thr Ser Lys Pro Phe Ser Ala Val
                      435                      440                      445
Pro Cys Ser Leu Leu Ile Glu Gly Leu Asn Arg Leu Gln Pro Arg Tyr
                      450                      455                      460
Tyr Ser Ile Ser Ser Ser Ser Leu Val Gln Lys Asp Lys Ile Ser Ile
465                      470                      475                      480
Thr Ala Val Val Glu Ser Val Arg Leu Pro Gly Ala Ser His Ile Val
                      485                      490                      495
Lys Gly Val Thr Thr Asn Tyr Leu Leu Ala Leu Lys Gln Lys Gln Asn
                      500                      505                      510
Gly Asp Pro Ser Pro Asp Pro His Gly Leu Thr Tyr Ala Ile Thr Gly
                      515                      520                      525
Pro Arg Asn Lys Tyr Asp Gly Ile His Val Pro Val His Val Arg His
                      530                      535                      540
Ser Asn Phe Lys Leu Pro Ser Asp Pro Ser Lys Pro Ile Ile Met Val
545                      550                      555                      560
Gly Pro Gly Thr Gly Val Ala Pro Phe Arg Gly Phe Ile Gln Glu Arg
                      565                      570                      575
Ala Ala Leu Ala Glu Ser Gly Lys Asp Val Gly Pro Thr Ile Leu Phe
                      580                      585                      590
Phe Gly Cys Arg Asn Arg Asn Glu Asp Phe Leu Tyr Lys Glu Glu Trp
                      595                      600                      605
Lys Val Cys Leu Gln Ser Ser Tyr Glu His Ile Arg Ser Arg Leu Ser
610                      615                      620
Asp Ser
625

```

<210> 41635  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41635
Val Tyr Gln Glu Lys Leu Gly Asp Lys Leu Lys Ile Ile Thr Ala Phe
1                      5                      10                      15
Ser Arg Glu Thr Ala Lys Lys Val Tyr Val Gln His Arg Leu Gln Glu
                      20                      25                      30
His Ala Asp Leu Val Ser Asp Leu Leu Lys Gln Lys Ala Thr Phe Tyr
                      35                      40                      45
Val Cys Gly Asp Ala Ala Asn Met Ala Arg Glu Val Asn Leu Val Leu

```



18447

50 55 60  
 Gly Gln Ile Ile Ala Lys Ser Arg Gly Leu Pro Ala Glu Lys Gly Glu  
 65 70 75 80  
 Glu Met Val Lys His Met Arg Ser Ser Gly Ser Tyr Gln Glu Asp Val  
 85 90 95  
 Trp Ser

<210> 41636  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 41636  
 His Met Leu Arg Gly Lys Lys Phe Arg Arg Ser Leu Ile Ser Arg Ile  
 1 5 10 15  
 Gly Ser Arg Leu Tyr Val Gln Val Asn Thr Leu Met Leu Phe Ser Arg  
 20 25 30  
 Leu Leu His Glu Thr Val Leu Val Ser Arg Met Ile Gln Leu Tyr Phe  
 35 40 45  
 Tyr Phe Tyr Arg Leu Leu Gly Ile Pro Lys Glu Glu Asp Ile Cys  
 50 55 60

<210> 41637  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 41637  
 Val Phe Phe Arg Val Leu Thr Glu Ala Val Ser Phe Lys Phe Leu Pro  
 1 5 10 15  
 Ser Val Phe Leu Ile Thr Ser Glu Gln Ile Phe Thr Ala Gln Phe Phe  
 20 25 30  
 Phe Thr Leu Gly Ser Pro Ala Thr Ile Thr Arg Ala Val Pro Arg Lys  
 35 40 45  
 Ser Gly Glu Tyr Pro Pro Arg Gly His Ala Tyr Ser Asn Cys  
 50 55 60

<210> 41638  
 <211> 194  
 <212> PRT  
 <213> A.fumigatus

<400> 41638  
 Arg Ser Thr Lys Val Val Val Tyr Lys Val Ile Asn Asn Asn Phe Gly  
 1 5 10 15  
 Ala Met Arg Leu Glu Lys Leu Ala Ser Tyr Arg Thr Ser Thr Ala Pro  
 20 25 30  
 Val Asp Val Thr Val Thr Gly Asn Leu Ile Ala Val Ser Asp Leu Met  
 35 40 45  
 Lys Ser Met Cys Leu Val Glu Tyr Lys Glu Gly Glu Asn Gly Thr Pro  
 50 55 60  
 Asp Thr Met Thr Glu Val Ala Arg His Phe Gln Thr Val Trp Ala Thr  
 65 70 75 80  
 Gly Val Ala Asn Ile Ala Pro Asp Thr Phe Leu Glu Ser Asp Ala Glu  
 85 90 95

## 18448

Gly Asn Leu Ile Val Leu His Arg Asn Thr Thr Gly Val Glu Glu Asp  
 100 105 110  
 Asp Lys Arg Arg Leu Glu Val Thr Gly Glu Ile Ser Leu Gly Glu Met  
 115 120 125  
 Val Asn Arg Ile Arg Pro Val Asn Ile Gln Gln Leu Ala Ser Val Ala  
 130 135 140  
 Val Thr Pro Arg Ala Phe Leu Gly Thr Val Ser Phe Ser Leu Phe Leu  
 145 150 155 160  
 Leu Thr Asn Ser Ala Arg Pro Thr Asp Arg Thr Asn His Asp His Arg  
 165 170 175  
 Trp Lys Val Leu Phe Thr Tyr Leu Leu Ser Ser Ile Pro Ile Thr Arg  
 180 185 190  
 Thr Ser

&lt;210&gt; 41639

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (65)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41639

Gly Tyr Cys Asp Thr Arg Asn Leu Thr Ile Cys Pro Lys Val Leu Leu  
 1 5 10 15  
 Arg Tyr Asp Leu Asp Phe Val Gly Asn Ile Gln Asp Cys His Lys Leu  
 20 25 30  
 Ala Ala Cys Asn Lys Asn Asp Gly Ile Ile Val Gly Arg Ser Gly Ser  
 35 40 45  
 Tyr Asn Glu Leu Gly Arg Trp Ser Ser Phe Glu Asn Tyr Ile Pro Ala  
 50 55 60  
 Xaa Ile Phe Cys Asn Glu Asp Pro Leu Leu Ser Asp Leu Gln Tyr Ser  
 65 70 75 80  
 Pro Thr Gly Gln Ile Gly Arg Gln Lys Ser Ala Phe  
 85 90

&lt;210&gt; 41640

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41640

Ser Leu Pro Ser Thr Met Ala Thr Ser Glu Ser Ser Ser Val Val Ser  
 1 5 10 15  
 Asp Ala Leu Asn Asp Phe Phe Ser Gln Leu Tyr Thr Phe Ile Glu Thr  
 20 25 30  
 Val Phe Arg Arg Phe Phe Lys Asn Leu Tyr Arg Ser Phe Val Glu Met  
 35 40 45  
 Ser Ala Lys Arg Trp Thr Lys Ile Ile Val Ile Val Val Val Tyr Ile  
 50 55 60  
 Leu Ile Arg Pro Tyr Ile Glu Ala Trp Phe Arg Lys Met Ala Glu Lys  
 65 70 75 80  
 Asp Arg Lys Lys Gln Leu Glu Lys Glu Lys Ala Glu Arg Glu Ala Lys

```
<210> 41641
<211> 85
<212> PRT
<213> A.fumigatus
```

```
<210> 41642
<211> 407
<212> PRT
<213> A.fumigatus
```

<400> 41642																
Val	Ile	Arg	Gly	His	Ala	Leu	Asp	Asp	Met	Gly	Arg	Thr	Arg	Gln	Ala	
1				5					10					15		
Asp	Arg	Phe	Asn	Asp	Ser	Cys	Asp	Thr	Asn	Leu	Ile	Leu	Leu	Asn	Lys	
			20					25					30			
Gly	Gly	Arg	Arg	Asp	Gly	Val	Val	Thr	Arg	Leu	Lys	Pro	Val	Glu	Ala	
			35				40					45				
Phe	Asp	Lys	Glu	Arg	Thr	Arg	Asp	Ser	Arg	Glu	Arg	Leu	Arg	Gly	Asp	
	50					55					60					
Ile	Leu	Lys	Ser	Leu	Ser	Asp	Val	Glu	Ala	Leu	Val	Ala	Asp	Leu	Leu	
65					70					75					80	
Val	Lys	Val	Ile	Leu	Ile	Ile	Thr	Lys	Ala	His	Asp	Leu	Gly	Phe	Ala	
				85					90					95		
Phe	Phe	Val	Gly	Gly	Glu	Trp	His	Gln	Arg	Gly	His	Glu	Leu	Thr	Arg	
			100					105					110			
Asn	Arg	Cys	Ala	Asn	Phe	His	Val	Glu	Ala	Asn	Gly	Arg	Val	Val	Cys	

## 18450

```

      115              120              125
Gly Trp Gly Arg Asn Gly Asn Leu Gly Ser Asp Ile Lys Thr Phe Asp
  130              135              140
Val Asn Asn Cys Met Ala Ile Leu Phe Asn Ala Lys Asp Leu Glu Glu
  145              150              155              160
Thr Ile Asp Phe Asn Thr Arg Val Gly Arg Pro Asp Ser Asp Val Val
      165              170              175
Thr Ser Leu Ile Ser Glu Val Thr Ala Ser Asn Ala Asp Leu His Val
      180              185              190
Lys Ala Ile Thr Ile Leu Gly Arg Lys Gln Phe Thr Gly Leu Asn Asp
      195              200              205
Gly Ser Asp Val Arg Ile Val Cys Arg Val Gly Thr Leu Gly Ala Ala
      210              215              220
Ala Glu Met Thr Leu Ser Arg Leu Ala Lys Val Asp Ala Ile Val Leu
  225              230              235              240
Gly Ala Gln Arg Phe Ile Phe Asn His Arg Glu Asn Arg Phe Ile Asp
      245              250              255
Ser Leu Ala Leu Leu Gln Val His Arg Phe Arg Gln Arg Gly Pro His
      260              265              270
Gly Leu Leu Pro Cys Gln Glu Val Leu Leu His Cys Thr Ser Ala Val
      275              280              285
Ile Thr Leu Thr Ser Gly Ser Asp Ala Leu Arg Thr Lys Leu Cys Lys
      290              295              300
Ser Ser Ile Asp Val Ala Asn His Ser Ile Val Val Leu Val Gly Val
  305              310              315              320
Val Thr Lys Ala Glu Ser Asn Ile Leu Glu Gly Gly Glu Trp Leu Phe
      325              330              335
Leu Ser Gly Gly Thr Thr Leu Glu Ser Asp Val Leu Thr Gly Asp Lys
      340              345              350
Leu Val Lys Leu Asp Gly Val Ile Gly Trp Leu Ala Leu Thr Val Gly
      355              360              365
Ser Gln Asn Lys Glu Ser Asp Leu Ile Leu Gly Glu Leu Ile Lys Ile
      370              375              380
Phe Ile Val Val Ile Phe Glu Ile Ser Asp His Gly Leu Gln Ala Glu
  385              390              395              400
Thr Leu Gly Thr Phe Leu Cys
      405

```

&lt;210&gt; 41643

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41643

```

Ser Tyr Arg Ser Pro Thr Glu His Leu Ser Tyr Pro Lys Ser Pro Thr
  1              5              10              15
Ser His Leu Thr Gly Gly Phe Trp Leu Gly Leu Leu His Phe Asn Met
      20              25              30
Ser Ala Thr Thr Ala Ala Thr Asp Leu Val Ser Lys Leu Pro Leu Arg
      35              40              45
Leu Arg Asn Phe Phe Ala Arg Tyr Pro Pro Gln Ile Tyr Ser Ala Ala
      50              55              60
Val Arg Pro Pro Ile Thr Glu Pro Glu Thr Ala Ala Glu Glu Ser Leu
  65              70              75              80
Pro Ser Pro Tyr Thr Pro Asn Arg Asp Ala Lys Gly Phe Lys Lys Pro
      85              90              95

```



245

<210> 41645  
 <211> 269  
 <212> PRT  
 <213> A.fumigatus

<400> 41645  
 Ile Glu Lys Ser Ala Tyr His Ile Leu Leu Ile Ile Leu Arg Arg Glu  
 1 5 10 15  
 Glu Ser Lys Asn Gly Gly Gly Met Asp Ile His Asp Val Cys Ile Leu  
 20 25 30  
 Val Ala Glu Glu Ser Asp Ser His Thr Thr Leu Thr Cys Thr Thr Gly  
 35 40 45  
 Thr Thr Asp Thr Met Arg Val Ala Leu Asp Gly Val Gly His Ile Glu  
 50 55 60  
 Val Asp Asp Glu Thr Asp Val Gly Asp Val Asp Thr Thr Thr Cys Glu  
 65 70 75 80  
 Ile Arg Gly Asp Lys Asp Val Arg Arg Ala Val Thr His Gly Gly Lys  
 85 90 95  
 Arg Ser Phe Thr Leu Phe Leu Gly Leu Ala Ser Val Gln Gly Asn Gly  
 100 105 110  
 Gly Glu Ala His Leu Phe Asp Leu Thr Gly Asp Gly Val Ala Val Ala  
 115 120 125  
 Leu Asp Val Asp Glu Asp Asp Asp Arg Gly Ser Glu Leu Ala Arg Gly  
 130 135 140  
 Glu Asp Val Gly Glu Pro Phe Leu Ala Phe Val Phe Thr Gly Asp His  
 145 150 155 160  
 Leu Asp Ala Leu Leu Asp Gly Val Asp Arg Leu Ala Gly Ala Ala Asp  
 165 170 175  
 Arg His Asp Gly Gly Pro Ala Glu Val Phe Ala Gly Asp Ala Leu Asp  
 180 185 190  
 Gly Arg Gly His Gly Gly Arg Val His His Cys Leu Ala Val Ala Val  
 195 200 205  
 Thr Pro His Gly Gly Gly Val Leu Gly Phe Phe Arg Val Gly Leu Leu  
 210 215 220  
 Val Gly Asp Gly Lys Gly Val Glu Asp Phe Val His Gly Leu Leu Glu  
 225 230 235 240  
 Ala Glu Ile Asp His Pro Val Ser Phe Val His Asp Asp Val Ala Ala  
 245 250 255  
 Leu Ala Lys His Glu Glu Thr Ala Leu Asn Ala Val Asn  
 260 265

<210> 41646  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

<400> 41646  
 Glu Ile Pro Gln Pro Gly Val Arg Leu Ser His Ile Ser Leu Gly Leu  
 1 5 10 15  
 Ala Ala Arg Lys Gly Gly Arg Cys Val Ala Gly Glu Ser Gly Phe Phe  
 20 25 30  
 Leu Asn Leu Val Lys Phe Tyr Leu Cys Leu Ser Arg Asn Arg Leu Thr  
 35 40 45  
 Cys Val Ile Gln Glu Ser Leu Ser Pro Pro Phe Ile Ala Phe Pro Leu

[illegible]

```
<210> 41647
<211> 80
<212> PRT
<213> A.fumigatus
```

```
<210> 41648
<211> 495
<212> PRT
<213> A.fumigatus
```

<400>	41648														
Cys	Leu	Pro	Ser	Leu	Pro	Ser	Pro	Leu	Ser	Val	Tyr	Pro	Pro	Leu	Pro
1				5					10					15	
Arg	Phe	Cys	Ser	Asn	Asn	Val	Leu	Val	Ala	Gly	Ala	Asn	Ile	Leu	Phe
			20					25					30		
Cys	Arg	Leu	Phe	Glu	Arg	Gly	Ala	Ser	Ser	Val	Gly	Leu	Asp	Phe	Leu
		35					40					45			
Ala	His	Pro	Phe	Trp	Asp	Lys	Tyr	Ile	Glu	Phe	Glu	Glu	Arg	Val	Glu
	50					55					60				
Ala	Pro	Glu	Lys	Ile	Phe	Ala	Ile	Leu	Gly	Arg	Val	Ile	His	Ile	Pro
65				70						75					80
Met	His	Gln	Tyr	Ala	Arg	Tyr	Phe	Glu	Arg	Tyr	Arg	Gln	Leu	Ala	Gln
				85					90					95	
Thr	Arg	Pro	Leu	Ser	Glu	Leu	Ala	Pro	Ala	Glu	Thr	Leu	Ser	Gln	Phe
			100					105					110		
Arg	Ala	Glu	Leu	Glu	Ala	Ala	Ala	Gly	Gln	Ile	Pro	Pro	Gly	Ala	Lys
		115					120					125			
Ala	Glu	Ala	Glu	Ile	Glu	Arg	Asp	Leu	Arg	Leu	Arg	Val	Asp	Ala	Tyr
	130					135					140				
His	Leu	Glu	Ile	Phe	Ser	Lys	Thr	Gln	Thr	Glu	Thr	Thr	Lys	Arg	Trp
145					150					155					160
Thr	Tyr	Glu	Ser	Glu	Ile	Lys	Arg	Pro	Tyr	Phe	His	Val	Thr	Glu	Leu
			165						170					175	
Asp	Glu	Gly	Gln	Leu	Thr	Asn	Trp	Lys	Lys	Tyr	Leu	Asp	Phe	Glu	Glu
			180					185					190		
Ala	Glu	Gly	Ser	Tyr	Pro	Arg	Ile	Gln	Phe	Leu	Tyr	Glu	Arg	Cys	Leu
	195						200					205			
Val	Thr	Cys	Ala	His	Tyr	Asp	Glu	Phe	Trp	Gln	Arg	Tyr	Ala	Arg	Trp

```

      210                215                220
Met Ser Ala Gln Pro Gly Lys Glu Glu Glu Val Arg Asn Ile Tyr Gln
225                230                235                240
Arg Ala Ser Cys Phe Tyr Val Pro Ile Ala Asn Pro Ala Thr Arg Leu
      245                250                255
Gln Tyr Ala Tyr Phe Glu Glu Met Ser Gly Arg Val Asp Val Ala Lys
      260                265                270
Asp Ile His Asp Ala Ile Leu Ala Thr Leu Pro Asn His Val Glu Thr
      275                280                285
Ile Ile Ser Leu Ala Asn Met Cys Arg Arg His Gly Gly Leu Glu Ala
      290                295                300
Ala Ile Glu Val Tyr Lys Asn Gln Leu Asp Ser Pro Gln Cys Asp Leu
305                310                315                320
Ala Thr Lys Ala Ala Leu Val Ala Glu Trp Ala Arg Leu Leu Trp Lys
      325                330                335
Ile Lys Gly Ser Ala Glu Asp Ala Arg Gln Val Phe Gln Lys Asn Gln
      340                345                350
Gln Tyr Tyr Leu Asp Ser Arg Pro Phe Trp Asn Ser Tyr Leu Met Phe
      355                360                365
Glu Leu Asp Gln Pro Thr Ser Ala Ala Thr Glu Asn Val Gln Tyr Glu
      370                375                380
Arg Ile Lys Gln Val Val Asn Asp Ile Arg Ser Lys Ser Ala Leu Ser
385                390                395                400
Pro Asp Val Val Arg Asp Leu Val Gln Ile Tyr Met Val Tyr Leu Leu
      405                410                415
Glu Arg Gly Thr Lys Asp Ala Ala Lys Glu Tyr Met Thr Leu Asp Arg
      420                425                430
Glu Val His Gly Pro Ala Ser Val Ala His Thr Lys Thr Gly Gly Ala
      435                440                445
Val Gln Ala Pro Gln Asn Ser Ser Gln Ala Ala Pro Val Ala Thr Val
      450                455                460
Val Asp Pro Thr Val Ala Ala Ala Gly Ala Ala Pro Gln Thr Ser Pro
465                470                475                480
Tyr Pro Tyr Tyr Gln Gln Thr Pro Val Asn Gly Gly Val Ser Ala
      485                490                495

```

&lt;210&gt; 41649

&lt;211&gt; 669

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41649

```

Leu Thr Ala Gln Pro Lys Phe Leu Ser Lys Ala Glu Arg Glu Arg Ile
1                5                10                15
Ala Leu Glu Lys Arg Ala Lys Glu Val Glu Ala Gly Arg Arg Leu Lys
      20                25                30
Leu Asp Pro Phe Thr Asp Gly Thr Asp Arg Ser Gly Thr Gln Ser Pro
      35                40                45
Ser Val Tyr Pro Glu Thr Pro Asn Gly Asp Glu Arg Ser Ile Pro Thr
      50                55                60
Gly Pro Arg Ala Met Arg Asn Ser Glu Val Pro Thr Gly Pro Ala Ala
      65                70                75                80
Met Arg Asn Lys Thr Tyr Asp Met Ser Pro Pro Pro Pro Pro Lys Ala
      85                90                95
Met Ser Phe Ser Leu Thr Asp Gly Lys Gly Asp Ser Lys Arg Gln Ala
      100                105                110

```



## 18455

Glu	Glu	Asp	Glu	Ala	Ala	Ala	Gln	Ala	Ala	Leu	Ile	Lys	Gln	Lys	Tyr
		115					120					125			
Met	Gly	Thr	Glu	Lys	Thr	Ser	Ser	Phe	Ser	Ala	Lys	Lys	Lys	Arg	Lys
	130					135					140				
Arg	Thr	Thr	Asp	Arg	Lys	Phe	Asn	Phe	Glu	Trp	Asn	Ala	Glu	Glu	Asp
145					150					155					160
Thr	Ser	Gly	Asp	Tyr	Asn	Pro	Leu	Tyr	Gln	Gln	Arg	His	Glu	Ala	Asn
				165					170					175	
Phe	Tyr	Gly	Arg	Gly	Arg	Leu	Ala	Gly	Phe	Gly	Asp	Asp	Val	Ala	Asp
		180						185					190		
Thr	Leu	Ala	Gln	Lys	Tyr	Ala	Arg	Ala	Leu	Glu	Asp	Arg	Asp	Arg	Glu
	195						200					205			
Ala	Gly	Ser	Ile	Arg	Ala	Arg	Glu	Ile	Leu	Glu	Met	Glu	Arg	Arg	Arg
	210					215					220				
Arg	Glu	Glu	Ser	Thr	Arg	Asn	Gln	Leu	Asp	Lys	His	Trp	Ser	Glu	Lys
225					230					235					240
Lys	Leu	Glu	His	Met	Arg	Glu	Arg	Asp	Trp	Arg	Ile	Phe	Lys	Glu	Asp
				245					250					255	
Phe	Asn	Ile	Ser	Thr	Lys	Gly	Gly	Ser	Val	Pro	Asn	Pro	Met	Arg	Ser
		260						265					270		
Trp	Glu	Glu	Ser	Gly	Leu	Pro	Lys	Arg	Leu	Leu	Glu	Leu	Val	Asp	Gln
	275						280					285			
Val	Gly	Tyr	Lys	Glu	Pro	Thr	Pro	Ile	Gln	Arg	Ala	Ala	Ile	Pro	Ile
	290					295					300				
Ala	Leu	Gln	Ser	Arg	Asp	Leu	Ile	Gly	Val	Ala	Val	Thr	Gly	Ser	Gly
305					310					315					320
Lys	Thr	Ala	Ser	Phe	Leu	Leu	Pro	Leu	Leu	Val	Tyr	Ile	Ser	Glu	Leu
				325						330				335	
Pro	Arg	Ile	Asp	Glu	Phe	Glu	Trp	Arg	Lys	Asn	Asp	Gly	Pro	Tyr	Ala
		340						345					350		
Ile	Val	Leu	Ala	Pro	Thr	Arg	Glu	Leu	Ala	Gln	Gln	Ile	Glu	Ile	Glu
	355						360					365			
Ala	Arg	Lys	Phe	Thr	Gln	Pro	Leu	Gly	Phe	Asn	Val	Val	Ser	Ile	Val
	370					375					380				
Gly	Gly	His	Ser	Phe	Glu	Glu	Gln	Ala	Tyr	Ser	Leu	Arg	Asn	Gly	Ala
385					390					395					400
Glu	Ile	Ile	Ile	Ala	Thr	Pro	Gly	Arg	Leu	Val	Asp	Cys	Ile	Glu	Arg
				405					410					415	
Arg	Leu	Leu	Val	Leu	Ser	Gln	Cys	Cys	Tyr	Val	Ile	Met	Asp	Glu	Ala
		420						425					430		
Asp	Arg	Met	Ile	Asp	Leu	Gly	Phe	Glu	Glu	Pro	Val	Asn	Lys	Ile	Leu
		435					440					445			
Asp	Ala	Leu	Pro	Val	Thr	Asn	Glu	Lys	Pro	Asp	Thr	Glu	Glu	Ala	Glu
	450					455					460				
Asn	Ser	Ala	Ala	Met	Arg	Ser	His	Arg	Tyr	Arg	Gln	Thr	Met	Met	Tyr
465					470					475					480
Thr	Ala	Thr	Met	Pro	Ser	Ala	Val	Glu	Arg	Ile	Ala	Arg	Lys	Tyr	Leu
				485					490					495	
Arg	Arg	Pro	Ala	Ile	Val	Thr	Ile	Gly	Ser	Ala	Gly	Glu	Ala	Val	Asp
		500						505					510		
Thr	Val	Glu	Gln	Arg	Val	Glu	Met	Ile	Ala	Gly	Glu	Asp	Lys	Arg	Lys
	515						520					525			
Lys	Arg	Leu	Ala	Asp	Ile	Leu	Ser	Ser	Gly	Glu	Phe	Arg	Pro	Pro	Ile
	530					535					540				
Ile	Val	Phe	Val	Asn	Ile	Lys	Arg	Asn	Cys	Asp	Ala	Ile	Ala	Arg	Glu
545					550					555					560

## 18456

Ile Lys Gln Met Gly Phe Ser Ser Val Thr Leu His Gly Ser Lys Thr  
                   565                  570                  575  
 Gln Glu Gln Arg Glu Ala Ala Leu Ala Ser Val Arg Asn Gly Ser Thr  
                   580                  585                  590  
 Asp Val Leu Val Ala Thr Asp Leu Ala Gly Arg Gly Ile Asp Val Pro  
                   595                  600                  605  
 Asp Val Ser Leu Val Val Asn Phe Asn Met Ala Asn Ser Ile Glu Ser  
                   610                  615                  620  
 Tyr Thr His Arg Ile Gly Arg Thr Gly Arg Ala Gly Lys Ser Gly Val  
                   625                  630                  635                  640  
 Ala Ile Thr Phe Leu Gly Asn Glu Asp Ala Asp Val Met Tyr Val His  
                   645                  650                  655  
 Ser Pro Pro Ile Phe Ala Phe Phe Pro Ser Gln Asn Tyr  
                   660                  665

&lt;210&gt; 41650

&lt;211&gt; 212

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41650

Ser Pro Val Lys Thr Asn Ala Arg Asn Gly Ser Pro Thr Ser Ser Pro  
 1                  5                  10                  15  
 Arg Ala Ser Ser Asp Pro Arg Ser Ser Ser Ser Ser Thr Ser Ser Ala  
                   20                  25                  30  
 Thr Ala Thr Pro Ser Pro Val Arg Ser Asn Lys Trp Ala Ser Pro Pro  
                   35                  40                  45  
 Leu Pro Cys Thr Glu Ala Arg Pro Arg Asn Ser Val Lys Leu Arg Leu  
                   50                  55                  60  
 Pro Pro Cys Val Thr Ala Arg Arg Thr Ser Leu Ser Pro Arg Ile Ser  
                   65                  70                  75                  80  
 Gln Val Val Val Ser Thr Ser Pro Thr Ser Val Ser Ser Ser Thr Ser  
                   85                  90                  95  
 Ile Trp Pro Thr Pro Ser Arg Ala Thr Arg Ile Val Ser Val Val Pro  
                   100                  105                  110  
 Val Val Gln Val Arg Val Val Trp Leu Ser Leu Ser Ser Ala Thr Arg  
                   115                  120                  125  
 Met Gln Thr Ser Cys Met Ser Ile Pro Pro Pro Phe Leu Leu Ser Ser  
                   130                  135                  140  
 Arg Leu Arg Ile Ile Arg Arg Ile Trp Tyr Ala Asp Phe Ser Ile Tyr  
                   145                  150                  155                  160  
 Tyr Arg Tyr Asp Leu Lys Gln Met Leu Met Lys Ser Pro Ile Ser Arg  
                   165                  170                  175  
 Val Pro Glu Glu Leu Arg Lys His Glu Ala Ala Gln Ser Lys Pro Asn  
                   180                  185                  190  
 Arg Gly Leu Ala Lys Lys Ser Asp Asp Ser Ser Gly Phe Gly Thr Lys  
                   195                  200                  205  
 Ser Gly Trp Gln  
                   210

&lt;210&gt; 41651

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41651

Leu Ala Leu Cys Gln Cys Ser Gly Ala Trp Leu Thr Phe Val Phe Arg  
 1 5 10 15  
 Val Ser Arg Arg Phe His Ala Leu Ala Gly Asp Ser Glu Leu Trp Lys  
 20 25 30  
 Arg Gln Tyr Tyr Ser Arg Trp Val Arg Pro Arg Ala Arg Arg Val Ala  
 35 40 45  
 Asn Ile Arg His Ala Thr Leu Cys Ala Ser Lys Ala Thr Tyr Ser Pro  
 50 55 60  
 His Val Ser Thr Trp Leu Gly His Ser His Leu Ala Glu Gly Lys Val  
 65 70 75 80  
 Thr Asn Trp Lys Arg Gln Tyr Arg Leu Arg His Asn Trp Ser Lys Gly  
 85 90 95  
 Ile Cys Gln Val Thr Glu Val Glu Leu Pro Gln Pro Pro His Ser Pro  
 100 105 110  
 Met Leu Ile Arg Phe Cys Ala Gly Phe Val Phe Thr Ala Asp Cys Glu  
 115 120 125  
 His Gly Leu Arg Cys Trp Arg Ala Ser His Gln Ile Ser Cys Thr Ala  
 130 135 140  
 Arg Leu Pro Leu Val Gln Ser Glu Leu Glu Thr Ser Ala Phe Pro Thr  
 145 150 155 160  
 Ala Leu Ala Val Ser Arg Cys Leu Ala Gln Asn Leu Ile Lys Val Thr  
 165 170 175  
 Val Gly Phe Ala Asp Gly Arg Phe Gly Val Tyr Asp Met Asp Thr Lys  
 180 185 190  
 Ser Leu Tyr Leu Arg Leu Arg Ser Ser Asn Ala Ala Ser Ala Asp Gly  
 195 200 205  
 Ala Ile Thr Ala Met Ala Ile Ser Asn Ser Tyr Leu Leu Met Val Ser  
 210 215 220  
 Glu His Lys Val Leu Ser Leu Tyr Glu Met Phe Leu Ala Glu Pro Glu  
 225 230 235 240  
 His Ser Thr Arg Ser Asn Ala Ala Asn Thr Ser Lys Gln Ser Ala Ala  
 245 250 255  
 Glu Asp Val Lys Leu Leu Glu Ser Leu Lys Ala Asp Ser Ile Leu Ser  
 260 265 270  
 Pro Met Ser Leu Ser Ile Arg Leu Ala His Ser Lys Ile Ile Ala Ser  
 275 280 285  
 Ile Val Tyr Ser Phe Phe His Ile Gly Cys Gly Trp Ser Leu Gly Ile  
 290 295 300  
 Gln Glu Leu His Phe Gly Lys Asn Gly Glu Gln Ile Gly Ser Arg Leu  
 305 310 315 320  
 Ala Thr Thr Val Asn Ala Gln Tyr Gly Ala Met Pro Leu His His Leu  
 325 330 335  
 Thr Arg Ser Arg Arg Gly Tyr Ser Ser Ser Phe Gln Ser Glu Pro Ser  
 340 345 350  
 Ser Gly Glu Ser Leu Val Glu Leu Thr Glu Pro Ser Ile Leu His Gln  
 355 360 365  
 Glu Thr Pro Thr Ser Ile Ser Tyr Ser His Pro Tyr Leu Leu Thr Ser  
 370 375 380  
 His Ala Asp Asn Thr Leu Thr Val Tyr Leu Val Val Ser Thr Gly Ala  
 385 390 395 400  
 Lys Leu Phe Ile Lys Gly Gly Gln Arg Leu Trp Gly His Thr Ser Ser  
 405 410 415  
 Val Ser Ala Val Gln Val Ser Asp His Gly Lys Ala Ile Ser Val Ser  
 420 425 430  
 Ser Arg Gly Asp Glu Ile Arg Val Trp Glu Leu Glu Ser Leu Ile Pro  
 435 440 445

## 18458

Ser Leu Gly Ser Ser Lys Glu Ala Arg Val Glu Asn Ser Ile Gln Val  
 450 455 460  
 Asn Pro Glu Asn Lys Leu Cys Lys Ile His Gly Gly Gly Ala Pro Leu  
 465 470 475 480  
 Ala Leu Phe Leu Ala Cys Gln His Cys Gly Pro Gln Leu Ala Ser Gly  
 485 490 495  
 Gln Met Ser Arg Glu Tyr Ala Arg Met Gly Asp Cys Val Gly Phe Asp  
 500 505 510  
 Asp Glu Arg Leu Leu Leu Ser Ser Arg Lys Glu Thr Gly Ala His Leu  
 515 520 525  
 Ile Ala Met Tyr Asp Phe Thr  
 530 535

&lt;210&gt; 41652

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41652

Lys Lys Ile Ser Leu Arg Asn Arg Ile Asn Gln Pro Leu Ile Asn Leu  
 1 5 10 15  
 Phe Ser Glu Lys Glu Lys Glu Ile Gln Tyr Asn Lys Ile Thr Leu Pro  
 20 25 30  
 Val Phe Ala His Ile Leu Ser Lys Trp Asn Ile Lys Leu Glu Val Val  
 35 40 45  
 Asp Ala Ser Thr Val Ser Pro Cys Lys Pro Asn Lys Lys Ile Ser Ala  
 50 55 60  
 Ile Val Asn Leu Cys Val Leu Arg Ser His Pro Tyr Leu Ser His Cys  
 65 70 75 80  
 Arg Cys Phe Pro Leu Tyr Cys Ala Val Cys Ile Ser Arg Phe Gln Cys  
 85 90 95  
 Ile Gln Arg Ser Arg Trp Ser Arg Gln Pro Ser Ile Asn Thr Leu Cys  
 100 105 110  
 Leu Leu Ala Arg Val Leu Tyr Phe Leu Arg Leu Thr Ile Met Arg Ser  
 115 120 125  
 Phe Glu Ile Leu Ala Ile Cys Ser Phe Gly Lys  
 130 135

&lt;210&gt; 41653

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41653

Leu Val Asp Gln Trp His Leu Leu Pro Leu Gly Arg Glu Cys Thr Val  
 1 5 10 15  
 Ala Pro Lys Glu Lys Ser Cys Tyr Arg Cys Gly Val Ala Gly His Ile  
 20 25 30  
 Ser Arg Glu Cys Ser Gln Ala Gly Ser Gly Asp Asn Tyr Asn Gly Ala  
 35 40 45  
 Pro Ser Gly Gly Gln Glu Cys Tyr Lys Cys Gly Gln Val Gly His Ile  
 50 55 60  
 Ala Arg Asn Cys Ser Gln Gly Gly Asn Tyr Gly Gly Gly Phe Gly His  
 65 70 75 80  
 Gly Gly Tyr Gly Gly Arg Gln Gln Thr Cys Tyr Ser Cys Gly Gly Phe  
 85 90 95

## 18459

Gly His Met Ala Arg Asp Cys Thr His Gly Gln Lys Cys Tyr Asn Cys  
 100 105 110  
 Glu Phe Leu Val Asn Leu Arg Phe Ala Leu Val Glu  
 115 120

<210> 41654  
 <211> 425  
 <212> PRT  
 <213> A.fumigatus

<400> 41654  
 Leu Met Val Phe Leu Ala Leu Ser Ala Leu Gly Val Pro Ser Thr Arg  
 1 5 10 15  
 Ala Leu Ala Ile Thr Leu Leu Pro Lys Ser Lys Val Leu Arg Glu Arg  
 20 25 30  
 Ile Glu Pro Gly Ala Ile Val Ala Arg Phe Ala Glu Thr Trp Leu Arg  
 35 40 45  
 Ile Gly Ser Phe Asp Leu Pro His Ser Arg Gly Asn Arg Asp Leu Ile  
 50 55 60  
 Arg Lys Leu Ala Thr Phe Thr Ala Glu Asp Val Phe Gly Gly Trp Glu  
 65 70 75 80  
 Thr Leu Pro Gly Val Val Ser Leu Gly Ser Asp Gln Ser Ala Asp Ala  
 85 90 95  
 Val Asp Asn Pro Ala Arg Gly Ile Pro Arg Asp His Ala Glu Glu His  
 100 105 110  
 Gln Gly Val Thr Glu Asn Arg Phe Ala Arg Leu Tyr Arg Glu Ile Val  
 115 120 125  
 Arg Arg Asn Ala Lys Thr Val Ala Ala Trp Gln Ala Tyr Gly Phe Met  
 130 135 140  
 Asn Gly Val Leu Asn Thr Asp Asn Thr Ser Ile Leu Gly Leu Ser Leu  
 145 150 155 160  
 Asp Phe Gly Pro Phe Ala Phe Met Asp Asn Phe Asp Pro Gln Tyr Thr  
 165 170 175  
 Pro Asn His Asp Asp His Leu Leu Arg Tyr Ser Tyr Lys Asn Gln Pro  
 180 185 190  
 Thr Val Ile Trp Trp Asn Leu Val Arg Leu Gly Glu Ala Leu Gly Glu  
 195 200 205  
 Leu Ile Gly Ala Gly Asp Lys Val Asp Glu Glu Trp Phe Leu Lys Asp  
 210 215 220  
 Gly Leu Thr Glu Glu Thr Ala Pro Pro Val Val Lys Arg Ala Glu Ala  
 225 230 235 240  
 Ile Ile Glu Arg Thr Gly Asp Glu Tyr Arg Ser Val Phe Leu Asn Glu  
 245 250 255  
 Tyr Lys Arg Leu Met Ser Arg Arg Leu Gly Leu Lys Thr Gln Lys Glu  
 260 265 270  
 Ser Asp Phe His Glu Leu Phe Ser Glu Met Leu Asp Thr Leu Glu Ala  
 275 280 285  
 Leu Glu Leu Asp Phe Asn His Phe Phe Arg Arg Leu Ser Asn Val Ala  
 290 295 300  
 Leu Ala Asp Ile Glu Thr Asp Gln Gln Arg Met Asp Thr Ala Pro Ile  
 305 310 315 320  
 Phe Phe His Ser Glu Gly Phe Gly Gly Ile Gly Tyr Thr Glu Arg Ser  
 325 330 335  
 Ala Lys Glu Arg Ile Ala Lys Trp Leu Ala Ala Trp Arg Ile Arg Ile  
 340 345 350  
 Leu Glu Asp Trp Gly Ile Glu Asn Asp Ala Asp Arg Gln Lys Asp Met

Parameter	Value	Unit	Source
$\alpha$	0.001	cm <sup>2</sup> /s	Table 1
$\beta$	0.001	cm <sup>2</sup> /s	Table 1
$\gamma$	0.001	cm <sup>2</sup> /s	Table 1
$\delta$	0.001	cm <sup>2</sup> /s	Table 1
$\epsilon$	0.001	cm <sup>2</sup> /s	Table 1
$\zeta$	0.001	cm <sup>2</sup> /s	Table 1
$\eta$	0.001	cm <sup>2</sup> /s	Table 1
$\theta$	0.001	cm <sup>2</sup> /s	Table 1
$\iota$	0.001	cm <sup>2</sup> /s	Table 1
$\kappa$	0.001	cm <sup>2</sup> /s	Table 1
$\lambda$	0.001	cm <sup>2</sup> /s	Table 1
$\mu$	0.001	cm <sup>2</sup> /s	Table 1
$\nu$	0.001	cm <sup>2</sup> /s	Table 1
$\xi$	0.001	cm <sup>2</sup> /s	Table 1
$\omicron$	0.001	cm <sup>2</sup> /s	Table 1
$\pi$	0.001	cm <sup>2</sup> /s	Table 1
$\rho$	0.001	cm <sup>2</sup> /s	Table 1
$\sigma$	0.001	cm <sup>2</sup> /s	Table 1
$\tau$	0.001	cm <sup>2</sup> /s	Table 1
$\upsilon$	0.001	cm <sup>2</sup> /s	Table 1
$\phi$	0.001	cm <sup>2</sup> /s	Table 1
$\chi$	0.001	cm <sup>2</sup> /s	Table 1
$\psi$	0.001	cm <sup>2</sup> /s	Table 1
$\omega$	0.001	cm <sup>2</sup> /s	Table 1
$\varphi$	0.001	cm <sup>2</sup> /s	Table 1
$\vartheta$	0.001	cm <sup>2</sup> /s	Table 1
$\varpi$	0.001	cm <sup>2</sup> /s	Table 1
$\varsigma$	0.001	cm <sup>2</sup> /s	Table 1
$\eta$	0.001	cm <sup>2</sup> /s	Table 1
$\theta$	0.001	cm <sup>2</sup> /s	Table 1
$\iota$	0.001	cm <sup>2</sup> /s	Table 1
$\kappa$	0.001	cm <sup>2</sup> /s	Table 1
$\lambda$	0.001	cm <sup>2</sup> /s	Table 1
$\mu$	0.001	cm <sup>2</sup> /s	Table 1
$\nu$	0.001	cm <sup>2</sup> /s	Table 1
$\xi$	0.001	cm <sup>2</sup> /s	Table 1
$\omicron$	0.001	cm <sup>2</sup> /s	Table 1
$\pi$	0.001	cm <sup>2</sup> /s	Table 1
$\rho$	0.001	cm <sup>2</sup> /s	Table 1
$\sigma$	0.001	cm <sup>2</sup> /s	Table 1
$\tau$	0.001	cm <sup>2</sup> /s	Table 1
$\upsilon$	0.001	cm <sup>2</sup> /s	Table 1
$\phi$	0.001	cm <sup>2</sup> /s	Table 1
$\chi$	0.001	cm <sup>2</sup> /s	Table 1
$\psi$	0.001	cm <sup>2</sup> /s	Table 1
$\omega$	0.001	cm <sup>2</sup> /s	Table 1
$\varphi$	0.001	cm <sup>2</sup> /s	Table 1
$\vartheta$	0.001	cm <sup>2</sup> /s	Table 1
$\varpi$	0.001	cm <sup>2</sup> /s	Table 1
$\varsigma$	0.001	cm <sup>2</sup> /s	Table 1
$\eta$	0.001	cm <sup>2</sup> /s	Table 1
$\theta$	0.001	cm <sup>2</sup> /s	Table 1
$\iota$	0.001	cm <sup>2</sup> /s	Table 1
$\kappa$	0.001	cm <sup>2</sup> /s	Table 1
$\lambda$	0.001	cm <sup>2</sup> /s	Table 1
$\mu$	0.001	cm <sup>2</sup> /s	Table 1
$\nu$	0.001	cm <sup>2</sup> /s	Table 1
$\xi$	0.001	cm <sup>2</sup> /s	Table 1
$\omicron$	0.001	cm <sup>2</sup> /s	Table 1
$\pi$	0.001	cm <sup>2</sup> /s	Table 1
$\rho$	0.001	cm <sup>2</sup> /s	Table 1
$\sigma$	0.001	cm <sup>2</sup> /s	Table 1
$\tau$	0.001	cm <sup>2</sup> /s	Table 1
$\upsilon$	0.001	cm <sup>2</sup> /s	Table 1
$\phi$	0.001	cm <sup>2</sup> /s	Table 1
$\chi$	0.001	cm <sup>2</sup> /s	Table 1
$\psi$	0.001	cm <sup>2</sup> /s	Table 1
$\omega$	0.001	cm <sup>2</sup> /s	Table 1
$\varphi$	0.001	cm <sup>2</sup> /s	Table 1
$\vartheta$	0.001	cm <sup>2</sup> /s	Table 1
$\varpi$	0.001	cm <sup>2</sup> /s	Table 1
$\varsigma$	0.001	cm <sup>2</sup> /s	Table 1
$\eta$	0.001	cm <sup>2</sup> /s	Table 1
$\theta$	0.001	cm <sup>2</sup> /s	Table 1
$\iota$	0.001	cm <sup>2</sup> /s	Table 1
$\kappa$	0.001	cm <sup>2</sup> /s	Table 1

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<210> 41655
<211> 156
<212> PRT
<213> A.fumigatus
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<210> 41656
<211> 63
<212> PRT
<213> A.fumigatus
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<210> 41657
<211> 75
<212> PRT
<213> A.fumigatus
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&lt;400&gt; 41657

Cys Leu Ala Asp Val Tyr Met Leu Gln Phe Ile Pro Arg Gly Trp Ile  
 1                                5                                10                                15  
 Leu Asp Glu Val Ile Glu Arg Val Glu Lys Arg Gly Asp Arg Lys Ile  
                               20                                25                                30  
 Leu Asp Arg Val Met Gln Met Ala Leu Asp Pro Phe Arg Asp Ser Trp  
                               35                                40                                45  
 Gly Leu Asp Lys Asp Glu Glu Glu Arg Phe Cys Gly Asp Val Pro Arg  
                               50                                55                                60  
 Tyr Lys Arg Ala Met Met Cys Ser Cys Ser Ser  
 65                                70                                75

&lt;210&gt; 41658

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41658

Arg Asp Thr Glu Asp Arg Arg Pro Glu Met Ser Gln Leu Val Arg Ala  
 1                                5                                10                                15  
 Ser Gly Leu Asp Val Ser Arg Leu Leu Ala Leu Val Ala Asn Ser Phe  
                               20                                25                                30  
 Thr Leu Gly Phe Ser Gly Ala Val Ala Gly Tyr Met Ser Asn Ile Ser  
                               35                                40                                45  
 Thr Tyr Asp His Cys Tyr Ser Thr Ser Ala Lys Arg Arg Leu Thr Arg  
                               50                                55                                60  
 Asn Ser Gln Leu  
 65

&lt;210&gt; 41659

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (26)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41659

Val Val Ala Ser Thr Ala Asn Val Thr Phe Tyr Val Val Glu Asp His  
 1                                5                                10                                15  
 Ser Leu Glu Asp Gly Val Gln Ser Gln Xaa Lys Arg Asn Ile Leu Ala  
                               20                                25                                30  
 Tyr Phe Ser Lys Gly Asp Ile Leu Ile Gly Phe Ile Gly Asp Ser Gln  
                               35                                40                                45  
 Leu Val Gly Trp Leu Ser His Thr Pro Ala Leu Ala Glu Ser Ile Gly  
                               50                                55                                60  
 Ala Phe Ser Val Ser Cys Arg Arg Arg Leu His Leu Asp Leu Pro Gln  
 65                                70                                75                                80  
 Val Val Cys Ser Arg Phe Lys Asp Lys Met Ala Ser Glu Pro Ala Ala  
                               85                                90                                95  
 Thr Val Ala Asp Leu Asp Phe Asp Asn Glu Gln Tyr Asp Ser Ala Glu  
                               100                                105                                110  
 Asp Glu Asp Phe Gln Leu Asp Pro Asp Gln Glu Asp Ala Asp Leu Thr

## 18462

115	120	125
Gly Ser Asp Ser Asp Asp	Glu Ala Thr Glu Pro	Ala Ala Lys Arg Arg
130	135	140
Lys Thr Gly Pro Thr Lys	Ala Ala Thr Glu Asp	Gln Glu Leu Asp Ser
145	150	155
Gly Asp Glu Ala Met Ile	Glu Lys Val Lys Ala	Arg Lys Glu Gly Lys
165	170	175
Gln Lys Gly Lys Lys Ser	Gln Gly Thr Ala Ser	Asp Glu Asp Glu Asp
180	185	190
Asp Val Asp Phe Asp Asp	Asp Asp Glu Gly Gly	Pro Gly Gly Phe Val
195	200	205
Arg Thr Arg Ala Met Arg	Met Arg Met Cys Val	Glu Pro Leu Tyr
210	215	220

&lt;210&gt; 41660

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41660

Gly Cys Glu Cys Ala Leu	Ser Leu Cys Thr Asp	Leu Ser Leu His Pro
1	5	10
Glu Asp Gln Tyr Leu Leu	Leu His Arg Gln Glu	Glu Arg Lys Pro Leu
20	25	30
Ala Lys Ile Asp Gly Ala	Thr Val Asp Val Asp	Ala Ile Trp Ala Gln
35	40	45
Met Asn Ala Pro Asp Ser	Ser Ala Gly Ile Leu	Pro Ser Gln Thr Gln
50	55	60
Ala Lys Asp Ala Thr Pro	Ala Lys Asp Glu Asn	Lys Asn Ala Asp Thr
65	70	75
Ala Glu Glu Gln Val Leu	Ser Pro Asp Ser Lys	Pro Gln Tyr Lys Glu
85	90	95
Glu Met Val Lys Ile Lys	Arg Thr Tyr Lys Phe	Ala Gly Glu Val Ile
100	105	110
Thr Glu Glu Lys Ile Val	Pro Lys Asp Ser Ala	Glu Ala Lys Leu Phe
115	120	125
Leu Ala Lys Gly Glu Ser	Val Glu Thr Val Thr	Asp Ala Asp Val Glu
130	135	140
His Ala Ala Asn Ala Lys	Asp Ala Leu Lys Leu	Arg Arg Pro Leu Arg
145	150	155
Lys Ile Ser Arg Phe Asp	Pro Asn Pro Thr Gly	Thr Ile Lys Lys Ser
165	170	175
Trp Glu Lys Gln Pro Thr	Ala Gly Ile Thr Gly	Gln Thr Glu Asn Ile
180	185	190
Ser Gly Pro Lys Ile Asn	Thr Val Glu Lys Ser	Arg Leu Asp Trp Ala
195	200	205
Ala Tyr Val Asp Gln Ala	Gly Ile Lys Asp Glu	Leu Lys Glu His Ser
210	215	220
Lys Ala Lys Glu Gly Phe	Leu Gly Arg Met Asp	Phe Leu Asn Arg Val
225	230	235
Val Ala Lys Arg Glu Glu	Arg Arg Asn Ala Arg	Leu Lys Gly Leu
245	250	255

&lt;210&gt; 41661

&lt;211&gt; 160

&lt;212&gt; PRT



&lt;213&gt; A.fumigatus

&lt;400&gt; 41661

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Ser Thr Arg Val Leu Pro Tyr Ser Phe Ala Ser Gly Thr Val Ser Pro
1          5          10          15
Leu Leu Lys Gly Ser Glu Glu Gly Leu Thr Leu Cys Arg Gln Pro Gln
          20          25          30
Arg Ala Leu Thr Tyr Ile Lys Arg Lys Gln Ala His Lys Leu Val Pro
          35          40          45
Ala Phe Leu Ala Cys Phe Glu Thr Met Trp Asn Gly Gln Leu Asp Ile
          50          55          60
Ser Lys Pro Glu Asn Leu Ser Lys Ala Leu Ser Lys Ala Phe Ser Gly
65          70          75          80
Thr Glu Val Glu Glu Ile Leu Ala Ala Ala Ser Pro Glu Ile Lys
          85          90          95
His Glu Leu Thr Ala Thr Thr Glu Arg Val Val Lys Glu Leu Gly Ala
          100          105          110
Phe Gly Cys Pro Trp Phe Trp Val Thr Asn Gly Glu Gly Lys Ser Glu
          115          120          125
Pro Phe Phe Gly Ser Asp Arg Phe His Phe Met Trp Asp Phe Leu Glu
          130          135          140
Leu Pro His Glu Asp Leu Arg Leu Lys Val Asp Glu Lys Ala Lys Leu
145          150          155          160

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&lt;210&gt; 41662

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41662

```

Pro Leu Phe Val Leu Thr Pro Asn Phe Phe Arg Leu Cys Gln Pro Val
1          5          10          15
His Pro Ala Lys Met Pro Ala Thr His Phe Pro Ser Met Gly Lys Leu
          20          25          30
Ala Leu Gly Ala Met His Leu Ala Ser Gly Phe His Asn His Asn Leu
          35          40          45
Gln Ser Cys Pro Gly Asp Ile Pro Val Ser Cys Ser Asn Thr Thr Ala
          50          55          60
Val Pro Asp Ser Cys Cys Phe Asn Tyr Pro Gly Gly Ser Leu Leu Leu
65          70          75          80
Thr Gln Phe Trp Asp Thr Asn Pro Ala Thr Gly Pro Ser Asp Ser Trp
          85          90          95
Thr Val His Gly Leu Trp Tyr Ala Arg Ala Glu Gly Asn Asn Lys Lys
          100          105          110
Tyr Gly His
          115

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&lt;210&gt; 41663

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41663

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Thr Ile Phe Ser Asp Ala Ile Leu Gly Ile Leu Asn Ser Pro Thr Asp
1          5          10          15
Val Val Asn Gly Gln Leu Leu Leu Asp Glu Asp Phe Leu Arg Asp His

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18464

[illegible]

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<210> 41664
<211> 68
<212> PRT
<213> A.fumigatus
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<400> 41664
Leu Trp Ser Gln Arg Asn Pro Asp Gln Gln Ser Ser Lys Ile Asn Lys
1          5          10          15
Ile Val Pro Gly His Ser Leu Thr Val Pro Gln Phe Tyr Pro Asp Gly
          20          25          30
Leu Pro Ser Ala Lys Arg Gln Ser Cys Asn Tyr Lys Phe Glu Thr Asp
          35          40          45
His Met Ile Gly Gln Thr Leu Ser Asp Arg Leu Pro Ala Ser Thr Arg
          50          55          60
Met Ala Thr Lys
65

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<210> 41665
<211> 253
<212> PRT
<213> A.fumigatus
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<400> 41665															
Leu	Asn	Ser	Gly	Thr	Pro	Ile	Arg	Pro	Leu	Val	Leu	Gln	Ile	Pro	Gly
1				5					10					15	
Leu	Phe	Met	Val	Phe	Gly	Met	Pro	Glu	Gln	Arg	Glu	Ile	Ile	Lys	Asn
			20					25					30		
Met	Ala	Thr	Asn	Asn	Gln	Arg	Arg	Pro	Asp	Asn	Cys	Asp	Gly	Thr	Tyr
		35					40					45			
Glu	Gln	Phe	Cys	Asp	Ser	Ser	Arg	Glu	Tyr	Ser	Asn	Ile	Thr	Glu	Ile
	50					55					60				
Leu	Gln	Ala	Gln	Gly	Arg	Thr	Glu	Leu	Leu	Ser	Tyr	Met	Gln	Thr	Tyr
65					70					75					80
Trp	Lys	Asp	Tyr	Gln	Gly	Asp	Asp	Glu	Ser	Phe	Trp	Glu	His	Glu	Trp
				85					90					95	
Asn	Lys	His	Gly	Ser	Phe	Val	Pro	Ile	Trp	Gln	Ser	Arg	Pro	Gly	Thr
			100					105					110		
Asn	Asp	Asp	Ile	Gly	Thr	Cys	Ile	Asn	Thr	Ile	Glu	Pro	Ser	Cys	Tyr
		115					120					125			
Thr	Asp	Tyr	Lys	Pro	Gln	Glu	Glu	Val	Gly	Asp	Tyr	Phe	Gln	Lys	Ala
	130					135					140				
Val	Asp	Leu	Phe	Lys	Gly	Leu	Asp	Thr	Tyr	Lys	Val	Cys	Ile	Arg	His
145					150					155					160
Gly	Leu	Leu	Ile	Ile	Leu	Arg	Leu	Thr	Gly	Gln	Ala	Leu	Ala	Ala	Ala
				165					170					175	
Gly	Ile	Thr	Pro	Ser	Ser	Ser	Lys	Thr	Tyr	Lys	Leu	Ser	Asp	Ile	Leu

## 18465

	180		185		190										
Ser	Ala	Leu	Ser	Ala	Ile	Thr	Gly	His	Glu	Pro	Ser	Val	Gly	Cys	Ser
	195						200					205			
Asn	Gly	Glu	Leu	Asn	Glu	Ala	Trp	Tyr	Phe	Phe	Asn	Ile	Lys	Gly	Asn
	210					215					220				
Leu	Ile	Asn	Gly	Lys	Tyr	Val	Pro	Ile	Asp	Pro	Arg	Met	Leu	Ser	Val
225					230					235					240
Tyr	Pro	Gln	Pro	His	Arg	Gln	Gln	Leu	Thr	Ser	Asn	Asn			
				245					250						

<210> 41666  
 <211> 147  
 <212> PRT  
 <213> A.fumigatus

<400> 41666

Asp	Leu	Ile	Gln	Phe	Asn	Arg	Ser	Glu	Asn	Tyr	Val	Thr	Leu	Ser	Ala
1			5						10					15	
Thr	Lys	Arg	Arg	Ile	Trp	Lys	Arg	Ile	Trp	Trp	Thr	Leu	Tyr	Thr	Arg
			20					25				30			
Asp	Arg	Ser	Val	Ala	Ala	Ala	Phe	Gly	Arg	Pro	Leu	His	Ile	Asn	Ser
		35					40					45			
Glu	Asp	Cys	Thr	Val	Glu	Asp	Leu	Lys	Glu	Ser	Asp	Phe	Ile	Glu	Tyr
	50					55					60				
Asp	Glu	Glu	Asn	Asp	Ser	Ala	Thr	Asp	Arg	Thr	Ala	Ile	Val	Phe	Phe
65				70					75					80	
Met	Gln	Tyr	Val	Lys	Leu	Cys	Gln	Leu	Met	Asp	Leu	Gly	Leu	Cys	Leu
				85					90				95		
Lys	Leu	Ser	Ser	Arg	Ser	Thr	Glu	Asp	Ser	Arg	Met	Lys	Gly	Ala	Ala
			100					105					110		
Gln	Cys	Glu	Leu	Gly	Leu	Asn	Asp	Trp	Leu	Val	Ser	Cys	Pro	Ser	Glu
	115					120						125			
Leu	Gln	Trp	Arg	Gln	Ser	Arg	His	Asn	Phe	Trp	Ser	Ala	Ile	Leu	Tyr
	130					135					140				
Ser	Thr	Phe													
145															

<210> 41667  
 <211> 141  
 <212> PRT  
 <213> A.fumigatus

<400> 41667

Thr	Val	Asp	His	Leu	Asp	Pro	Leu	Asp	Val	Asp	Ile	Leu	His	Gln	Arg
1				5					10					15	
His	Ala	Phe	Asp	Leu	Pro	Ser	Gln	Ala	Val	Cys	Asp	Ala	Leu	Val	Asp
			20					25					30		
Val	Phe	Phe	Lys	Trp	Ile	Ala	Pro	Val	Leu	Pro	Val	Ile	Asn	Arg	His
		35				40						45			
Asp	Phe	Met	Arg	Arg	Tyr	Arg	Asn	Pro	Gln	Asp	Pro	Pro	Ser	Ile	Leu
	50					55				60					
Leu	Leu	Gln	Ala	Val	Leu	Met	Val	Ala	Ser	Arg	Phe	His	Tyr	Asp	Ala
65					70					75				80	
Gln	Ser	Ser	Gly	Asn	Gly	Ile	Ile	Ser	Pro	Arg	Ile	Leu	Tyr	Lys	Lys
				85					90				95		
Val	Lys	Ala	Leu	Tyr	Asp	Ala	Gly	Tyr	Glu	Arg	Asp	Pro	Thr	Thr	Val

Variable	Mean	SD	Min	Max	Median	Mode	Skewness	Kurtosis	Shapiro-Wilk	Normality
Age	35.2	12.5	18	65	32	30	0.15	2.10	0.98	Normal
Gender	1.2	0.4	1	2	1	1	0.05	0.10	0.99	Normal
Marital Status	2.1	0.8	1	3	2	2	0.10	0.50	0.97	Normal
Education	15.8	2.5	10	20	16	16	0.08	1.80	0.99	Normal
Income	1200	300	500	2000	1100	1000	0.12	2.20	0.98	Normal
Health	3.5	0.5	1	4	3	3	0.05	0.10	0.99	Normal
Stress	4.2	0.8	1	5	4	4	0.10	0.50	0.97	Normal
Life Satisfaction	3.8	0.6	1	5	3	3	0.15	1.00	0.96	Normal
Work Satisfaction	3.2	0.7	1	5	3	3	0.18	1.20	0.95	Normal
Family Satisfaction	3.6	0.6	1	5	3	3	0.12	0.80	0.97	Normal
Community Satisfaction	3.4	0.7	1	5	3	3	0.15	1.10	0.96	Normal
Overall Satisfaction	3.5	0.6	1	5	3	3	0.10	0.60	0.98	Normal

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<210> 41668
<211> 181
<212> PRT
<213> A.fumigatus
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<210> 41669
<211> 69
<212> PRT
<213> A.fumigatus
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<210> 41670  
<211> 86

<212> PRT  
 <213> A.fumigatus

<400> 41670  
 Ser His Arg Asn Asn Gly Phe Leu Arg Tyr Trp Thr Val Ser Asn Ile  
 1 5 10 15  
 Pro Leu Phe Ala Leu Ala Ser Pro Met Leu Ala Ile Met Thr Tyr Ser  
 20 25 30  
 Ala Leu Trp Thr Leu Asn Val Glu Ser Gly Arg Leu Thr Gly Ala Gly  
 35 40 45  
 Arg Leu Leu Arg Ser Leu Ala Ala Pro Gln Leu Ile Met Ala Ala Leu  
 50 55 60  
 Thr Phe Ser Thr His His Val Gln Ile Ile Thr Arg Met Ser Trp Gly  
 65 70 75 80  
 Tyr Pro Val Trp Tyr Leu  
 85

<210> 41671  
 <211> 140  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (61)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 41671  
 Thr Asp Thr Gln Thr Arg Lys Leu Ser Asp Phe Arg Gly Arg Met Gln  
 1 5 10 15  
 Thr Gln Pro Ile Cys Thr Asp Met Met Tyr Asp Arg Arg His Gln Ile  
 20 25 30  
 Glu Leu Lys Lys Leu Phe Cys Lys Phe Arg Asn Thr His Val His Thr  
 35 40 45  
 Gln Lys Asp Leu Gly Pro Glu Asn Met Phe Val Gly Xaa Arg Ser Asp  
 50 55 60  
 Glu Ala Ile Asp Ala Leu Leu Arg Cys Phe Cys Ala Pro Gly Lys Gly  
 65 70 75 80  
 Gln Asp Pro Tyr Val Ser Ser Tyr Val Trp His Val Cys Gly Gln Arg  
 85 90 95  
 Gly Ser Gln Arg Cys Arg Asp Cys Glu Gly Ala Pro Gly Arg Gln Gln  
 100 105 110  
 Trp Leu Pro Ala Ala Ala Gly Gln Asp Gln Arg Gly Val Val Cys Gly  
 115 120 125  
 Pro Asp Asp Gln Asn Gly Ile Tyr Leu Leu Pro Trp  
 130 135 140

<210> 41672  
 <211> 311  
 <212> PRT  
 <213> A.fumigatus

<400> 41672  
 Asp Val Ser Val Leu Pro Gly Lys Asp Lys Ile Leu Thr Cys Pro Pro  
 1 5 10 15  
 Thr Tyr Gly Met Tyr Ala Val Ser Ala Glu Val Asn Asp Val Glu Ile

18468

20	25	30
Val Lys Val Pro Leu Asp	Val Asn Gly Phe Gln Leu Gln Pro Asp	
35	40	45
Lys Ile Asn Glu Ala Leu Ser	Ala Asp Pro Thr Ile Lys Met Ala Tyr	
50	55	60
Ile Cys Ser Pro Gly Asn Pro Thr Ala Asn Leu Ile Arg Lys Glu Asp		
65	70	75
Ile Gln Lys Val Leu Glu His Pro Thr Trp Asn Gly Val Val Ile Val		
85	90	95
Asp Glu Ala Tyr Ile Asp Phe Ala Pro Glu Gly Ser Ser Leu Ala Glu		
100	105	110
Trp Val Thr Glu Trp Pro Asn Leu Val Val Met Gln Thr Leu Ser Lys		
115	120	125
Ala Phe Gly Leu Ala Gly Ile Arg Leu Gly Val Ala Phe Thr Ser Pro		
130	135	140
Glu Ile Ala Arg Leu Leu Asn Ser Leu Lys Ala Pro Tyr Asn Ile Ser		
145	150	155
Ser Pro Thr Ser Ala Ile Ala Thr Ala Ala Leu Ser Pro Glu Asn Met		
165	170	175
Ala Val Met Arg Asn Tyr Arg Glu Gln Ile Ile Ala Gln Arg Lys Arg		
180	185	190
Met Leu Gln Glu Leu Pro Lys Ile Pro Gly Val Gly Arg Phe Leu Gly		
195	200	205
Gly Gln Glu Ser Asn Phe Leu Leu Val Glu Met Leu Asp Lys Pro Ala		
210	215	220
Ser Glu Gly Gly Lys Pro Ser Asn Ala Val Ala Leu Ala Ala Tyr Glu		
225	230	235
Ala Met Ala Glu Lys Arg Gly Val Val Val Arg Phe Arg Gly Lys Glu		
245	250	255
Leu Gly Cys Glu Gly Cys Leu Arg Ile Thr Val Gly Thr Glu Gln Glu		
260	265	270
Val Thr Arg Phe Leu Arg Glu Leu Arg Ala Val Leu Asp Gly Leu Leu		
275	280	285
Lys Gly Val Glu Ile Lys Ser Val Arg Asp Glu Val Asn Lys Glu Asn		
290	295	300
Gln Ala Asn Gln Val Val Gly		
305	310	

<210> 41673

<211> 370

<212> PRT

<213> A.fumigatus

<400> 41673

Arg Tyr Ala Thr His Leu Glu Ala Gly Thr Asp Met Thr Ile Thr Ile	
1	5
Thr Gln Val Tyr Asn Asn Asn Ile Thr Leu Thr Pro Ser Gln Phe Gln	
20	25
Ser Pro Ile His Asp Ala Ser Lys Met Val Pro Gln Leu Phe Pro Pro	
35	40
Arg His Val Tyr Phe Pro Ser Asn Pro Ser His Thr Ser Thr Val Ile	
50	55
Leu Leu His Asp Thr Asn Ser Thr Gly Ala Glu Leu Ala Ala Ala Leu	
65	70
Asp Val Ser Thr Thr Pro Ala Thr Glu Thr Ala Thr Ala Gly Asn Pro	
85	90
	95

18469

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Lys Ser Ile Phe Glu His Phe Pro Ser Cys Arg Trp Val Phe Pro Ser
      100      105      110
Ala Gln Pro Arg Gln Ile Asp Ile Cys Tyr Ala Ser Arg Gly Asn Trp
      115      120      125
Ile Asn Val Asp Val Asp Val Ala Val Ala Val Asp Thr Asp Ala Asn
      130      135      140
Glu Asp Thr Asp Pro Gly Ala Asn Ser Leu Gln Gln Pro Gln Pro Gln
      145      150      155      160
Leu Ser Pro Ser Thr Lys Asp Val Asp Asn Asn Tyr Asn Asn Asn Ala
      165      170      175
Asp Gln Asn Asp Asp Leu Glu Thr Cys Val Glu Tyr Ile Leu Gln Val
      180      185      190
Val Glu Glu Glu Ile Ile Arg Leu Asp Gly Asp Ser Arg Arg Val Val
      195      200      205
Leu Gly Gly Phe Gly Gln Gly Met Ala Val Ala Ile Ala Ala Leu Leu
      210      215      220
Ala Ala Gln Arg Arg Leu Gly Gly Phe Val Gly Val Ser Gly Trp Val
      225      230      235      240
Pro His Pro Glu Arg Ile Gly Ser Leu Ala Gly Arg Gly Arg Gly Leu
      245      250      255
Leu Val Glu Asn Glu Ala Arg Met Gly Ala Ser Glu Gly Ser Ala Gly
      260      265      270
Ala Asp Gly Val Glu Val Asp Pro Gly Ala Asp Ser Met Leu Glu Thr
      275      280      285
Pro Val Leu Leu Ser Tyr Leu Glu Asp Asp Pro Cys Val Asp Ile Gln
      290      295      300
Thr Ala Leu Thr Val Asp Glu Thr Leu Asn Arg Leu Gly Phe Val Lys
      305      310      315      320
Val Val Trp Asp Ala Cys Pro Ser Ser Pro Gln Gly Glu Gly Ser Leu
      325      330      335
Leu His Leu His His Leu Asp Thr Ile Met Gly Phe Leu Thr Gln Val
      340      345      350
Phe Asp His Glu Gly Ser Asn Leu Pro Gln Tyr Asp Met Leu Gly Tyr
      355      360      365
Ser Thr
      370

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<210> 41674

<211> 198

<212> PRT

<213> A.fumigatus

<400> 41674

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Val Arg Asp Tyr Pro Gly Pro Leu Trp Glu Pro Arg Ser Thr Arg Leu
1      5      10      15
Thr His Phe Leu Gln Pro Tyr Ser Arg Thr Lys Met Lys Ile Ser Ala
      20      25      30
Arg Pro Thr Ala Ala Met Gln Ala Lys Tyr Thr Pro Leu Pro Thr Pro
      35      40      45
Ala Asn Pro Asp Pro Gln Pro Asp Cys Gly Thr Ile Tyr Val Glu Phe
      50      55      60
Cys Ala Asp Ser Thr Gly Val Gly Thr Lys Gln Val Arg Ala Phe Asn
      65      70      75      80
His Phe Val Asp Glu Asn Asn Phe His Thr Gly Val Phe Ile Thr Gln
      85      90      95
Thr Pro Ile Ser Pro Ser Ala Val Arg Leu Leu Ser Gly Ile Pro Gly

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## 18470

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          100              105              110
Arg Ile Cys Glu His Phe Gln Glu Gln Asp Leu Leu Val Asn Ile Thr
          115              120              125
Arg His Glu Leu Val Pro Lys His Val Leu Leu Ser Pro Glu Glu Lys
          130              135              140
Lys Asn Leu Leu Gln Arg Tyr Arg Leu Lys Glu Ser Gln Leu Pro Arg
145              150              155              160
Ile Gln Val Ser Asp Pro Val Ala Arg Tyr Leu Gly Leu Arg Arg Gly
          165              170              175
Gln Val Val Lys Ile Ile Arg Lys Ser Glu Thr Ala Gly Arg Tyr Ala
          180              185              190
Ser Tyr Arg Trp Val Ile
          195

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&lt;210&gt; 41675

&lt;211&gt; 519

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (318)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41675

```

Gln Asp Ala Asn Pro Met Ile Arg Gln Ala Leu Phe Ala Lys Thr Gln
1              5              10              15
Ser Gly Ser Tyr Met Arg Leu Arg Ser Leu Tyr Pro Ser Ile Pro Arg
          20              25              30
Trp Ser Gln Ala Arg His Ser Leu Arg Ser Phe Ser Asn Glu Ser Arg
          35              40              45
Ser Arg Ser Ser Ile Asp Thr Phe Leu Pro Ser Gly Tyr Gln Asp Ser
          50              55              60
Leu Thr Arg Ser Ser Asn His Pro Gly His Gly Pro Trp Thr Pro Ser
65              70              75              80
Gln Ser Thr Ala Ser Phe Ser Thr Ser Ser Ser Leu Ser Glu Pro Ala
          85              90              95
Asp Trp Asp Glu Asn Pro Asn Leu Ser Ile Ser Thr Phe Ser Glu Leu
          100              105              110
Pro Ser Lys Asp Phe Gly Val Asn Gln His Met Ile Ile Asn Gln Glu
          115              120              125
Phe Lys Glu Ala Leu Arg Gln Ile Leu Trp Gln Phe Arg Ala Pro Ile
          130              135              140
Arg Tyr Ala Phe Ala Tyr Gly Ser Gly Val Phe Pro Gln Ser Gly Ser
145              150              155              160
Ala Ala Gly Ser Ser Gln Cys His Pro Ser Ala Pro Ala Ala Ile Gln
          165              170              175
Asn Met Gln Gln Gly Lys Gly Lys Met Ile Asp Phe Ile Phe Gly Val
          180              185              190
Ser Tyr Thr Gln His Trp His Ala Leu Asn Leu Ser Gln His Arg Asp
          195              200              205
His Tyr Ser Ala Leu Gly Ser Thr Gly Ser Tyr Met Val Ser Gln Val
          210              215              220
Gln Asp Arg Phe Gly Ala Gly Val Tyr Phe Asn Pro Tyr Val Thr Val
225              230              235              240
Asn Gly Thr Leu Ile Lys Tyr Gly Val Val Asn Leu Asp Thr Leu Cys

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## 18471

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                245                250                255
Arg Asp Leu Ser Gln Trp Asp Thr Leu Tyr Leu Ala Gly Arg Leu Gln
                260                265                270
Lys Pro Val Lys Ile Leu Arg Asp His Pro Arg Val Arg Leu Ala Asn
                275                280                285
Gln Ile Asn Leu Leu Ser Ala Val Arg Val Ala Leu Leu Leu Leu Pro
                290                295                300
Ala Glu Phe Ser Glu Phe Glu Leu Tyr Thr Thr Ile Ala Xaa Ile Ser
305                310                315                320
Tyr Met Gly Asp Leu Arg Met Ser Leu Pro Ala Glu Asp Pro Arg Lys
                325                330                335
Val Arg Asn Ile Val Ser Gly Gln Met Ala His Phe Arg Arg Leu Tyr
                340                345                350
Ala Pro Leu Ile Glu Asn Leu Pro Asn Val Thr Phe Asn Asp Arg Arg
                355                360                365
Cys Thr Glu Glu Asp Trp Ile Asp Asp Pro Asn Ala Asn Val Arg Leu
370                375                380
Thr Gln Asp Met Asp Pro Val Lys Arg Gly Asn Met Val Arg Arg Leu
385                390                395                400
Pro Glu Ser Phe Lys Gln Lys Leu Tyr Phe Gln Tyr Gln Ser Arg Phe
                405                410                415
Glu Ile Pro Gln Val Glu Phe Asn Lys Met Met Lys Glu Ser Ser Asp
                420                425                430
Ser Asp Ser Glu Val Val Arg Arg Arg Gln Gly Gly Pro Phe Glu Gln
                435                440                445
Arg Ile Ala Ala Asp Glu Asn Leu Lys Lys Glu Ile Gln Ala Ser Ile
245 450                455                460
Thr Lys Thr Ile Arg Trp Pro Ser Thr Val Gln Thr Ile Lys Gly Leu
465                470                475                480
Phe Thr Ser Gly Ile Ser Arg Thr Trp Arg Tyr Leu Ser Glu Lys Gln
                485                490                495
Ser Lys Tyr Arg Thr Ser Gly Arg Lys Ala Lys Ala Ser Ser Glu Glu
500                505                510
Ser Pro Ser Ser Lys His Glu
515

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&lt;210&gt; 41676

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41676

```

Val Ser Leu Thr His Phe Pro Phe Leu Leu Pro Pro Leu Gln Phe Ser
1                5                10                15
Lys Val Met Ala Ala Ala Ala Asn Ala Ala Pro Ala Thr Glu Gln Lys
                20                25                30
Ala Arg Pro Thr Lys Pro Asn Glu Glu Ala Phe Lys Ala Asp Leu Ala
35                40                45
Gln Ala Glu Lys Glu His Ala Ala Val Gln Glu Lys Leu Val Cys Glu
50                55                60
Val Ser Val Asn
65

```

&lt;210&gt; 41677

&lt;211&gt; 94

&lt;212&gt; PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (78)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41677

Asp	Pro	Gly	Gly	Glu	Leu	Thr	Gln	Arg	Phe	Gln	Cys	Trp	Gln	Phe	Lys
1				5					10					15	
Cys	Ala	Asn	Leu	Phe	Asp	Arg	Thr	Ser	Arg	Gly	Phe	Arg	Arg	Arg	Ser
		20						25					30		
Gly	Val	Trp	Lys	Arg	Lys	Arg	Arg	Thr	Leu	Thr	Ala	Asn	Val	Leu	Thr
		35					40					45			
Asp	His	Ala	Lys	Lys	Val	Gly	Tyr	Glu	Asn	Ser	Gly	Val	Asn	Gly	Lys
	50					55					60				
Val	Ser	Ala	Glu	Ala	Glu	Leu	Lys	Gln	Glu	Asn	Asp	Ala	Xaa	Ala	Asp
65					70					75					80
Val	Ser	Glu	Glu	Leu	Gln	Lys	Ala	Ser	Ile	Glu	Asp	Thr	Ala		
				85					90						

<210> 41678

<211> 82

<212> PRT

<213> A.fumigatus

<400> 41678

Glu	Pro	Ser	Asp	Phe	Leu	Leu	Cys	Ser	Tyr	Ser	Asp	Ser	Gln	Thr	Ala
1				5					10					15	
Leu	Thr	Thr	Glu	Phe	Leu	Ala	Pro	Glu	Pro	Asp	Asn	Asn	Ala	Pro	Leu
			20					25					30		
Leu	Ser	His	Ser	Leu	Val	Arg	Cys	Gln	Gly	Tyr	Gly	Val	Thr	Gly	Leu
		35					40					45			
Ser	Ala	Phe	Thr	Gly	Arg	Phe	Val	Gln	His	Leu	Tyr	Glu	Glu	Glu	Val
	50					55					60				
Gly	Phe	Leu	Ser	Thr	Lys	Glu	Thr	Thr	Tyr	Thr	Trp	Asp	Leu	Gly	Glu
65					70				75						80
Leu	Leu														

<210> 41679

<211> 419

<212> PRT

<213> A.fumigatus

<400> 41679

Arg	Tyr	Val	Phe	Thr	Thr	Ser	Cys	Lys	Leu	Arg	Asn	Ile	Tyr	Lys	Asp
1				5					10					15	
Thr	Asn	Tyr	Ala	Gln	Asn	Gln	Ile	Lys	Ala	Lys	Ile	Glu	Ser	Ala	Lys
			20					25					30		
Pro	Asn	Asn	Gln	Asp	Ser	Pro	Ser	Ala	Lys	Arg	Gln	Gln	Glu	Leu	Arg
		35					40					45			
Ala	Glu	Leu	Ser	Ser	Ile	Arg	Gln	Lys	Gln	Gln	Gly	Phe	Lys	Ala	Ser
	50					55					60				
Arg	Thr	Ser	Thr	Gln	Glu	Lys	Ile	Asn	Ala	Leu	Glu	Leu	Thr	Leu	Lys
65					70				75						80

18473

Ala Arg Ile Thr Glu Gln Asn Asn Ser Arg Thr Arg Met Pro Phe Lys  
85 90 95  
Asn Val Glu Asp Ile Asp Arg Glu Ile Ala Arg Leu Glu Lys Gln Val  
100 105 110  
Asp Ser Gly Thr Leu Arg Leu Val Asp Glu Arg Lys Ala Leu Ser Asp  
115 120 125  
Ile Ser Thr Leu Arg Lys Gln Arg Lys Asn Phe Ala Gly Leu Asp Glu  
130 135 140  
Gln Gln Lys Val Ile Asn Asp Leu Lys Ala Gln Ile Ala Thr Leu Lys  
145 150 155 160  
Lys Thr Leu Asp Asn Pro Glu Ala Lys Ala Leu Ser Asp Lys Tyr Thr  
165 170 175  
Glu Ile Gln Lys Glu Leu Asp Ala Ile Lys Ala Glu His Asp Ser Ala  
180 185 190  
Phe Lys Asn Leu Asn Ala Leu Arg Asp Glu Arg Thr Lys Leu His Ala  
195 200 205  
Glu Gln Gln Lys Lys Trp Asn Ala Ile Arg Glu Ile Lys Asp Asn Tyr  
210 215 220  
Tyr Lys Ala Arg Lys Ala Tyr Lys Glu Tyr Glu Asp Glu Ala Trp Arg  
225 230 235 240  
Ile Arg Arg Glu Lys Gln Lys Ala Gln Arg Glu Ala Phe Glu Arg Glu  
245 250 255  
Lys Lys Lys Lys Ile Ala Asp Lys Lys Leu Glu Glu Ala Ser Arg Pro  
260 265 270  
Ala Tyr Thr Asp Glu Ile Leu Ile Ala Gln Gly Leu Ile Arg His Phe  
275 280 285  
Asn Pro Ser Tyr Asp Phe Ser Thr Leu Gly Leu Asp Asp Lys Lys Asp  
290 295 300  
Gln Ser Ser Ala Phe Arg Ala Gln Val Gly Arg Thr Val Asp Asp Ser  
305 310 315 320  
Asn Ile Lys Gly Met Lys Val Leu Lys Lys Glu Asp Arg Glu Glu Asp  
325 330 335  
Tyr Phe Val Gly Thr Gly Gly Lys Lys Ser Lys Lys Gly Lys Lys Gly  
340 345 350  
Thr Ala Asn Gly Ser Pro Ala Pro Gly Thr Pro Ala Glu Pro Thr Lys  
355 360 365  
Phe Asn Leu Asn Val Gly Val Ile Glu Asp Phe Ala Lys Val Lys Ile  
370 375 380  
Asp Pro Pro Met Asn Gln Ser Asp Val Pro Ala Val Ile Glu Lys Leu  
385 390 395 400  
Pro Pro Lys Ile Thr Glu Trp Lys Ala Asn Gln Ala Ala Lys Thr Arg  
405 410 415  
Gly Val Ser

<210> 41680

<211> 612

<212> PRT

<213> A.fumigatus

<400> 41680

Val Thr Leu Ala Pro Ser Phe Ser Met Ala Lys Asp Glu Leu Gln Glu  
1 5 10 15  
Ala Asn Gln Gln Ser His Gln Val Gly Asp Arg Pro Asn Lys Thr Asp  
20 25 30  
Ser Ile Gly Ser Asp Glu Val Val Met Asn Arg Gly Ala Asn Phe Lys

	35					40					45				
Gly	Arg	Asn	Gln	Arg	Gln	Leu	Trp	Gly	Gly	Ser	Val	His	Leu	Asn	Ser
	50					55					60				
Asp	Ser	Arg	Tyr	Arg	Ala	Arg	Pro	Arg	Thr	Thr	Gln	Gln	Ile	Pro	Arg
65					70					75					80
Gln	Asn	Ala	Asn	Gly	Thr	Pro	Asn	Arg	Pro	Ala	Ala	Met	Glu	Asn	His
				85					90					95	
Thr	Thr	Glu	Asp	Asp	Val	Arg	Cys	Gln	Ile	Lys	Gly	Pro	Pro	Ser	Ala
			100					105					110		
Gln	Lys	Thr	Ala	Asn	Lys	Ala	Pro	Ser	Leu	Glu	Ala	Leu	Asp	Glu	Leu
		115					120					125			
Lys	Arg	Leu	Gln	Lys	Glu	Ile	Val	Leu	Gln	Ala	His	Leu	Asn	Arg	Tyr
	130					135					140				
Lys	Asp	His	Glu	Asp	Asp	Thr	Ala	Asn	Pro	Glu	Ser	Leu	Ala	Lys	Cys
145					150					155					160
Arg	Asp	Gly	Pro	Gly	Thr	Asp	Pro	Lys	Ser	Asp	Val	Tyr	Lys	Ser	Ile
				165					170					175	
Ala	Arg	Cys	Arg	Leu	Thr	Ala	Asn	Pro	Asn	Ala	Thr	Ser	Ser	His	Pro
			180					185					190		
Gly	Ser	Ser	Pro	Glu	Asp	Lys	Phe	Glu	Gly	Asp	Val	Asn	Asp	Arg	Tyr
		195					200					205			
Phe	Val	Asp	Glu	Ile	Arg	Ser	Arg	Val	Gln	Lys	Phe	Tyr	Ala	Ala	Lys
	210					215					220				
Leu	Asp	Ala	Gln	Arg	Glu	Ser	Tyr	His	Asn	Ser	Val	Ser	Val	Tyr	Pro
225					230					235					240
Ala	Ile	Val	Asp	Gly	Gln	Ile	Phe	Leu	Ser	Arg	Tyr	Pro	Ser	Ala	Glu
			245						250					255	
His	Glu	Arg	Pro	Glu	Lys	Thr	Leu	Ser	Asn	Thr	Glu	Arg	Gln	Thr	Gly
			260					265					270		
Ser	Gln	Asp	Gly	Ser	His	Lys	Pro	Glu	His	Cys	Ser	Met	Val	Lys	Trp
		275					280					285			
Glu	Asp	Arg	Trp	Glu	Leu	Arg	Pro	Arg	Ala	Cys	Ser	Thr	Tyr	Glu	Gly
	290					295					300				
Phe	Arg	Asp	Trp	Phe	Arg	His	Trp	Leu	Glu	Met	Glu	Thr	Gly	Asp	Ser
305					310					315					320
Pro	Asn	Ile	Asp	Ile	His	His	Gln	Thr	Phe	Phe	Asp	Gly	Thr	Ala	His
			325						330					335	
Met	Asp	Gly	Ile	Lys	Ser	Phe	Tyr	Ile	Leu	Asp	Leu	Gly	Asp	Val	Pro
			340					345					350		
Thr	Arg	Leu	Asp	Met	Thr	Ser	Glu	Ala	Thr	Arg	Leu	His	Tyr	His	Glu
		355					360					365			
Thr	Ala	Glu	Gly	Tyr	Cys	His	Asn	Leu	Ala	Leu	His	Met	Arg	Ala	Ala
	370					375					380				
Glu	Glu	Glu	Ala	Lys	Thr	Arg	Arg	Lys	Gln	Ala	Arg	Asp	Ala	Phe	Ile
385					390					395				</	

## 18475

				485					490					495		
Asp	Ser	Leu	Gly	Leu	Gln	Thr	Thr	Gly	Arg	Tyr	Thr	Ala	Glu	Leu	Glu	
			500					505					510			
Ile	Phe	Ile	Lys	Pro	Asp	Gln	Lys	Arg	Arg	Gly	Ile	Gly	Lys	Cys	Leu	
		515					520					525				
Leu	Asp	Lys	Leu	Ile	Glu	Val	Cys	Asp	Val	Thr	Tyr	Val	Pro	Lys	Arg	
		530				535					540					
Gly	Ile	Phe	Tyr	Asp	Ala	Gly	Cys	Asp	Asp	Lys	Thr	Gly	Phe	Tyr	Pro	
545					550				555						560	
Gly	Gly	Ser	Arg	Thr	Leu	Lys	Arg	Leu	Val	Phe	Ile	Ile	Ser	Tyr	Ser	
			565					570					575			
Val	Pro	Glu	Arg	Ser	Gln	Ile	Lys	Trp	Leu	Ile	Asp	Trp	Leu	Glu	Arg	
		580					585					590				
Asp	Tyr	His	Phe	Glu	Gln	Gln	Gly	Val	Leu	Lys	Gly	Ala	Arg	Val	Lys	
		595				600					605					
Phe	Glu	Arg	Leu													
		610														

&lt;210&gt; 41681

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (45)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41681

Ser	Ala	Leu	Gln	Arg	Ile	Lys	Ser	Val	Glu	Asn	Phe	Arg	Glu	Gly	Lys
1			5					10					15		
Val	Ala	Phe	Leu	Leu	Ala	Thr	Asp	Leu	Ala	Ser	Arg	Gly	Leu	Asp	Ile
		20					25					30			
Lys	Gly	Val	Glu	Thr	Val	Ile	Asn	Tyr	Lys	Thr	Ala	Xaa	Asn	His	Glu
		35				40					45				
Ile	Tyr	Leu	Pro	Arg	Val	Gly	Arg	Thr	Ala	Arg	Ala	Gly	Arg	Ser	Gly
		50			55					60					
Arg	Ala	Cys	Thr	Ile	Ala	Thr	Glu	Pro	Glu	Arg					
65				70					75						

&lt;210&gt; 41682

&lt;211&gt; 662

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41682

Thr	Phe	Phe	Phe	Leu	Ser	Ala	Gln	Glu	Ile	Leu	Asp	Arg	Ser	Arg	Arg
1			5					10					15		
Pro	Gly	Arg	Lys	Asn	Arg	Ser	Gly	Leu	Ser	Pro	Ser	Thr	Ser	Leu	Ser
		20					25					30			
Leu	Ala	Leu	Arg	Glu	Phe	Leu	Gln	Ser	Cys	Ala	Pro	Leu	Phe	Ala	Phe
		35				40					45				
Arg	Arg	Pro	Asn	Asn	Gly	Arg	Ser	Pro	Arg	Lys	Met	Ala	Pro	Asn	Ala
		50			55					60					
Ala	Thr	Lys	Lys	Arg	Ala	Ala	Ala	Arg	Asp	Asp	Asp	Phe	Val	Leu	Thr
65				70					75					80	

Leu Ser Asp Asp Glu Asn Asp Ile Phe Glu Asn Gly Val Glu Glu Asp  
 85 90 95  
 Gly Asp Asn Ala Gln Glu Asp Thr Leu Ser Ser Ser Lys Lys Arg Lys  
 100 105 110  
 Arg Glu Ala Ala Glu Ala Pro Lys Gly Lys Asn Lys Lys Gln Lys Gln  
 115 120 125  
 Leu Lys Lys Ser Lys Lys Gly Glu Ser Ala Ala Gly Ala Val Ser Asp  
 130 135 140  
 Asp Gln Ser Ser Glu Glu Asp Glu Ala Glu Ala Met Asp Ala Gly Glu  
 145 150 155 160  
 Asp Asp Gly Ala Leu Asp Ser Glu Phe Glu Phe Asp Val Gly Gly Asn  
 165 170 175  
 Ala Asn Thr Gly Val Ile Glu Gly Phe Asp Gly Trp Glu Ala Arg Asn  
 180 185 190  
 Gly Ala Ser Leu Ala Asp Ala Pro Lys Asn Gly Asp Lys Lys Ala Val  
 195 200 205  
 Asp Ile Asp Asp Ile Ile Ser Arg Arg Lys Ala Lys Lys Glu Ala Glu  
 210 215 220  
 Leu Lys Lys Lys Gln Gln Lys Glu Lys Lys Arg Arg Glu Glu Glu Gly  
 225 230 235 240  
 Glu Glu Glu Ser Glu Gly Glu Asp Ala Asp Ser Asp Gly Gly Met Ser  
 245 250 255  
 Val Asp Phe Gln Asp Asp Glu Leu Leu Ala Ala Asp Gly Phe Gly Met  
 260 265 270  
 Gly Ala Asp Gly Ala Asp Glu Ser Asp Asp Asp Val Glu Asn Gly Ser  
 275 280 285  
 Asn Asp Ser Asp Asp Ser Glu Gly Lys Gly Ser Glu Asp Glu Glu Ser  
 290 295 300  
 Gly Asp Glu Tyr Asn Asp Asp Asp Ala Ala Ser Asp Asn Asp Ser Val  
 305 310 315 320  
 Ala Thr Pro Val His His Pro Asp Asp Glu Ala Ala Ser Asp Glu Glu  
 325 330 335  
 Ser Glu Ala Glu Ser Glu Val Asp Ala Glu Glu Ala Glu Lys Arg Lys  
 340 345 350  
 Ala Phe Phe Ala Pro Glu Glu Lys Ser Thr Ala Val Ser Thr Phe Asn  
 355 360 365  
 Arg Ser Phe Gln Asp Phe Asn Leu Ser Arg Pro Ile Leu Arg Gly Leu  
 370 375 380  
 Ala Ser Val Asn Phe Thr Thr Pro Thr Pro Ile Gln Gln Lys Thr Ile  
 385 390 395 400  
 Pro Val Ala Leu Leu Gly Lys Asp Ile Val Gly Ser Ala Val Thr Gly  
 405 410 415  
 Ser Gly Lys Thr Ala Ala Phe Val Val Pro Ile Leu Glu Arg Leu Leu  
 420 425 430  
 Phe Arg Pro Arg Lys Val Pro Thr Ser Arg Val Ala Ile Leu Met Pro  
 435 440 445  
 Thr Arg Glu Leu Ala Val Gln Cys Tyr Asn Val Ala Thr Lys Leu Ala  
 450 455 460  
 Thr His Thr Asp Ile Thr Phe Cys Gln Leu Val Gly Gly Phe Ser Leu  
 465 470 475 480  
 Arg Glu Gln Glu Asn Ile Leu Lys Lys Arg Pro Asp Val Ile Ile Ala  
 485 490 495  
 Thr Pro Gly Arg Phe Ile Asp His Met Arg Asn Ser Pro Ser Phe Thr  
 500 505 510  
 Val Asp Thr Leu Glu Ile Leu Val Leu Asp Glu Ala Asp Arg Met Leu  
 515 520 525

18477

Glu Asp Gly Phe Ala Asp Glu Leu Asn Glu Ile Leu Thr Thr Ile Pro  
 530 535 540  
 Lys Ser Arg Gln Thr Met Leu Phe Ser Ala Thr Met Thr Asp Ser Val  
 545 550 555 560  
 Asp Lys Leu Ile Arg Val Gly Leu Asn Arg Pro Val Arg Leu Met Val  
 565 570 575  
 Asp Ser Lys Lys Asn Thr Ser Met Asn Leu Thr Gln Glu Phe Val Arg  
 580 585 590  
 Leu Arg Pro Gly Arg Glu Asp Lys Arg Leu Gly Tyr Leu Leu Tyr Leu  
 595 600 605  
 Cys Asn Glu Ile Tyr Thr Gly Arg Val Ile Val Phe Phe Arg Gln Lys  
 610 615 620  
 Arg Glu Ala His Arg Val Arg Ile Val Phe Gly Leu Leu Gly Leu Lys  
 625 630 635 640  
 Ala Ala Glu Leu His Gly Ser Met Ser Gln Glu Gln Val Cys Gln Leu  
 645 650 655  
 Ile Asn Gln Ile Val Thr  
 660

<210> 41683

<211> 133

<212> PRT

<213> A.fumigatus

<400> 41683

Arg Arg Tyr Pro Lys Arg Leu Ser Ser Leu Pro Gly Arg Asn Arg Thr  
 1 5 10 15  
 Asn Ser Trp Val Arg Phe Met Asp Val Phe Phe Phe Glu Ser Thr Ile  
 20 25 30  
 Lys Arg Thr Gly Arg Leu Arg Pro Thr Arg Met Ser Leu Ser Thr Glu  
 35 40 45  
 Ser Val Ile Val Ala Glu Lys Ser Ile Val Cys Arg Asp Leu Gly Met  
 50 55 60  
 Val Val Lys Ile Ser Leu Ser Ser Ser Ala Lys Pro Ser Ser Asn Ile  
 65 70 75 80  
 Arg Ser Ala Ser Ser Arg Thr Lys Ile Ser Ser Val Ser Thr Val Lys  
 85 90 95  
 Leu Gly Glu Phe Arg Met Trp Ser Ile Lys Arg Pro Gly Val Ala Met  
 100 105 110  
 Ile Thr Ser Gly Arg Phe Phe Lys Met Phe Ser Cys Ser Arg Arg Leu  
 115 120 125  
 Lys Pro Pro Thr Ser  
 130

<210> 41684

<211> 64

<212> PRT

<213> A.fumigatus

<400> 41684

Ser Lys Leu Ala Gln Leu Asp Ile Phe Asp Glu Leu Tyr Gly His Leu  
 1 5 10 15  
 Leu Thr Ser Leu Gln Arg Leu Arg Leu Asp Ser Ile Lys Thr His Lys  
 20 25 30  
 Trp Thr Ile Leu Pro Cys Ser Ala Met Thr Gly Lys Asn Leu Tyr Glu  
 35 40 45

## 18478

Gly Leu Gln Trp Val Val Gln Asp Ala Lys Asp Arg Leu Phe Leu Tyr  
 50 55 60

<210> 41685  
 <211> 153  
 <212> PRT  
 <213> A.fumigatus

<400> 41685  
 Lys Ser Thr Arg Leu Trp Thr Phe Leu Gln Val Gln Arg Lys Pro Cys  
 1 5 10 15  
 Ala Ser Leu Leu Pro Gln His Gln Pro Arg Ser Arg Leu Gln Ile Pro  
 20 25 30  
 Arg Gln Thr Leu Leu Arg His Gln Asp Gly Val Leu Glu Trp Gln Leu  
 35 40 45  
 Ser Arg Tyr Arg Lys Gln His His His Tyr Ile His His His Ser  
 50 55 60  
 Pro Arg Pro Arg Cys Pro Phe Pro Pro Asn Arg Arg Cys His Trp Ser  
 65 70 75 80  
 Arg Ser Pro His Arg Arg His Ser His Leu His His Arg His Pro Tyr  
 85 90 95  
 Gln Ile Arg Leu Gln Gln Ala Ile Arg Arg Pro Glu Ser Pro Leu Thr  
 100 105 110  
 Tyr Arg His Gln Ser Arg His Leu His Leu His Ser Pro Pro Leu Leu  
 115 120 125  
 Pro Pro Pro Ser Ser Phe Ser Pro Ser Ala Ala Ser Phe Ser Val Gln  
 130 135 140  
 Pro Leu Ser Ser Leu Ser Ser Trp Ile  
 145 150 155

<210> 41686  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 41686  
 Lys Asp Lys Phe Ser Gln Asn Ala Val Asn Ile Glu Lys Ser Ser Leu  
 1 5 10 15  
 Lys Gly Gln Gly Asp Glu Asn Phe Asp Ala Val Ser Leu Leu Thr Thr  
 20 25 30  
 Glu Lys Gln Pro Ile Trp Met Leu Thr Phe Asp Val Ser Gly Leu Asp  
 35 40 45  
 Asn Ala Gly Lys Thr Thr Ile Val Lys Gln Ile Met Asn Glu Asp Val  
 50 55 60  
 Arg Thr Val Ser Pro Thr Leu Gly Phe Ile Ile Lys Thr Ile Asp Phe  
 65 70 75 80  
 Glu Gly

<210> 41687  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 41687  
 Glu Lys Pro Thr Ala Arg Thr Pro Gln Gly Thr Ser Ile Asp Phe Cys



## 18479

```

1           5           10           15
Pro Pro Gly Asp Val Gly Gly Gln Lys Thr Leu Arg Ser Tyr Trp Lys
      20           25           30
Asn Tyr Phe Glu Lys Thr Asp Thr Leu Val Trp Val Val Asp Ala Thr
      35           40           45
Asp Arg Leu Arg Val Asp Asp Cys Arg Asp Glu Leu Ala Gly Leu Leu
      50           55           60
Leu Glu Glu Val Arg Val Ala Asn Val Pro Ala Arg Leu Gln Asn Phe
65           70           75           80
Arg

```

&lt;210&gt; 41688

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41688

```

Leu Trp Met Gly Thr His Pro Ser Leu Pro Ser Lys Asp Leu Glu Thr
1           5           10           15
Gln Arg Thr Leu Leu Asp Met Val Gln Asp Asn Gln Ala Leu Ile Ser
      20           25           30
Gln Glu Val Ser Glu Arg Tyr Gly Gly Lys Leu Pro Phe Leu Phe Lys
      35           40           45
Val Leu Ser Ile Arg Lys Ala Leu Ser Ile Gln Ala His Pro Asn Lys
      50           55           60
Lys Leu Ala Glu Lys Leu His Ala Arg Asp Pro Arg Asn Tyr Pro Gly
65           70           75           80
Glu Tyr Thr Ala Phe Lys Arg Thr Phe Val Val Tyr Phe Gln Thr Ala
      85           90           95
Phe His

```

&lt;210&gt; 41689

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41689

```

Leu Phe Ser Asp Asp Asn His Lys Pro Glu Met Thr Ile Ala Ile Thr
1           5           10           15
Pro Phe Glu Gly Leu Cys Gly Phe Arg Pro Leu Val Glu Ile Ile His
      20           25           30
Phe Leu Lys Ala Val Ala Pro Leu Arg Gln Leu Val Gly Glu Arg Ala
      35           40           45
Ala Ser Glu Phe Glu Asn Thr Val Lys Gly Ser Glu Glu Ser Glu Asp
      50           55           60
Pro Ala Val Thr Glu Lys Asn Lys Gln Ala Leu Arg Thr Leu Phe Thr
65           70           75           80
Ser Leu Met Arg Ser Ser Pro Glu Ser Ile Glu Ala Ala Thr Lys Glu
      85           90           95
Leu Val Ala Ile Ala Gln Asn Ser Pro Glu Thr Phe Thr Thr Ser Ser
      100           105           110
Ser Thr Pro Glu Thr Asn Pro Thr Asn Pro Ala Glu Leu Ala Ala Ile
      115           120           125
Thr Val Arg Leu Asn Gly Gln Phe Pro Asn Asp Ile Gly Ser Phe Val

```

## 18480

130 135 140  
 Phe Phe Phe Leu Asn Phe Val Lys Leu Glu Pro Gly Glu Ala Met Phe  
 145 150 155 160  
 Leu Lys Ala Asp Asp Ile His Ala Tyr Ile Ser Gly Asp Ile Ile Glu  
 165 170 175  
 Cys Met Ala Ser Ser Asp Asn Val Val Arg Ala Gly Phe Thr Pro Lys  
 180 185 190  
 Phe Lys Asp Val Asp Thr Leu Val Asp Met Leu Thr Tyr Ser Tyr Ala  
 195 200 205  
 Pro Ile Ala Glu Gln Lys Leu Glu Pro Thr Asp Tyr Pro Tyr Ala Val  
 210 215 220  
 Leu Asn Ala Pro Ala Tyr Ser Ser Gly Ser Ser Cys Ile Leu Tyr Asp  
 225 230 235 240  
 Pro Pro Ile Glu Glu Phe Ser Val Val Lys Thr Asp Leu Lys Arg Gln  
 245 250 255  
 Gly Ala Lys Ala Thr Phe Asp Gly Ile Ser Gly Pro Ser Ile Val Ile  
 260 265 270  
 Cys Thr Ala Gly Ala Gly Lys Ile Thr Val Gly Pro Lys Thr Glu Glu  
 275 280 285  
 Val Asn Glu Gly Tyr Val Phe Phe Val Gly Ala Asn Ala Glu Cys Ile  
 290 295 300  
 Ile Glu Ser Thr Gly Glu Asp Thr Phe Thr Thr Phe Lys Ala Phe Cys  
 305 310 315 320  
 Asp Leu Thr Gly Lys Glu Asp Met Val Asn Gly Asn  
 325 330

&lt;210&gt; 41690

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41690

Phe Lys Met Ala Asp His Pro Asp Asp Val Arg Leu Thr Leu Leu Glu  
 1 5 10 15  
 Lys Ala Asp Leu Ile Pro Gly Tyr Leu Ser Val Leu Ala Thr Ala Leu  
 20 25 30  
 Tyr Ser Ala Val Ala Gly Ile Phe Arg Gly Asn Thr Gly Ala Lys Glu  
 35 40 45  
 Tyr Gly Val His Val Gly His Ala Ile Val Arg Lys Met Val Thr Arg  
 50 55 60  
 Phe Ser Met Arg Gln Met Gln Tyr Val Asp Gln His Pro Pro Leu Arg  
 65 70 75 80  
 Ser Val Asn Thr Val Ala Asp Val Gln Glu Gln Val Asn Phe Leu Leu  
 85 90 95  
 Asn Glu Gln Ser Val  
 100

&lt;210&gt; 41691

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41691

Thr Ala Pro Cys Ser Pro Phe Ser Phe Gly Ser Gly Ser Cys Thr Ser  
 1 5 10 15  
 Tyr Leu Glu Val Asn Gly Ser Ile Phe Leu His Ser Glu Arg Ala Ser

## 18481

	20		25		30
Asp Gly Asp Arg Pro Leu Leu Arg Thr Phe Thr Gly Asp Ser Leu Asp					
	35		40		45
Asp Thr Leu Asp Pro Leu Pro Phe Asn Ala Leu Phe Val Leu Ile Met					
	50		55		60
Phe Glu Asn His Phe Gly Ala Asn Asp Lys Leu Pro Val Ala Leu Arg					
65		70		75	80
Asp Arg Ala Ser Asp Thr Phe Cys Arg Phe Phe Asn Phe Asp His Asp					
	85		90		95
Thr Val Thr Asn Phe Ala Ala Val Thr Arg Leu Arg Thr Gly Ser Thr					
	100		105		110
Gly Ala Thr Leu Tyr Ala Phe Asp Ala Ala Asn Leu Val Arg Tyr Arg					
	115		120		125
Arg Thr					
130					

&lt;210&gt; 41692

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41692

Glu Gln Ser Gly Gly Gly Phe Ala Ile Gly Gly Ala Pro Gly His Phe					
1	5		10		15
Asp Leu Tyr Ser His Ile Val Ala Asp Leu Asn Ala Asn Gly His Asp					
	20		25		30
Val Ala Ile Phe Phe Leu Ala Tyr Thr Leu Thr Pro His Ala Ala Tyr					
	35		40		45
Pro Thr Gln Leu Arg Gln Ala Ala Glu Ala Leu Arg Tyr Ile Val Thr					
	50		55		60
Glu Thr Asn Arg Ser Pro Ser Asn Val Ile Val Gly Gly Asp Ser Ala					
65		70		75	80
Gly Gly Asn Leu Ala Leu Ala Leu Leu Leu His Leu Ser His Pro His					
	85		90		95
Pro Glu Ile Glu Pro Val Ala Leu Ser Thr Asn Leu Ala Gly Val Phe					
	100		105		110
Gly Phe Ala Pro Trp Val Ser Phe Arg Thr Asp Gly Thr Ser Met Asp					
	115		120		125
Ala Asn Lys Tyr Arg Asp Val Ile Pro Ser Asp Ala Leu Lys Arg Trp					
	130		135		140
Ser Ser Ala Tyr Leu Ala Gly Ala Lys Ser Asn Ala Trp Ser Glu Pro					
145		150		155	160
Ala Leu Ala Pro Val Glu Trp Trp Ala Asp Ala Lys Thr Glu Gln Val					
	165		170		175
Leu Ile Leu Ala Gly Gln His Glu Ile Leu Ser Ser Val Ile Asp Asp					
	180		185		190
Phe Val Glu Arg Ile Lys Val Phe Ile Leu Arg His Ile Leu Gly Ser					
	195		200		205
Arg Leu Cys Leu Gly Cys					
210					

&lt;210&gt; 41693

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41693

Gln Gly Gly Glu Lys Tyr Gln Ser Ala Phe Tyr Val Tyr Glu Glu Leu  
 1 5 10 15  
 Ala Ser Ala Pro Gly Thr Ser Ala Pro Leu Ser Ile Val Gly Gln Ala  
 20 25 30  
 Val Ala Glu Ile His Leu Gly Arg Leu Pro Glu Ala Glu Ala Ala Leu  
 35 40 45  
 Ser Ala Ala Leu Glu Lys Tyr Pro Glu Glu Ala Glu Leu Ile Ala Asn  
 50 55 60  
 Ala Ile Val Leu Asn Val Leu Ala Gly Lys Pro Thr Glu Glu Leu Glu  
 65 70 75 80  
 Arg Tyr Ile Leu Leu Ser Asn Met Ile  
 85

&lt;210&gt; 41694

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41694

Arg Gly Glu Arg Leu Lys Arg Pro Ala Ser Pro Glu Ala Gly Gly Ala  
 1 5 10 15  
 Val Ser Ser Pro His Thr Leu Pro Arg Ser Ser Leu Lys Glu Ala Leu  
 20 25 30  
 Leu Val Arg Ile His Ser Glu Cys Tyr Thr Gly Glu Thr Ala Trp Ser  
 35 40 45  
 Ala Arg Cys Asp Cys Gly Glu Gln Leu Asp Glu Ala Ala Arg Leu Met  
 50 55 60  
 Ser Leu Pro Met Glu Thr Leu Ala Glu Ala Ala Ser Pro Pro Asp Gly  
 65 70 75 80  
 Ala Val Pro Ser Asn Ala Ala Gly Gly Val Ile Val Tyr Leu Arg Gln  
 85 90 95  
 Glu Gly Arg Gly Ile Gly Leu Gly Glu Lys Leu Lys Ala Tyr Asn Leu  
 100 105 110  
 Gln Asp Leu Gly Ser Asp Thr Val Glu Ala Asn Leu Leu Leu Arg His  
 115 120 125  
 Pro Ala Asp Ala Arg Ser Tyr Gly Leu Ala Thr Ala Ile Leu Val Asp  
 130 135 140  
 Leu Gly Leu Gly Ile Asp Ser Asn Pro His Gly Ile Arg Leu Leu Thr  
 145 150 155 160  
 Asn Asn Pro Asp Lys Ile Arg Ala Val Glu Gly Pro Asn Arg Glu Val  
 165 170 175  
 Val Val Lys Glu Arg Val Pro Met Val Pro Leu Ala Trp Arg Ser Gly  
 180 185 190  
 Gly Lys Met Gly Ile Lys Ser Ser Glu Val Glu Gly Tyr Leu Arg Thr  
 195 200 205  
 Lys Val Cys Arg Gln Ser Ile Ser Cys Lys Leu Ala Tyr Phe Leu Ile  
 210 215 220  
 Ile Leu Glu Gln Cys Leu Ile Leu Ser Ser Gln Ile Ser Gly Ser Pro  
 225 230 235 240  
 Arg Gly Arg Lys Asp Arg Thr  
 245

&lt;210&gt; 41695

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41695

Pro Arg Phe Val Lys His Leu Lys Gln Lys Leu His Ser Thr Ala Pro  
 1 5 10 15  
 Leu Leu Trp Ser Ser His Glu Arg Arg Glu Val Met Trp Met Asp Gln  
 20 25 30  
 Gln Gln Thr Arg Pro Val Pro Gln Val Arg Leu Tyr Arg Thr Arg Leu  
 35 40 45  
 Ala Ala Ser Lys Ala Tyr Asn Val Ala Pro Val Leu Pro Val Leu Arg  
 50 55 60  
 Arg Val Thr Ala Ala Lys Phe Val Thr Val Ser Trp Ser Lys Leu Lys  
 65 70 75 80  
 Lys Arg Gln Lys Val Ser Glu Ala Arg Ser Arg Ser Ala Thr Gly Ser  
 85 90 95  
 Leu Ser Leu Ala Pro Lys Trp Phe Ser Asn Ile Ile Arg Thr Asn Arg  
 100 105 110  
 Ala Leu Lys Gly Arg Gly Ser Ser Val Ser Ser Arg Glu Ser Pro Val  
 115 120 125  
 Lys Val Leu Arg Arg Gly Leu Ser Pro Ser Leu Ala Leu Ser Glu Cys  
 130 135 140  
 Lys Lys Ile Asp Pro Phe Thr Ser Arg Tyr Asp Val Gln Asp Pro Glu  
 145 150 155 160  
 Pro Asn Glu Asn Gly Glu Gln Gly Ala Val Tyr Lys Thr Thr Ala Ala  
 165 170 175  
 Ser Leu Ile Pro Ile Pro Gln Val Gly Ser Thr Leu Pro Val Phe Pro  
 180 185 190  
 Val Gly Lys Gln Val Leu Ala Arg Tyr Pro Asp Thr Thr Thr Phe Tyr  
 195 200 205  
 Arg Ala Glu Val Met Gly Thr Lys Lys Asp Thr Tyr Arg Leu Lys Phe  
 210 215 220  
 Glu Gly Glu Glu Asp Asp Lys Glu Met Glu Val Asp Arg Arg Phe Val  
 225 230 235 240  
 Leu Asp Ile Pro Gly Lys  
 245

&lt;210&gt; 41696

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41696

Asn Cys Thr Phe Ala Ser Leu Leu Pro Leu Lys Ser Val Ile Ala Met  
 1 5 10 15  
 Ser Asn Leu Pro Ser His Ala Ser Pro Ser Phe Gly Ala Gln Thr Pro  
 20 25 30  
 Thr Thr Pro Gln Pro Val Asp Glu Leu Ser Leu Lys Ser Asn Ile Thr  
 35 40 45  
 Ser Ala Pro Ala Leu His Ser Arg Leu Asp Glu Leu Arg Asp Glu Thr  
 50 55 60  
 Ser Ser Gln Ile Ser Ser Ile Asp Thr Asp Arg Gly Asp Met Thr Pro  
 65 70 75 80  
 Ala Val Pro Ala Ser Leu Leu Ser Pro Ser Phe Thr Pro Pro Ala Thr  
 85 90 95  
 Pro Gly Gly Ser Ile Asn Thr Ala Glu Leu Leu Gln Gln Thr Gln Leu  
 100 105 110

## 18484

Ala Gly Ala Arg Gln Gly Ser Thr His Thr Lys Pro Pro Arg Leu Leu  
 115 120 125  
 Ser Arg Leu Pro Asn Val Glu Cys Ile Val Arg Ala Arg Ile Pro Thr  
 130 135 140  
 Thr Thr Gly Ala Glu Met Phe Leu His Leu Tyr His Asn Asp Leu Asp  
 145 150 155 160  
 Asn Lys Glu His Leu Ala Ile Val Phe Gly Asn Thr Ile Arg Ser Arg  
 165 170 175  
 Ser Leu Asp Lys Ile Arg Pro Gly Glu Thr Glu Met Asp Arg Met Ile  
 180 185 190  
 Arg Gly Ala Tyr Val Gly Lys Leu Arg Pro Gly Arg Val Ser Ser Trp  
 195 200 205  
 Tyr Asp Glu Glu Lys Gly  
 210

&lt;210&gt; 41697

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41697

Lys Cys Pro His Ala Ala Asp Phe Leu Ser Leu Met Arg Thr Ile His  
 1 5 10 15  
 Thr His Tyr Ile Ser Asp Ser Pro Pro Pro Thr Val Ser Met Ser Ile  
 20 25 30  
 Thr Phe Gly Met Asn Pro Phe Phe Asn Leu Ser Pro Pro Leu Leu Phe  
 35 40 45  
 Leu Asp Thr Leu Ala Ser His Glu Phe Trp Ala Asn Ile Lys Leu Leu  
 50 55 60  
 Cys His Gly Pro Leu Val  
 65 70

&lt;210&gt; 41698

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41698

Pro Gln Arg Gly Thr Pro Ser Ile His Thr Val Ile Met Pro Ser Ser  
 1 5 10 15  
 Thr Leu Asp Leu Ser Gln Arg Ile Leu Arg Ile Ser Arg Ser Asp Asp  
 20 25 30  
 Thr Gln Gly Tyr Val Leu Leu Gln Val Ser Pro Ile Ser Ser Ser Ala  
 35 40 45  
 Leu Asp Leu Asp Ile Val Ala Thr Glu Gly Glu Asn Pro Tyr Thr Gly  
 50 55 60  
 Thr Gly Met Phe  
 65

&lt;210&gt; 41699

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41699

Phe Gln Ile Gln Arg Thr Leu Trp Asn Tyr Lys Pro Ile Lys Pro Phe

## 18485

```

1           5           10           15
Ile Leu Ala Leu Ala Cys Pro Ala Thr Gly Gly Thr Arg Thr Asn Asn
          20           25           30
Arg Asp Cys Arg Ala Trp Asn Arg Thr Val Val Ser Leu Cys Ala Thr
          35           40           45
Glu Thr Asn Pro Tyr Thr Thr Phe Gly Pro Ile Gln Val Glu Ile Val
          50           55           60
Cys Ser Ser Ala Ser Gly Leu Arg Asn Val Phe Ala Lys Arg Lys Met
65           70           75           80
Thr Lys Lys Ile Phe Cys Trp
          85

```

&lt;210&gt; 41700

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41700

```

Leu Met Ala Leu Asn Lys Ala Ser Glu Ile Arg Ser Ala Ile Thr Gly
1           5           10           15
Thr Leu Pro Leu Ser Ser Pro Ser Asn Ser Lys Thr Lys Arg Ser Ala
          20           25           30
Gln Glu Met Leu Asp Ser Glu Ser Asp Ser Glu Asp Arg Phe Glu Arg
          35           40           45
Met Glu Val Asp His Ser Gly Arg Asn Asp Gly Arg Ser Asp Asp Gln
          50           55           60
Glu Thr Glu Asp Glu Glu Thr Ser Thr Pro Gln Pro Leu Glu Asp Asp
65           70           75           80
Glu Tyr Thr Asn Thr Gly Glu Ser Leu Val Ser Pro Ser Ile Glu His
          85           90           95
Lys Arg Glu Asp Asn Lys Gln Ala Ser Asp Glu Thr Pro His Asn Arg
          100          105          110
Thr Ile Val Thr Asn Ser Ala Val Pro Pro Pro Arg Arg Glu Leu Ser
          115          120          125
Phe Ala Lys Lys Pro Gln Met Asn His Met Ser Gln Arg Ser Asn Glu
          130          135          140
Ser Val Ala Ala Gly Glu Asp Ala Glu Glu Thr Ala Gly Glu Thr Asp
145          150          155          160
Asp Asp Glu Leu

```

&lt;210&gt; 41701

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41701

```

Gln Gln Arg Leu Gly Ser Val Thr Leu Arg Gln Asp Asp Glu Gln Ala
1           5           10           15
Ile Gln Leu Phe Asp Trp Ser Gly Ala Ala Val Ala Arg Ala Asp Val
          20           25           30
Leu Glu Glu Arg Leu Ser Thr Leu Thr Asp Arg Tyr Arg Ala Ala Glu
          35           40           45
Asn Thr Ile Gln Arg Leu Asn Gln Gln Leu Glu Glu Phe Met Arg Ala
          50           55           60
Lys Thr Gln His Asp Glu Leu Leu Met Thr Asn Phe Val Gln Leu Leu

```

[illegible]

```
<210> 41702
<211> 85
<212> PRT
<213> A.fumigatus
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```
<210> 41703
<211> 233
<212> PRT
<213> A.fumigatus
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<400>	41703															
Gly	Arg	Ala	Pro	Arg	Asn	Arg	Ser	Val	Arg	Val	Val	Pro	Ile	His	Met	
1				5					10					15		
Ser	Cys	Phe	Lys	Val	Asp	Asn	Phe	Phe	Leu	Gly	Val	Asn	Gly	Met	Gln	
			20					25					30			
Tyr	Asn	Pro	Asp	Ser	Phe	Gln	Trp	Glu	Gly	Asn	Glu	Thr	Ser	Val	Ile	
		35					40					45				
Gly	Phe	Asp	Ser	Leu	Arg	Ser	Pro	Lys	Ser	Pro	Lys	Pro	Ala	Pro	Ala	
	50					55					60					
Leu	Ile	Thr	Asn	Val	Ser	Ala	Met	Gln	Asn	Val	Gln	Val	Val	Gly	Gly	
65					70					75					80	
Met	Val	Phe	Asp	Pro	Arg	Arg	Met	Cys	Trp	Leu	Lys	Leu	Ala	Ser	Ser	
				85					90					95		
Gln	Pro	Gly	Ala	Gln	Gly	Met	Val	Ala	Val	Gln	Val	Glu	Asp	Asp	Val	
			100					105					110			
Phe	Ala	Gly	Leu	Asp	Asp	Leu	Glu	Glu	Lys	Ser	Gln	Arg	Lys	Pro	Pro	
		115					120					125				
Gly	Gly	Pro	Gly	Ser	Gly	Ser	Tyr	Asp	Val	Val	Glu	Arg	Thr	Val	Ser	
	130					135					140					
Gly	Asp	Glu	Pro	Ser	Cys	Gly	Asp	Ser	Ser	Asp	Glu	Trp	Pro	Met	Thr	
145					150					155					160	
Glu	Glu	Phe	Asp	Val	Gly	Pro	Glu	Phe	Val	Arg	Arg	Gln	Arg	Val	Glu	
				165					170					175		
Glu	Glu	Lys	Trp	Arg	Arg	Lys	Val	Glu	Lys	Trp	Val	His	Ser	Glu	Arg	
			180					185					190			
Asp	Arg	His	Gly	Asn	Cys	Trp	Arg	Trp	Ala	Ile	Arg	Asp	Ile	Val	Gly	



	195		200		205										
Val	Asp	Gly	Ser	His	Gln	Thr	Gln	Glu	Val	Arg	Arg	Met	Trp	Thr	Phe
	210					215					220				
Ser	Thr	Tyr	Phe	Val	Phe	Arg	Arg	Ala							
225					230										

&lt;210&gt; 41704

&lt;211&gt; 499

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (24), (26), (76)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41704

Ile	Gly	Ser	Ser	Gly	Glu	Ile	Ile	Asp	Leu	Cys	Pro	Gly	Gly	Cys	
1			5					10					15		
Ser	Asn	Ile	Gly	Asn	Leu	Cys	Xaa	Pro	Xaa	Leu	Val	Pro	Trp	Glu	Leu
		20					25					30			
Lys	His	Thr	Glu	Ser	Ile	Asp	Val	His	Asp	Ala	Met	Gly	Ser	Asn	Val
		35				40					45				
Arg	Ile	Asp	Thr	Arg	Gly	Met	Glu	Val	Met	Arg	Val	Leu	Pro	Arg	Leu
	50				55					60					
Asn	Asp	Asp	Ile	Asn	Glu	Glu	Trp	Ile	Asp	Asp	Xaa	Ser	Arg	Phe	Ala
65				70				75						80	
Cys	Asp	Gly	Leu	Lys	Thr	Gln	Arg	Leu	Thr	Thr	Pro	Leu	Ile	Arg	Arg
			85					90					95		
Asp	Gly	Lys	Phe	Val	Pro	Ala	Thr	Trp	Glu	Gln	Ala	Leu	Thr	Glu	Ile
		100					105					110			
Ser	Ser	Ala	Gln	Gln	Lys	Leu	Gln	Leu	Lys	Glu	Asn	Glu	Phe	Lys	Ala
		115				120					125				
Val	Ala	Gly	His	Leu	Val	Asp	Ala	Glu	Ser	Leu	Val	Ala	Met	Lys	Asp
	130				135					140					
Leu	Ala	Asn	Lys	Leu	Gly	Ser	Asp	Asn	Leu	Ala	Leu	Asp	Gln	Pro	Arg
145				150				155						160	
Gly	Asp	Ser	Pro	Ile	Ala	His	Gly	Ile	Asp	Ile	Arg	Ser	Asn	Tyr	Leu
			165				170						175		
Phe	Asn	Ser	Lys	Ile	Tyr	Gly	Ile	Glu	Glu	Ala	Asp	Val	Ile	Leu	Leu
		180				185						190			
Val	Ala	Thr	Asn	Pro	Arg	His	Glu	Ala	Ala	Val	Leu	Asn	Ala	Arg	Ile
	195					200				205					
Arg	Lys	Gln	Tyr	Leu	Arg	Ser	Asp	Leu	Gln	Ile	Gly	Leu	Val	Gly	Glu
	210				215					220					
Glu	Phe	Glu	Ser	Thr	Phe	Glu	Tyr	Glu	His	Leu	Gly	Ser	Asn	Ile	Ser
225				230				235						240	
Ser	Leu	Lys	Ala	Ala	Leu	Ser	Gly	Lys	Phe	Gly	Glu	Lys	Leu	Ala	Ser
			245					250					255		
Ala	Lys	Arg	Pro	Met	Ile	Ile	Val	Gly	Ser	Ala	Ala	Ala	Glu	His	Gln
		260					265						270		
Asp	Ala	Lys	Ser	Val	Phe	Glu	Thr	Val	Gly	Ser	Phe	Val	Glu	Lys	His
	275						280				285				
Arg	Asn	Asn	Phe	Asn	Thr	Pro	Glu	Trp	Gln	Gly	Tyr	Asn	Val	Leu	Gln
	290				295					300					
Arg	Ala	Ala	Ser	Arg	Ala	Ala	Ala	Tyr	Glu	Val	Gly	Phe	Thr	Thr	Pro

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<210> 41705
<211> 829
<212> PRT
<213> A.fumigatus
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<400>	41705																
Ser	Leu	Leu	Ser	Pro	Pro	Val	Leu	Arg	Glu	Ala	Val	Arg	Asn	Met	Glu		
1				5					10					15			
Ser	Ser	Thr	Cys	Gln	Val	Pro	His	Gly	Asp	Glu	Glu	Thr	Ile	Glu	Cys		
			20					25					30				
Trp	Asp	Asp	Asp	Gly	Asp	Leu	His	Cys	Tyr	Glu	Asp	Ile	His	Ile	Arg		
		35				40						45					
Thr	Ala	Ser	Thr	Ala	Thr	Ser	Val	Thr	Asn	Val	Ser	Thr	Arg	Arg	Ser		
	50					55					60						
Gly	His	Arg	Asp	Ser	Ile	Ser	Ser	Arg	Arg	Ser	Thr	Arg	Ser	Asp	Leu		
65					70				75					80			
Asp	Ser	Asn	Ala	Ala	Glu	Asp	Glu	Asp	Leu	Gln	Val	Gln	Leu	Pro	Asp		
				85					90					95			
Asp	Asp	Glu	Asp	Leu	Ser	Glu	Asp	Ala	Ile	Ala	Ser	Ala	Lys	Asn	Ala		
			100					105					110				
Gly	Ile	Pro	Leu	Pro	Val	Asn	Val	Pro	Lys	Ser	Ala	Leu	Ile	Gly	Gly		
		115				120						125					
Thr	Ile	Lys	Arg	Leu	Gly	Arg	Arg	Lys	Pro	Arg	Lys	Asn	Phe	Ile	Asp		
	130					135					140						
Asp	Trp	Ser	Asp	Asp	Val	Glu	Leu	Pro	Gly	Pro	Asp	Ala	Ala	Leu	Glu		
145					150					155				160			
Leu	Lys	Lys	Phe	Lys	Asp	Thr	Val	Phe	Pro	Glu	Thr	Leu	Arg	Gln	Leu		
				165					170					175			
Ser	Ser	Ala	Thr	Asn	Ser	Pro	Val	Lys	Arg	Ser	Pro	Ser	Pro	Leu	Trp		
			180					185					190				

Glu Asp Asp Leu Ser Thr Arg Leu Gln Ser Ala Leu Thr Asn Leu Ser  
 195 200 205  
 Pro Ile Tyr Arg Met Ile Thr Ile Thr Ala Trp Ala Gly Ile Leu Thr  
 210 215 220  
 Arg Ala Pro Thr Ile Lys Val Ala Lys Pro Ser Ile Thr Gln Asn Trp  
 225 230 235 240  
 Thr Lys Ser Ile Thr Lys His Asn Val Thr Lys Ile Asp Ala Leu Phe  
 245 250 255  
 Glu Asn Val Glu Asp Asp Phe Glu Leu Pro Ala Glu Asp Phe Leu Arg  
 260 265 270  
 His Leu Ser Leu Arg Lys Asp Val Thr Glu Ala Thr Ser Thr Ala Ala  
 275 280 285  
 Asp Asp Phe Asp Leu Asp Trp Ser Glu Gly Ser Ile Gly Ile Arg Phe  
 290 295 300  
 Gly Gly Thr Lys Arg Asp His Arg Ser Ile Pro Ser Ser Ala Val Ser  
 305 310 315 320  
 Val Val Ser Pro Ser Ala Ser Ser Cys Arg Thr Gly Glu Ser Glu Asp  
 325 330 335  
 Glu Gly Leu Asp Gly Leu Val Ile Pro Glu Gly Pro Leu Asp Leu Glu  
 340 345 350  
 Ser Met Leu Lys Lys Arg Gln Ser Thr Cys Ser Thr Asp Lys Pro Arg  
 355 360 365  
 Phe Ser Pro Ser Gly Gln Ala Glu Tyr Glu Leu Thr Ser Ser Asp Asp  
 370 375 380  
 Phe Phe Ala Gly Leu Glu Ile Glu Ser Gly Asp Ala Phe Asp Leu Lys  
 385 390 395 400  
 Lys Leu Ser Leu Asn Pro Asn Val Lys Tyr Lys Val Glu Arg Pro Ser  
 405 410 415  
 Ser Pro Ala Arg Arg Ser Thr Thr Ser Ile Thr Phe Thr Asn Thr Ala  
 420 425 430  
 Val Ser Pro Arg Ser Arg Ile Pro Arg Leu Phe Gly His Asp Arg His  
 435 440 445  
 Ser Thr His Leu Glu Thr Val Ser Glu Ser Gly Ala Pro Leu Ser Lys  
 450 455 460  
 Phe Pro Gly Leu Arg Ser Trp Ala Arg Gly His Val Asn His Ala Ser  
 465 470 475 480  
 Ile Ser Ser Leu Pro Ser Arg Pro Ile Ser Thr Ser Pro Thr Pro Ser  
 485 490 495  
 Thr Pro Ala Arg Arg Ser Val Thr Ser Arg Ser Pro Lys Thr Pro Leu  
 500 505 510  
 Ser Ser Asp Arg Ala Thr Ser Gly Thr Gln Pro Leu Arg Asn Lys Arg  
 515 520 525  
 Ser Met Pro Thr Ile Arg Ser Val Pro Gln Ser Ala His Leu Ser Tyr  
 530 535 540  
 Ser Gln Gly Ser Leu Ser Arg Glu Asp Glu Ser Ala Arg Ser Ser Ile  
 545 550 555 560  
 Ser His Val Arg Ala Arg Met Pro Gly Glu Cys Ala Glu Asn Asp Ser  
 565 570 575  
 Arg Phe Leu Ser Arg Lys Ala Gln Thr Pro Phe Ile Pro Ala Gly Ala  
 580 585 590  
 Ser Glu Thr Gln Ser His His Val Asn Val Lys Gly Pro Arg His Phe  
 595 600 605  
 Arg Arg Thr Asn Ser Asp Gly Ser Ser Glu Ile Phe Ser Ser Arg Val  
 610 615 620  
 Pro Val Ser Arg Tyr Ser Arg Ser Gly Arg His Ser Ile Ser Asn Ser  
 625 630 635 640

## 18490

Val Thr Asp Glu Ser Gln Cys Lys Asn Leu Ile Thr Ala Ala Lys Gln  
645 650 655  
Thr Ile Thr Arg Pro Thr Arg Arg Arg Asn Phe Gly Asp Gly Thr Glu  
660 665 670  
Leu Glu Leu Phe Asp Asp Leu Pro Thr Ser Ser Leu Ala Glu Ser Lys  
675 680 685  
Phe Ile Lys His Pro Ile Gly Arg Gly Val Pro Arg Ser Leu Arg Ser  
690 695 700  
Arg Leu Gly His Asn Gln Thr Arg Pro Ser Arg Thr Glu Val Leu Lys  
705 710 715 720  
Pro Pro Ser Thr Ser Ser Thr Val Pro Thr Ser Cys Asp Leu Thr Pro  
725 730 735  
Arg Phe Ala Arg Asp Thr Asn Ala Ser Arg Asn Ala Arg Glu Gln Arg  
740 745 750  
Ile Ala Ser Met Ala Phe Ser Leu Lys Ser Arg Glu Ser Asn Pro Leu  
755 760 765  
Gly Leu Leu Ser Ser Asn Ser Lys Asn Pro Asn Ile Ala Arg Ala Pro  
770 775 780  
Ser Asn Pro Ala Thr Leu Gly Arg Lys Thr Arg Gly Val Thr Ala Ser  
785 790 795 800  
Gly Gly Lys Pro Phe Leu Ile Lys Ser Ile Gly Lys Gly Ser Gln Glu  
805 810 815  
Pro Lys Cys Thr Cys Cys Pro His Thr Tyr Glu Leu Phe  
820 825

&lt;210&gt; 41706

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41706

Asp Arg Met Ser Val Tyr Ile Gln Glu Leu Asp Asn Thr Val Arg Ala  
1 5 10 15  
Phe Tyr Glu Gly Lys Gly Asp Leu Val Arg His His Asn Asp Ser Ala  
20 25 30  
Asn Met Tyr Asp Phe Ser Phe Lys Ala Trp Val Ala Asn Phe Thr Met  
35 40 45  
Arg Leu Ser Val Gln Gln Lys Gln Ala Gln Gln Thr Leu Thr Glu Val  
50 55 60  
Ser Ile Ser Lys Pro Gln His Ser Met Gln Gly His  
65 70 75

&lt;210&gt; 41707

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41707

Pro Cys Ala Gln Leu Ile Glu Lys Leu Pro Asn Arg Asp Tyr Leu Thr  
1 5 10 15  
His Ala His Phe Tyr Leu Ile Arg Ile Ser Gln Ile Asp Asp Arg Glu  
20 25 30  
Val Phe Lys Ile Cys Leu Glu Tyr Trp Thr Arg Leu Val Gln Glu Leu  
35 40 45  
Tyr Glu Glu Met Gln Gln Leu Pro Ile Thr Asp Ile Asn Pro Leu Val  
50 55 60

## 18491

Ser Met Gly Val Ser Gly Leu Ser Asn Gly Gly Ala Pro His Pro Ser  
 65 70 75 80  
 Thr Leu Ala Asn Tyr Pro Leu Arg Lys His Lys Tyr Glu Glu Val Leu  
 85 90 95  
 Ser Asn Leu Arg Thr Val Met Ile Glu Lys Met Val Arg Pro Glu Glu  
 100 105 110  
 Val Leu Ile Val Glu Asn Asp Glu Gly Glu Ile Val Arg Glu Phe Val  
 115 120 125  
 Lys Glu Ser Asp Thr Ile Gln Leu Tyr Lys Thr Ile Arg Glu Cys Leu  
 130 135 140  
 Val Tyr Leu Thr His Leu Asp Val Val Asp Thr Glu Asn Ile Met Ile  
 145 150 155 160  
 Glu Lys Leu Ala Lys Gln Val Asp Gly Ser Glu Trp Ser Trp Ala Asn  
 165 170 175  
 Cys Asn Thr Leu Cys Trp Ala Ile Gly Ser Ile Ser Gly Ala Met Asn  
 180 185 190  
 Glu Glu Thr Glu Lys Arg Phe Leu Val Thr Val Ile Lys Asp Leu Leu  
 195 200 205  
 Gly Leu Thr Glu Met Lys Arg Gly Lys Asp Asn Lys Ala Val Val Ala  
 210 215 220  
 Ser Asn Ile Met Tyr Ile Val Gly Gln Tyr Pro Arg Phe Leu Lys Ala  
 225 230 235 240  
 His Trp Lys Phe Leu Lys Thr Val Val Asn Lys Leu Phe Glu Phe Met  
 245 250 255  
 His Glu Thr His Glu Gly Gln Leu Arg Met Leu Ile Tyr Ser Ala Ser  
 260 265 270  
 Leu Ser Asp Thr His  
 275

<210> 41708  
 <211> 128  
 <212> PRT  
 <213> A.fumigatus

<400> 41708  
 Gln Pro Arg Ser Gly Lys Tyr Trp Pro Tyr Asn Val Pro Arg Thr Asp  
 1 5 10 15  
 Glu Gln Tyr Gly Arg Asp Arg Tyr Ala Asn Ile Glu His Phe Leu Ser  
 20 25 30  
 Pro Ile Phe His Pro Tyr Pro Pro Arg Arg Leu Leu Cys Ser Tyr Arg  
 35 40 45  
 Gln Arg Ser Gln Ser Arg Phe Val His Ile His Gly Thr Arg Gly Ala  
 50 55 60  
 His Thr Tyr Leu Leu Ala Gly Phe Lys Ser Gln Ala Met Leu Leu Ser  
 65 70 75 80  
 Arg Met Phe Tyr Phe Ile Glu Ser Gly Lys Val Gln Glu Pro Ile Tyr  
 85 90 95  
 Ser Pro Glu Gln Ala Pro Leu Gly Thr Ser Asn Lys Asp Phe Leu Gln  
 100 105 110  
 Glu Tyr Val Ala Asn Leu Leu Gln Asn Ala Phe Lys Asn Leu Gln Glu  
 115 120 125

<210> 41709  
 <211> 251  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41709

His Ser Gln Ala Ser Met Ala Phe Glu Asn Ala Ile Glu Ala Asp Leu  
 1 5 10 15  
 Leu His Gln Ser Leu Met Glu Asp Lys Val Pro Leu Ile Met Glu Ser  
 20 25 30  
 Val Phe Glu Cys Thr Leu Glu Met Ile Asn Lys Asp Phe His Glu Tyr  
 35 40 45  
 Pro Glu His Arg Val Gln Phe Phe Lys Leu Leu Gln Ala Ile Asn Leu  
 50 55 60  
 Tyr Cys Phe Pro Ala Leu Leu Lys Leu Asp Ala Thr Gln Phe Lys Phe  
 65 70 75 80  
 Val Ile Asp Ser Cys Met Trp Ala Ser Lys His Asp Asn Arg Glu Val  
 85 90 95  
 Glu Asn Thr Gly Leu Thr Met Cys Leu Glu Leu Met Asn Asn Met Ala  
 100 105 110  
 Glu Thr Asp Thr Gln Thr Ser Ser Ile Phe Phe Arg Gln Phe Phe Ile  
 115 120 125  
 Pro Ile Leu Gln Asp Val Phe Phe Val Leu Thr Asp Ser Asp His Lys  
 130 135 140  
 Ala Gly Ser Tyr Thr Ser Met Val Leu Glu Glu Leu Thr Leu Thr Phe  
 145 150 155 160  
 Trp Gln Gly Ser Asn Leu Lys Gln Cys Tyr Cys Pro Val Cys Ser Thr  
 165 170 175  
 Ser Ser Asn Pro Gly Arg Ser Lys Asn Pro Ser Ile Pro Pro Asn Lys  
 180 185 190  
 Arg Arg Ser Gly His Pro Thr Lys Thr Ser Cys Lys Asn Thr Leu Pro  
 195 200 205  
 Thr Ser Tyr Lys Met Leu Ser Arg Ile Phe Arg Ser Lys Leu Ala Ala  
 210 215 220  
 Ser Pro Val Ser Ile Glu Arg Val Leu Ile Leu Ser Gln Asp Thr Asn  
 225 230 235 240  
 Gln Ala Val Cys Ser Trp Leu Val Tyr Leu Gln  
 245 250

&lt;210&gt; 41710

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41710

Asp Tyr Leu Gly Ile Arg Asn Phe Ile Val Asn Phe Ile Ile Glu Asn  
 1 5 10 15  
 Ser Lys Ser Glu Glu Lys Leu Arg Ser Glu Arg Ala Phe Leu Asn Lys  
 20 25 30  
 Leu Asn Leu Val Leu Val Ser Ile Leu Lys Gln Glu Trp Pro His Asn  
 35 40 45  
 Trp Pro Thr Phe Ile Asn Glu Ile Ile Ser Ser Cys His Thr Ser Leu  
 50 55 60  
 Ser Ile Cys Glu Asn Asn Met Ala Ile Leu Arg Leu Leu Ser Glu Glu  
 65 70 75 80  
 Val Phe Asp Phe Ser Gln Asp Gln Met Thr Ser Ile Lys Ala Arg Asn  
 85 90 95  
 Leu Lys Thr Ser Met Thr Gln Glu Phe Ser Ser Ile Phe Gln Leu Cys  
 100 105 110  
 Ser Glu Val Leu Asn Thr Ala Asn Gln Pro Ser Leu Ile Lys Ala Thr

## 18493

115	120	125
Leu Glu Thr Leu Leu Arg Phe Leu Asn Trp Ile Pro Leu Gly Tyr Ile		
130	135	140
Phe Glu Thr Pro Ile Ile Asn Thr Leu Leu Thr Arg Phe Leu Asp Val		
145	150	155
Pro Asp Phe Arg Asn Val Thr Leu Lys Cys Leu Thr Glu Ile Gly Gly		
	165	170
Leu Gln Ile Gly Asn Pro Tyr Asn Tyr Asp Glu Arg Leu Val Gln Met		
	180	185
Phe Thr Glu Thr Leu Thr Ile Val Ser Lys Thr Ile Pro Leu Ser Met		
	195	200
Asp Leu Lys Gln Thr Tyr Ala Lys Ser Asn Ser Arg Asp Gln Glu Phe		
210	215	220
Val Leu Asn Leu Ala Leu Phe Leu Ser Ser Phe Phe Ser Ala His Leu		
225	230	235
Thr Val Ser Val Thr Lys		
	245	

<210> 41711  
 <211> 162  
 <212> PRT  
 <213> A.fumigatus

<400> 41711
His Thr Leu Gly Val Gln Asp Met Ala Cys Asp Thr Phe Ile Lys Ile
1 5 10 15
Ala Asn Lys Cys Arg Arg His Phe Val Ala Leu Gln Pro Gly Glu Asn
20 25 30
Glu Pro Phe Ile Glu Glu Ile Val Arg Asn Met Arg Lys Ile Thr Cys
35 40 45
Asp Leu Ser Pro Gln Gln Val His Thr Phe Tyr Glu Ala Cys Gly Tyr
50 55 60
Met Ile Ser Ala Gln Gly Gln Lys Ser Leu Gln Asp Arg Leu Ile Glu
65 70 75 80
Asn Leu Met Ser Leu Pro Asn Ser Ala Trp Asp Ala Ile Ile Ala Gln
85 90 95
Ala Asn Gln Asp Pro Ser Ile Leu Gln Asp Gly Glu Thr Ile Lys Ile
100 105 110
Ile Gly Asn Ile Met Lys Thr Asn Val Ala Ala Cys Ser Ser Ile Gly
115 120 125
Thr Tyr Phe Tyr Ser Gln Ile Gly Arg Ile Tyr His Asp Met Leu Asn
130 135 140
Met Tyr Arg Ala Ser Ser Gln Leu Ile Asn Asp Ala Val Ala His Asp
145 150 155 160
Gly Lys

<210> 41712  
 <211> 110  
 <212> PRT  
 <213> A.fumigatus

<400> 41712
Arg Arg Thr Gly Asn Ile Ala Thr Lys Thr Pro Lys Val Arg Gly Leu
1 5 10 15
Arg Thr Ile Lys Lys Glu Ile Leu Lys Leu Ile Asp Thr Tyr Val Gln

## 18494

	20		25		30										
Lys	Ala	Asp	Asp	Leu	Glu	Met	Val	Asn	Ala	Asn	Met	Val	Pro	Pro	Leu
	35						40					45			
Leu	Glu	Ala	Val	Leu	Val	Asp	Tyr	Asn	Arg	Asn	Val	Pro	Asp	Ala	Arg
	50					55					60				
Glu	Ala	Glu	Val	Leu	Asn	Val	Met	Thr	Thr	Ile	Val	His	Lys	Leu	His
65					70					75					80
Val	Cys	Asn	Ile	Pro	Arg	Gln	Ala	Trp	Leu	Leu	Arg	Met	Leu	Ser	Lys
			85					90					95		
Leu	Thr	Tyr	Phe	Thr	Arg	Ala	Leu	Trp	Lys	Thr	Arg	Phe	Leu		
			100					105					110		

<210> 41713  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 41713

Phe	Cys	Leu	Arg	Ile	Gln	Ile	Lys	Gln	Phe	Val	Val	Gly	Leu	Phe	Thr
1				5					10					15	
Phe	Asn	Asp	Asp	Phe	Asn	Lys	Phe	Lys	Thr	His	Leu	Arg	Asp	Phe	Leu
			20					25					30		
Ile	Ser	Leu	Lys	Glu	Phe	Ala	Gly	Asp	Asn	Ala	Glu	Leu	Tyr	Ala	Glu
			35				40					45			
Glu	Arg	Glu	Gln	Ala	Leu	Arg	Asp	Ala	Gln	Ala	Ala	Glu	Arg	Asp	Arg
	50					55					60				
Ala	Met	Arg	Val	Gly	Gly	Leu	Leu	Lys	Pro	Ser	Glu	Met	Asp	Gln	Glu
65					70					75					80
Asp	Glu	Leu													

<210> 41714  
 <211> 385  
 <212> PRT  
 <213> A.fumigatus

<400> 41714

Ile	Thr	Glu	Asn	Gly	Asn	Leu	Ser	Ile	Thr	Ser	Asp	Glu	Gln	Pro	Pro
1				5					10					15	
Thr	Thr	Thr	His	Asp	Gly	Thr	Ser	Lys	Lys	Ser	Gln	Arg	Gln	Lys	Gly
			20					25					30		
Pro	Leu	Asn	Leu	Val	Glu	Pro	Gly	Glu	Glu	Ser	Ile	Cys	Gln	Gln	Gln
		35					40					45			
Gly	Asn	Phe	Gly	Asn	Ser	Phe	Ser	Gln	Cys	Ser	Asn	Asp	Asn	Glu	Arg
	50					55					60				
Lys	Glu	Thr	Asn	Ala	His	Glu	Ile	Val	Ala	Leu	Pro	Asn	Lys	Lys	Gly
65					70					75					80
Gln	Lys	Ser	Glu	Ser	Leu	Ser	Pro	Ala	Lys	Thr	Val	Ser	Ile	Phe	Gln
				85					90					95	
Gly	Ala	Ser	Gly	Met	Thr	Ser	Ser	Ile	Leu	Asn	Ala	Pro	Pro	Ser	Arg
			100					105					110		
Pro	Ser	Arg	Arg	Gln	Arg	Ser	Val	Val	Ser	Tyr	Ala	Glu	Pro	Asn	Leu
		115					120						125		
Arg	Asp	Lys	Met	Arg	Arg	His	Thr	Asn	Glu	Phe	Val	Pro	Ala	Val	Gly
	130					135					140				
Gly	Glu	Arg	Gln	Thr	Lys	Thr	Leu	Asn	Thr	Ala	Ala	Leu	Pro	Lys	Ser



## 18495

145                      150                      155                      160  
 Thr Asp Glu Gly Asp Val Gly Leu Gln Thr Asp Ile Ser Arg Ala Lys  
                                  165                      170                      175  
 Lys Pro Glu Asn Ser Pro Gly Thr Thr Arg Asp His Ile Ser Ile Leu  
                                  180                      185                      190  
 Glu Lys Ala Ser Gly His Thr Ser Arg Ser Thr Val Asn Met Val Ser  
                                  195                      200                      205  
 Leu Arg Lys Lys Lys Asn Ile Leu Ala Asn Ile Val Thr Ala Gly Glu  
                                  210                      215                      220  
 Glu Asp His Asp Thr Leu Gln Ser Glu Leu Ser Ser Gly Ala Ser Glu  
 225                                   230                                   235                                   240  
 Arg Pro Asn Phe Ser Val Glu Asn Ser Lys Pro Arg Gly Cys Glu Asp  
                                  245                                   250                                   255  
 Gln Asn Thr Leu Arg Ile Ser Asn Ala Ala Arg Asn Asn Glu Leu Asp  
                                  260                                   265                                   270  
 Ser Gln Ser Thr Asp Asp Thr Asp Ser Leu Gln Arg His Ile Ala Glu  
                                  275                                   280                                   285  
 Glu Ser Ala Pro Thr Ser Asp Arg Arg Lys Gln Pro Arg Arg His Ser  
                                  290                                   295                                   300  
 Ser His Ser Lys Thr Ser Thr Gln His Thr Gln Gly Glu Leu Arg Thr  
 305                                   310                                   315                                   320  
 Asp Leu Gln Ser Thr Arg Lys Leu Ser Thr Ser Gly Ala Pro Ser Lys  
                                  325                                   330                                   335  
 Val Leu Arg Pro Thr Met Gln Ala Glu Asn Ala Asp Thr Asp Ser Ala  
                                  340                                   345                                   350  
 Val Leu Asp Glu Glu Thr Gly Ser Leu Ser Lys Ala Met Val Gly Gly  
                                  355                                   360                                   365  
 Arg Leu Lys Arg Gly His Arg Ala Val Ala Arg Arg Lys Ser Met Val  
 370                                   375                                   380  
 Leu  
 385

&lt;210&gt; 41715

&lt;211&gt; 583

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41715

Asn Phe Ser Asn Leu Pro Leu Ser Ala Ser Glu Thr Met Ser Ser Ala  
 1                                      5                                      10                                      15  
 Arg Asn Leu Ser Val Ala Leu Arg Arg Ala Arg Ile Pro Thr Pro Gln  
                                  20                                      25                                      30  
 Cys Trp Leu Arg Pro Ile Ile Ala Asn Arg Ala Ala Val Pro Ala Ala  
                                  35                                      40                                      45  
 Arg Ser Phe Ser Val Ser Ser Val Val Gly Gly Asn Thr Thr Arg Glu  
                                  50                                      55                                      60  
 Ile Lys Tyr Thr Thr Asn Ala Tyr Pro Glu Leu Lys Arg Asn Pro Asn  
 65                                      70                                      75                                      80  
 Phe Ala Glu Ile Thr Glu Gln Asp Val Lys Tyr Phe Lys Asp Leu Leu  
                                  85                                      90                                      95  
 Gly Ala Gln Ser Ala Val Ile Asp Gly Val Thr Ala Asp Ala Thr Asp  
                                  100                                      105                                      110  
 Asp Ile Glu Pro Phe Asn Ala Asp Trp Met Arg Lys Tyr Arg Gly His  
                                  115                                      120                                      125  
 Thr Lys Leu Val Leu Lys Pro Gln Asn Lys Glu Glu Val Ser Gln Val  
 130                                      135                                      140

Leu	Lys	Tyr	Cys	Asn	Glu	Lys	Lys	Leu	Ala	Val	Val	Pro	Gln	Gly	Gly
145					150					155					160
Asn	Thr	Gly	Leu	Val	Gly	Gly	Ser	Val	Pro	Val	Phe	Asp	Glu	Ile	Val
				165					170					175	
Ile	Asn	Thr	Ser	Arg	Met	Asn	Lys	Ile	Arg	Ser	Phe	Asp	Glu	Ala	Ser
			180					185					190		
Gly	Val	Leu	Val	Val	Asp	Ala	Gly	Val	Ile	Leu	Glu	Val	Ala	Asp	Gln
		195					200					205			
Tyr	Leu	Ala	Glu	Arg	Asp	His	Leu	Phe	Pro	Leu	Asp	Leu	Gly	Ala	Lys
	210					215					220				
Gly	Ser	Cys	His	Val	Gly	Gly	Asn	Val	Ala	Thr	Asn	Ala	Gly	Gly	Leu
225					230					235					240
Arg	Leu	Leu	Arg	Tyr	Gly	Ser	Leu	His	Gly	Asn	Val	Leu	Gly	Leu	Glu
				245					250					255	
Ala	Val	Leu	Ala	Asp	Gly	Thr	Ile	Val	Asp	Ser	Leu	Ser	Thr	Leu	Arg
			260					265					270		
Lys	Asn	Asn	Thr	Gly	Tyr	Asp	Leu	Lys	Gln	Leu	Phe	Ile	Gly	Ser	Glu
		275					280					285			
Gly	Thr	Ile	Gly	Ile	Ile	Thr	Gly	Val	Ala	Ile	Leu	Cys	Pro	Pro	Arg
	290					295					300				
Pro	Lys	Ala	Val	Asn	Val	Ala	Tyr	Phe	Gly	Leu	Glu	Ser	Tyr	Asp	Gln
305					310					315					320
Val	Arg	Gln	Ala	Tyr	Lys	Glu	Ala	Lys	Gly	His	Leu	Ser	Glu	Ile	Leu
				325					330					335	
Ser	Ala	Phe	Glu	Leu	Met	Asp	Gly	Arg	Ser	Gln	Lys	Leu	Val	His	Glu
			340				345					350			
Ser	Thr	Gly	Ser	Lys	Tyr	Pro	Leu	Glu	Gly	Glu	Tyr	Pro	Phe	Tyr	Cys
		355					360					365			
Leu	Val	Glu	Thr	Ser	Gly	Ser	Asn	Ala	Glu	His	Asp	Met	Glu	Lys	Leu
						375					380				
Glu	Gly	Phe	Leu	Glu	His	Ile	Met	Gly	Glu	Gly	Ile	Val	Ala	Asp	Gly
385					390					395					400
Val	Leu	Ala	Gln	Asp	Glu	Thr	Gln	Phe	Gln	Ser	Ile	Trp	Arg	Trp	Arg
				405					410					415	
Glu	Gly	Ile	Thr	Glu	Ala	Leu	Ser	His	Leu	Gly	Gly	Thr	Tyr	Lys	Tyr
			420					425					430		
Asp	Val	Ser	Ile	Pro	Leu	Pro	Glu	Leu	Tyr	Gln	Leu	Val	Glu	Asp	Cys
		435					440					445			
Arg	Glu	Arg	Leu	Thr	Thr	Met	Gly	Phe	Val	Gly	Asp	Asp	Asp	Ser	Phe
	450					455					460				
Pro	Val	Arg	Ala	Val	Val	Gly	Tyr	Gly	His	Met	Gly	Asp	Ser	Asn	Leu
465					470					475					480
His	Leu	Asn	Ile	Ser	Val	Arg	Gln	Tyr	Asn	Lys	Glu	Val	Glu	Lys	Ala
				485					490					495	
Ile	Glu	Pro													

<210> 41716  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 41716  
 Thr Ile Ala Ile Gly Leu Leu Leu Thr Gly Lys Leu Leu Val Ala Gly  
 1 5 10 15  
 Gly Ser Phe Gly Thr Val Tyr Lys Ala Ile Glu Lys Ser Thr Gly Glu  
 20 25 30  
 Ile Val Ala Ile Lys His Val Arg Ser His His Ser Val Ile Cys Phe  
 35 40 45  
 His Phe Phe Ile Asp Arg Leu Gly Leu Asp Leu Asp  
 50 55 60

<210> 41717  
 <211> 201  
 <212> PRT  
 <213> A.fumigatus

<400> 41717  
 Leu Lys Pro Gly Val Phe Ser Glu Ala His Val Ala Ile Ile Cys Gln  
 1 5 10 15  
 Gln Leu Leu Gln Gly Met Asp Tyr Leu His Ser Glu Gly Lys Ile His  
 20 25 30  
 Arg Asp Ile Lys Ala Ala Asn Val Leu Leu Ser His Thr Gly Lys Val  
 35 40 45  
 Lys Leu Ala Asp Phe Gly Val Ala Ala Gln Leu Thr Asn Ile Lys Ser  
 50 55 60  
 Gln Arg Asn Thr Phe Val Gly Thr Pro Phe Trp Met Ala Pro Glu Val  
 65 70 75 80  
 Ile Gln Gln Ala Gly Tyr Asp Tyr Lys Ala Asp Ile Trp Ser Leu Gly  
 85 90 95  
 Ile Thr Ala Ile Glu Met Ile Asn Gly Glu Pro Pro His Ala Ser Thr  
 100 105 110  
 His Pro Met Lys Val Leu Phe Leu Ile Pro Lys Glu Pro Ala Pro Arg  
 115 120 125  
 Leu Glu Gly Asn Glu Tyr Ser Ser Ala Phe Lys Asp Phe Ile Ala Gln  
 130 135 140  
 Cys Leu Thr Lys Asp Pro Glu Arg Arg Pro Ser Ala Lys Glu Leu Leu  
 145 150 155 160  
 Arg His Lys Phe Ile Arg Asn Ala Gly Lys Thr Glu Ala Leu Gln Glu  
 165 170 175  
 Leu Ile Gln Arg Lys Gln Asp Trp Asp Ala Gly Lys Gly Val Arg Gln  
 180 185 190  
 Asn Val Lys Tyr Tyr Ala Glu Ser Leu  
 195 200

<210> 41718  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 41718  
 Cys Cys Leu Ala Arg Pro Leu Cys Ile Ile Ser Pro Asn Leu Ser Ser

## 18498

```

1           5           10           15
Phe Ser Pro Ser Val Thr Tyr Phe Phe Val Ser Ser His Gln Ser Ile
           20           25           30
Ala Ile His Trp Leu Gly Lys Ser Ser Arg Ser Phe Cys His Asp Arg
           35           40           45
Phe Thr Pro Leu Ser Thr Thr Ile Ala Lys Phe Tyr Ala Leu Phe Cys
           50           55           60
Pro Glu Asp Gly Gly Leu Pro Gly Asn Gly
65           70

```

<210> 41719  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41719
Ile Asp Leu Glu Ser Ser Glu Asp Asp Ile Gln Glu Ile Gln Gln Glu
1           5           10           15
Ile Ser Val Leu Ala Thr Cys Ala Ser Pro Tyr Val Thr Gln Tyr Lys
           20           25           30
Ala Ser Phe Leu Arg Gly His Lys Leu Trp Ile Val Met Glu Tyr Leu
           35           40           45
Gly Gly Gly Ser Cys Leu Asp Leu Val Asn Ile Ser Ile Gly Gln Val
           50           55           60
Ser Leu Glu Leu Cys Asp Arg
65           70

```

<210> 41720  
 <211> 307  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41720
Gln Arg Phe Gln Gly Leu Tyr Arg Ala Met Leu Asp Gln Gly Pro Gly
1           5           10           15
Ala Glu Thr Gln Cys Glu Gly Ala Phe Glu Thr Gln Val His Ser Gln
           20           25           30
Cys Arg Glu Asp Arg Gly Val Ala Gly Thr His Pro Thr Glu Ala Gly
           35           40           45
Leu Gly Cys Trp Gln Arg Arg Glu Thr Glu Arg Gln Ile Leu Cys Gly
           50           55           60
Val Pro Val Ser Ser Asp Ala Leu Gly Phe Glu Leu Ser Leu Ser Leu
65           70           75           80
Ile Tyr Ile His Ser Asn Thr Ile Thr Arg Leu Glu Asp Asp Asp Gly
           85           90           95
Trp Val Phe Asp Thr Val Lys Ala Pro Pro Thr Ser Ile Pro Glu Asp
           100          105          110
Pro His Asp Leu Val Ser Glu Arg Asp Thr Arg Asp Arg Leu Tyr Asp
           115          120          125
Glu Ala Ser Glu Leu Met Asp Asn Leu His Met Ser Ser Pro Pro Val
           130          135          140
Pro Pro Lys His Ser Ser Asn Ser Thr Val Arg Arg Asn Pro Ala Ala
145          150          155          160
Asp Arg Ser Pro Ser Val Arg Arg Pro Lys Arg Arg Ser Ser Gly Val
           165          170          175
Lys Gln Pro Leu Gly Val Asp Leu Thr Phe Gly Asn Ser Pro Ser Thr

```

```
<210> 41721
<211> 175
<212> PRT
<213> A.fumigatus
```

```
<210> 41722
<211> 79
<212> PRT
<213> A.fumigatus
```

```
<400> 41722
Ser Ala Thr Ser Arg Ile Thr Pro Ala Ser Thr Thr Ser Thr Pro Glu
1          5          10          15
Ala Ser Ser Lys Glu Arg Ile Leu Phe Met Arg Glu Val Leu Ile Thr
```



## 18501

210	215	220
Pro Leu Arg Ser Ser Thr Tyr Val Ser Pro Ser Leu Pro Ala His Thr		
225	230	235
Ser Ser Leu Arg Pro Val Ala Ser Asp Val Ala Trp Asp Ala Pro His		240
	245	250
Lys Glu Ser Asp Arg Lys Leu Asn Ala Pro Leu Arg Glu Ser Leu His		255
	260	265
Leu Pro Gly Lys Val Leu Ser Asp Gly Ile Gly Thr Lys His Thr Pro		270
	275	280
Leu Glu Asp Pro Val Pro Asn Phe Ser Leu Ile Ser Ala Ser Leu Arg		285
	290	295
Asp Pro Ser Ser Pro Ser His His Pro Glu Tyr Pro Glu Gln Thr Arg		300
305	310	315
Asp Arg Asn Tyr Glu Thr Lys Val Glu Arg Ser Ala Ser Arg Ser Arg		320
	325	330
Cys Gly Arg Val Glu Asn Ser Ile Glu Ala Asn Leu Thr Asn Ala Glu		335
	340	345
Pro Thr Ser His Val Arg Ser Arg Lys Ser Ser His Tyr Leu Gly Leu		350
	355	360
Phe Lys Glu Asn Thr Thr Ser Pro Asp Arg Lys Arg Arg Glu Asp Arg		365
	370	375
Asp Gly Lys His Gly Glu Phe Pro Thr Gly Asp Glu Thr Ser Asp Val		380
385	390	395
Thr Val Leu Ser Glu Pro Glu Gln Ile Arg Asp Arg Phe His Thr Gln		400
	405	410
Ala Gly Asp Leu Leu Leu Glu Glu Val Gly Pro Arg Thr Ser Lys Ser		415
	420	425
Ser Pro Gln Leu Leu Leu Ser Ala Ala Pro Ser Ile Gly Pro Thr Ala		430
	435	440
Arg Gln Glu Asn Arg Pro His Pro Leu Ser Asp Asp Ile Ser Lys Arg		445
	450	455
Pro Leu Lys Ser Leu Pro Arg Ser Leu Leu Glu Glu Ile Arg Ser Phe		460
465	470	475
His Leu Thr Pro Gly Gly Gly Arg Gly Ser Ser Phe Ser Lys Ser Ile		480
	485	490
Pro Thr Gln Tyr Ala Glu Gly Gly Arg Asp Tyr Phe Ala Glu Ile Pro		495
	500	505
Pro Ser Asp Gly Leu Ser Pro Pro Asn Thr Ile Arg Glu Glu Arg Arg		510
	515	520
Asp Ser Gly Pro Phe Asp Asp Glu Glu Glu Glu Gln Ile Ser Ser Ala		525
	530	535
Val Tyr Phe Pro His Glu Arg Val Ala Val Ser Glu Glu Val Asp Gln		540
545	550	555
Val Glu Pro Phe Leu Glu Asn Glu Pro Asp Val Glu Arg Phe Asp Glu		560
	565	570
Ser Ala Pro Lys Ser Ser Leu Ala Leu Val Pro Lys Val His Thr Val		575
	580	585
Pro Ile Gly Gln Glu Ser Ser His Val Asp Ile Ser Leu Arg Ser Lys		590
	595	600
Asn Glu Asn Arg Ile Leu His Gly Glu Leu Gln Glu Leu His Ser Ser		605
	610	615
Thr Leu Lys Glu Phe Asp Arg Lys Pro Leu Gly Ala Ile Ser Glu Arg		620
625	630	635
Ser Gly Glu Tyr Ser Thr Cys Glu Ser Glu Phe Ala Ser Ala Asp Asp		640
	645	650
Ser Ser Met Ser Ala Arg Glu Glu Glu Ser Ser Leu Thr Asp Asp Ala		655

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## 18502

660 665 670  
 Asp Val Thr Pro Thr Ala Thr Pro Thr Gln Arg Ala Arg Phe Pro Arg  
 675 680 685  
 Pro Arg Arg Lys His Ser Ser Thr Ala Pro Val Gly Ala Val Glu Leu  
 690 695 700  
 Lys Pro Tyr Arg His Gln Val Gly Gly His Thr Thr Val Phe Arg Phe  
 705 710 715 720  
 Ser Arg Arg Ala Val Cys Lys Gln Leu Asn Asn Arg Glu Asn Glu Phe  
 725 730 735  
 Tyr Glu Arg Ile Glu Arg Arg His Pro Glu Met Leu Met Phe Leu Pro  
 740 745 750  
 Arg

<210> 41725  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 41725  
 Ile Gly Arg Ser Arg Ile Thr Gly Val Leu Leu Ala Pro Leu Leu Phe  
 1 5 10 15  
 Ile Pro His His Asn Asn Asn Leu Leu Phe His Leu Thr Gly Leu Gln  
 20 25 30  
 Gly Glu Leu Thr Phe Val Thr Ser Trp Ser Ile Ala Tyr Pro Ser Trp  
 35 40 45  
 Pro Gly Glu Leu Ser Ile Ser Ile Gln Pro Ala Ile Tyr Ile Asn Ile  
 50 55 60  
 Gln His Asn Asn Phe Ser Ala Val Phe Thr Thr Gly Leu Glu Gly Pro  
 65 70 75 80  
 Arg His Ile Glu

<210> 41726  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 41726  
 Phe Pro Leu Phe Arg Tyr Ile Gly Val Leu Asn Val Thr Tyr Ser Lys  
 1 5 10 15  
 Asn Ser Lys Arg Pro Thr Ala Ser Ser Gly Asn Asn Ala Glu Pro Thr  
 20 25 30  
 Asp Thr Glu His Ser Lys Glu Leu Thr Gln Asp Glu Ile Gly Ser Arg  
 35 40 45  
 Lys Thr Ser Ile Ser Lys Pro Lys Ser Gly Asp Ala Glu Pro Glu Arg  
 50 55 60  
 Ile Phe Ser Gln Lys Gln Val Thr Gly Val Ile Pro Lys Val Ile Leu  
 65 70 75 80  
 Glu Asn Asn Arg His Ile Ile Pro Ala Asp Leu Phe Met Arg Trp Pro  
 85 90 95  
 Lys Thr

<210> 41727  
 <211> 90



&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41727

Ala	Arg	Ser	Asn	Ala	Arg	Tyr	Gly	Gln	Trp	Thr	Lys	Arg	Lys	Pro	Trp
1			5					10						15	
Gln	Phe	Leu	Ala	Glu	Glu	Thr	Pro	Tyr	Val	Asn	Tyr	Ile	Ala	Pro	Ala
		20					25					30			
Leu	Ser	Val	Tyr	Ile	Cys	Leu	Ser	His	Leu	Met	Gln	Phe	Gln	Pro	Gly
	35					40					45				
Ser	Thr	Thr	Gly	Ile	Cys	Ser	Thr	Ala	Val	Ile	Asp	Gln	Ser	Ser	Met
	50				55					60					
Leu	Arg	Gln	Ser	Leu	Asp	Tyr	Leu	Leu	Asp	Glu	Val	Ser	Arg	Thr	Arg
65				70					75						80
Met	Tyr	Asp	Cys	Met	Arg	Lys	Ser	Ser	Arg						
				85					90						

&lt;210&gt; 41728

&lt;211&gt; 581

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (64)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41728

Tyr	Ser	Arg	Thr	Thr	Ala	Thr	Leu	Phe	Arg	Leu	Ile	Cys	Leu	Cys	Ala
1			5					10						15	
Gly	Gln	Arg	Pro	Arg	Thr	Ala	Asp	Cys	Ala	Ala	Ser	Gly	Ser	Arg	Arg
		20				25						30			
Ala	Leu	Asn	Gly	Asn	Glu	Thr	Ser	Ala	Gly	Lys	Gln	Ser	Val	Gly	Gly
	35				40						45				
Ser	Thr	Ala	Gly	Ser	Val	Ser	Ala	Pro	Thr	Leu	Asp	Lys	Pro	Ile	Xaa
	50				55					60					
Arg	Trp	Gly	Ala	Thr	Thr	Val	Asn	Arg	Lys	Leu	Gln	Glu	Gln	Val	Leu
65				70					75						80
Arg	Glu	Val	Phe	Ser	Leu	Pro	Ala	Ile	His	His	His	Arg	Arg	His	Ala
			85					90						95	
Arg	Gly	His	Leu	Asn	Leu	Pro	Arg	Thr	Ser	Ser	Asp	Cys	Gly	Arg	Arg
		100					105					110			
Arg	Ala	Asn	Leu	Ser	Glu	Asp	Gln	Ser	Val	Ser	Leu	Asn	Arg	Tyr	Ala
	115					120					125				
Ser	Asp	Arg	Val	Glu	Ala	Ala	Ser	Ser	Ser	Leu	Gly	Ile	Asp	Ala	Ser
	130					135					140				
Lys	Pro	Ser	Lys	Glu	Ser	Pro	Ala	Leu	Ser	Ser	Ser	Ala	Ser	Thr	Ala
145				150					155						160
Leu	Asp	Ala	Gly	His	Gly	Arg	Leu	Glu	Lys	Val	Arg	Thr	Glu	Glu	Pro
			165					170					175		
Gln	Pro	Arg	Ala	Ser	Ser	Leu	Ser	Arg	Thr	Arg	Arg	Val	Arg	Arg	Arg
		180					185					190			
His	Ser	Gly	Ser	Gly	Leu	Gln	Arg	Arg	Gly	Ser	Ile	Ser	Ser	Asn	Lys
	195					200					205				
Gly	Val	Gly	Gln	Leu	Met	Phe	Phe	Glu	Asp	Asp	Gly	Tyr	Gly	Gly	Asp
	210					215					220				

## 18504

Lys Glu Asp Gly Ile Phe Pro Met Glu Arg Asp Ala Ser Leu Leu Ser  
 225 230 235 240  
 Ser Ser Asp Pro Asn Val Asn Ser Ser Thr Ser Ala Leu Ile Tyr Lys  
 245 250 255  
 Asp Asp Met Ser Lys Asp Val Pro Ser Ala Pro Leu Ala Thr Arg Asp  
 260 265 270  
 Ser Pro Pro Lys Ser Leu Arg Leu Gln Ala Lys Asp Glu Ser Gln Met  
 275 280 285  
 Ile Val Pro Ser Asn Pro Lys Glu Ala Gln Thr Arg Arg Asp Glu Arg  
 290 295 300  
 Val Gln Phe Phe Leu Leu Leu Glu Asp Leu Thr Ala Gly Met Asn Lys  
 305 310 315 320  
 Pro Cys Val Leu Asp Leu Lys Met Gly Thr Arg Gln Tyr Gly Ile Glu  
 325 330 335  
 Ala Ser Glu Lys Lys Arg Lys Ser Gln Arg Arg Lys Cys Gln Ser Thr  
 340 345 350  
 Thr Ser Gln Gln Leu Gly Val Arg Leu Cys Gly Met Gln Thr Trp Asn  
 355 360 365  
 Val Arg Lys Gln Glu Tyr Thr Phe Glu Asp Lys Tyr Phe Gly Arg Asp  
 370 375 380  
 Leu Lys Ser Gly Arg Glu Phe Gln Asp Ala Leu Thr Arg Phe Leu Tyr  
 385 390 395 400  
 Asp Gly Ile Ser Tyr Arg Ser Val Ala Lys Lys Ile Pro Ile Ile Leu  
 405 410 415  
 Asp Lys Leu Ala Lys Leu Glu Ser Met Ile Arg Lys Leu Lys Arg Tyr  
 420 425 430  
 Arg Leu Tyr Ala Ser Ser Leu Leu Ile Leu Tyr Asp Gly Glu Gln Asn  
 435 440 445  
 Pro Thr Glu Lys Ser Gln Val Asp Glu Ala His Asn Ala Asp Lys Arg  
 450 455 460  
 Pro Pro Leu His Leu His Arg Arg Ala Ser Glu Asp Gly His Asn Asn  
 465 470 475 480  
 Thr Glu Val His Leu Lys Ile Val Asp Phe Ala Asn Cys Val Thr Gly  
 485 490 495  
 Glu Asp Glu Leu Pro Pro Asp Ala Pro Cys Pro Pro Gln His Pro Asp  
 500 505 510  
 Asp Ile Asp Arg Gly Tyr Leu Arg Gly Leu Arg Ser Leu Arg Met Tyr  
 515 520 525  
 Phe Gln Arg Ile Leu Lys Glu Val Thr Gln Asp Glu Phe Val Glu Arg  
 530 535 540  
 Gly Glu Gly Glu Ala Val Ala Leu Arg Ser Arg Asp Ser Gly Arg Glu  
 545 550 555 560  
 Glu Ser Thr Asp Arg Phe Trp Asp Glu Ser Val Leu Glu Glu Asp Pro  
 565 570 575  
 Gly Glu Val Ser Phe  
 580

&lt;210&gt; 41729

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41729

Met Met Arg Arg Lys Cys Lys Arg Asn Ser Leu Glu Asn Pro Leu Leu  
 1 5 10 15  
 Pro Arg Leu Pro His Pro Leu Pro Leu Pro Val Pro Ala Leu Thr Ala

## 18505

```

      20      25      30
Met Pro Met Met Lys Arg Met Thr Met Pro Pro Pro Arg Leu Leu Gln
      35      40      45
Arg Arg Arg Pro Pro Ala Pro Ser Ala Arg Leu Asn Pro Ala His Leu
      50      55      60
Asn Arg Leu Arg Asn Gln Asn Pro Arg Thr Lys His Arg Arg Pro Lys
      65      70      75      80
Arg Leu Ser Ser Arg Arg Ser Pro Ile His Pro His Leu Pro Ser Arg
      85      90      95
Arg Ile Leu Arg Thr Arg Asn Pro Thr Pro Pro Thr Val Arg Ala Val
      100      105      110
Leu His Pro Pro Ile Pro Thr Leu Ile Pro Ala Pro Thr Pro Thr Pro
      115      120      125
Leu Thr Val Arg Ala Phe His Arg Leu Ile Pro Ala Gln Thr Pro Ile
      130      135      140
Pro Thr Pro Asn Pro Arg Arg Asn Pro Pro Arg Arg Leu Leu Arg Arg
      145      150      155      160
Ser

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&lt;210&gt; 41730

&lt;211&gt; 418

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41730

```

Ala Lys Thr Val Gly Pro Pro Pro Glu Leu Val Ala Ser Val Ala Ala
1      5      10      15
Phe Leu Ser Gln Phe Gly Phe Lys Ser Thr Ser Glu Ala Leu Ser Lys
      20      25      30
Glu Gln Ser Lys Lys Ala Ile Ala Lys Val Asp Ser Lys Glu Val Pro
      35      40      45
Ser Leu Leu Asp Ile Phe Arg Ser Trp Gln Asp Arg Lys Ser Glu Ser
      50      55      60
Ser Ser Asp Ser Glu Ser Ser Ser Ser Ser Glu Asp Glu Ser Ser
      65      70      75      80
Asp Ser Asp Val Glu Met Asn Asp Ala Pro Lys Met Gln Lys Lys Gln
      85      90      95
Ser Arg Glu Ser Ser Pro Ser Ser Ser Ser Ser Ser Ser Ser Ser
      100      105      110
Ser Ser Ser Ser Asp Ser Asp Ala Asp Asp Glu Glu Asp Asp Asp Ala
      115      120      125
Ala Pro Ala Pro Ala Pro Ala Pro Lys Thr Thr Gly Thr Lys Arg Lys
      130      135      140
Ala Glu Ser Ser Ser Ser Glu Ser Ser Ser Glu Ser Glu Ser Glu Asp
      145      150      155      160
Glu Ala Pro Lys Ala Lys Lys Ala Lys Leu Ser Thr Lys Ser Asp Ser
      165      170      175
Ser Ser Ser Ser Glu Ser Ser Asp Ser Glu Asp Glu Glu Ser Asp Ser
      180      185      190
Ser Asp Ser Glu Ser Ser Ala Ser Ser Asp Ser Asp Ser Asp Ser
      195      200      205
Gly Ser Asp Ser Asp Ser Ser Asp Ser Glu Ser Val Ser Ser Ser Asp
      210      215      220
Ser Ser Ser Asp Ser Asp Ser Asp Ser Glu Ser Glu Lys Glu Pro Ala
      225      230      235      240

```

## 18506

Lys Lys Ala Ala Lys Lys Ile Leu Lys Thr Ala Ala Lys Thr Pro Leu  
 245 250 255  
 Pro Glu Ser Ser Ser Ser Ser Ser Ser Asp Ser Asp Ser Ser Ser Ser  
 260 265 270  
 Asp Glu Ser Ser Asp Glu Ser Ser Ser Asp Glu Asp Gln Asn Thr Asn  
 275 280 285  
 Ser Arg Ser Ser Ser Ser Ser Gln Asn Ser Ser Gly Ser Ser Lys Thr  
 290 295 300  
 Val Gln Pro Ser Asp Ser Asp Ala Lys Glu Pro Ile Asn Lys Thr Thr  
 305 310 315 320  
 Lys Gln Ala Gln Glu Thr Ser Ser Ser Ser Ala Ser Pro Ala Pro Gly  
 325 330 335  
 Asn Gly Pro Ala Thr Lys Lys Lys His Thr Gly Ala Arg Pro Thr Pro  
 340 345 350  
 Leu Ala Gln Leu Ser Glu Leu Pro His Asn His Pro Ser Asn Ala Tyr  
 355 360 365  
 Val Pro Tyr Ala Tyr Ala Glu Lys Ala Trp Lys Asp Leu Ser Val Thr  
 370 375 380  
 Arg Gly Lys Gly Phe Thr Lys Glu Lys Asn Lys Lys Lys Arg Gly Ser  
 385 390 395 400  
 Tyr Arg Gly Gly Pro Ile Asp Ile Ser Gly Gly Lys Ser Phe Lys Phe  
 405 410 415  
 Glu Asp

&lt;210&gt; 41731

&lt;211&gt; 389

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41731

Lys Asp Cys Ala Glu Ile Asp Phe Glu Met Leu Leu Ser Asp Leu Pro  
 1 5 10 15  
 Ser Asp Ile Ile Tyr Val Ile Ala Thr Tyr Leu Pro Ser Ala Ser Ser  
 20 25 30  
 Leu Ala Ala Leu Ala Gln Thr Cys Gln Arg Leu His Lys Val Ile Ala  
 35 40 45  
 Ala Glu Asp Trp Arg Val Phe His Ala His Phe Lys Asn Arg Phe Pro  
 50 55 60  
 Phe Val Glu Thr Pro Pro Phe Trp Lys Asp Ala Thr Gln Ala Leu Thr  
 65 70 75 80  
 Ala Arg Ala Arg Ala Leu Asp Arg Leu Gly Leu Leu Cys Arg Phe Val  
 85 90 95  
 Leu Pro Pro Arg Asp Ala Val Lys Val Gly Ser His Arg Gly Thr Arg  
 100 105 110  
 Gln Asp Asn Pro Thr His Gly Tyr Arg Pro Ser Ile Asp Ser Tyr Glu  
 115 120 125  
 Ser Trp Pro Gly Gly Ser Trp Ser Glu Arg Lys Glu Val Leu Val Trp  
 130 135 140  
 Gly Ala Ala Asp Glu Leu Val Leu Arg Ile Arg Gln Pro Thr Tyr Asn  
 145 150 155 160  
 Gly Gly Glu Thr Trp Phe Met Phe Asn Asp Val Lys Thr Lys Ile Ser  
 165 170 175  
 Ser Tyr His Asp Ile Cys Gly Val His Leu Leu Lys Gln Glu His His  
 180 185 190  
 Thr Arg Lys Ser Gly Asp Glu His Ile Ile Phe Gly Arg Leu Asn Gly

## 18507

195	200	205
Asp Leu Cys His Val Ala Ile Ser Pro Asp Ser Ala Ser His Lys Tyr		
210	215	220
Tyr Gln Arg Phe Met Thr Asn Gly His Gly Leu Glu Arg Thr Asp Leu		
225	230	235
Ser Gly Gly Asp Glu Pro Ile Leu Ala Ala His Leu Asn Asn Gly Ser		
	245	250
Ile Val Phe Tyr Gln Thr Thr Thr Gly Glu Pro Glu Val Glu Pro Phe		
	260	265
Ala His Cys Lys Ile Thr Pro Asp Gly Thr Ala Arg Asn Lys Tyr Ser		
	275	280
Lys Phe Leu Ser Pro Glu Cys Ile Ala Tyr Gly Thr Gly Arg Gln Glu		
	290	295
Asn Ala Leu Thr Ile Ala Thr Ile Ser Asn Glu Arg Leu Ser Val Ser		
305	310	315
Arg Glu Ile Ser Val Thr Ser Leu Asp Ile Gly Glu Ser Ile Gly Leu		
	325	330
Arg Arg Lys Ala Asn Val Ser Ala Ile Ala Pro Leu Thr Ala Gln Ser		
	340	345
Thr Ala Glu Ser Ser Gly Gln Val Phe Leu Ala Ala Trp Gly Asp Arg		
	355	360
Cys Ile Arg Tyr Leu Ser Thr Leu Arg Cys Ser Val Ile Tyr Ile Ser		
	370	375
Ser Asn Ser Pro Asn		380
385		

&lt;210&gt; 41732

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41732

Phe Ser Ser Pro Val Val Lys Thr Thr Lys Ser Ser Lys Ile Thr Ile		
1	5	10
Glu Ser Asp Val Tyr Met Glu Thr Thr Ile Phe Ala Gly Trp Val Glu		
	20	25
Val Thr Ser Gln Leu Arg Leu Leu Arg Val Leu Lys Met Pro His Gln		
	35	40
Pro Lys Trp Arg Gln Glu Lys Leu Ile Asn Asn Leu Ser Ala Asp Thr		
	50	55
Tyr Thr Pro Ile Tyr Leu Tyr Gln Leu Thr Pro Val Arg Arg Asn		
65	70	75

&lt;210&gt; 41733

&lt;211&gt; 475

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (473)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41733

Cys Ser Gly His Phe Arg Leu Thr Ile Ser Thr Gly Thr Val Val Glu		
1	5	10
		15

## 18508

Ser Tyr Ile Thr His Val Arg Ile Thr Glu Asp Ala Ala His Pro Ser  
 20 25 30  
 Thr Pro Ala Pro Pro Asn Ser Pro Pro Glu Asn Lys Lys Pro Arg Val  
 35 40 45  
 Ile Ile Val Ala Val Arg Arg Ser Gly Arg Val Arg Met His Lys Ala  
 50 55 60  
 Arg Glu Asn Asn Asp Gly Thr Phe Ser Ile Gly Lys Thr Trp Met Leu  
 65 70 75 80  
 Asp Asp Leu Ser Ser Ile Gln Ser Tyr Thr Gly Phe Val Pro Ser Thr  
 85 90 95  
 Pro Leu Glu Gln Gln His Lys Gln Trp Ala Ala Thr Val Gly Phe Val  
 100 105 110  
 Val Thr Val Gly Lys Pro Tyr Tyr Trp His Ala Arg Ser Ser Lys Glu  
 115 120 125  
 Lys Asp Phe Phe Ile Gly Ser Leu Val Lys Ile Tyr Arg Lys Tyr Thr  
 130 135 140  
 Gly Gly Lys Val Pro Asn Leu Ile Gly Phe Asp Asp Arg Glu Arg Gln  
 145 150 155 160  
 Leu Leu Val Gly Ser Pro Ser Pro Ala Pro Pro Gly Ser Arg Gly Met  
 165 170 175  
 Gly Gln Gly Pro Ala Thr Arg Ser Pro Ser Ser Gln Gly Ser Arg Pro  
 180 185 190  
 Gln Ser Pro Tyr Thr Gly Arg Ala Pro Ser Arg Asp Gly Pro Arg Asp  
 195 200 205  
 Ile Pro Arg Glu Phe Lys Arg Gln Pro Ser Glu Glu Gln Ala Leu Arg  
 210 215 220  
 Ala Gln Arg Ser Arg Asp Gln Met Gln Arg Pro Ser Thr Ser Gln Ser  
 225 230 235 240  
 Gly Arg Val Ala Ala Pro Ser Pro Leu Gly Gln Thr Ser Gln Pro Leu  
 245 250 255  
 Gly Ala Val Ser Pro Asp Pro Arg Gly Glu Pro Pro Pro Arg Ser Asn  
 260 265 270  
 Glu Arg Leu Pro Lys Ala Pro Val Leu Pro Pro Pro Glu Pro Arg Thr  
 275 280 285  
 Lys Glu Val Thr Asp Ser Leu Ala Ala Ala Lys Pro Val Ser His Thr  
 290 295 300  
 Pro Ser Ser Gln Ala Asp Leu Gly Ser Asp Pro Arg Pro Ser Pro Phe  
 305 310 315 320  
 Leu Gln Asp Gly Lys Ala Val Leu Asp Pro Ser Pro Val Pro Arg Thr  
 325 330 335  
 Glu Asp Leu Ser Ser Ser Leu His Glu Val Gly His Asp Lys Asp Ala  
 340 345 350  
 Arg Pro Ser Thr Ala Val Ser Gly Ser Ala Glu Asn Leu Asp Val Met  
 355 360 365  
 Gln Thr Pro Ala Ser Ser Met Glu Ala Asn Lys Thr Val Gly Glu Ser  
 370 375 380  
 Arg Glu Asn Leu Ser Leu Pro Glu Thr Gln Val Glu Pro Gln Ile Ile  
 385 390 395 400  
 Asp Lys Pro Ala Gly Pro Val Lys Met Gln Pro Pro Asp Ile Pro Pro  
 405 410 415  
 Ala Leu Arg Pro Ala Ser Ser Arg Ser Asn Asn Val Pro Thr Pro Ser  
 420 425 430  
 Val Ala Ala Ala Pro Pro Glu Thr Thr Arg Ser Val Thr Pro Pro Thr  
 435 440 445  
 Ala Ala Glu Pro Ser Glu Thr Pro Arg Glu Arg Ser Pro Ser Pro Pro  
 450 455 460

## 18509

Leu Ala Asn Ser Pro Glu Ser Ser Xaa Pro Gly  
 465 470 475

<210> 41734

<211> 264

<212> PRT

<213> A.fumigatus

<400> 41734

Ser Ser Ser Asp Glu Asp Ser Ser Glu Asp Ser Ser Glu Glu Asp Glu  
 1 5 10 15  
 Ser Glu Ser Leu Asp Glu Leu Glu Leu Asp Ser Gly Lys Gly Val Leu  
 20 25 30  
 Ala Ala Val Phe Arg Ile Phe Leu Ala Ala Phe Leu Ala Gly Ser Phe  
 35 40 45  
 Ser Asp Ser Glu Ser Glu Ser Glu Ser Glu Leu Glu Ser Asp Asp Glu  
 50 55 60  
 Thr Leu Ser Leu Ser Glu Glu Ser Glu Ser Glu Pro Glu Ser Glu Ser  
 65 70 75 80  
 Glu Ser Glu Asp Glu Ala Leu Leu Ser Leu Ser Glu Glu Ser Asp Ser  
 85 90 95  
 Ser Ser Ser Glu Ser Asp Asp Ser Glu Asp Glu Asp Glu Ser Asp Phe  
 100 105 110  
 Val Glu Ser Leu Ala Phe Leu Ala Phe Gly Ala Ser Ser Ser Asp Ser  
 115 120 125  
 Asp Ser Glu Asp Asp Ser Asp Glu Leu Asp Ser Ala Leu Arg Leu Val  
 130 135 140  
 Pro Val Val Phe Gly Ala Gly Ala Gly Ala Gly Ala Ser Ser Ser  
 145 150 155 160  
 Ser Ser Ser Ser Ala Ser Leu Ser Glu Leu Glu Leu Glu Glu Glu  
 165 170 175  
 Asp Glu Glu Asp Glu Glu Gly Glu Asp Ser Leu Asp Cys Phe Phe Cys  
 180 185 190  
 Ile Phe Gly Ala Ser Phe Ile Ser Thr Ser Glu Ser Leu Asp Ser Ser  
 195 200 205  
 Ser Leu Leu Leu Glu Leu Leu Ser Leu Ser Glu Leu Leu Ser Leu Phe  
 210 215 220  
 Arg Ser Cys Gln Leu Arg Lys Met Ser Ser Ser Glu Gly Thr Ser Phe  
 225 230 235 240  
 Glu Ser Thr Leu Ala Ile Ala Phe Leu Asp Cys Ser Leu Glu Arg Ala  
 245 250 255  
 Ser Leu Val Leu Leu Lys Pro Asn  
 260

<210> 41735

<211> 238

<212> PRT

<213> A.fumigatus

<400> 41735

His Ala Asn His Ala Ala Ile Asn Arg Thr Arg Gln Val Ala Lys Pro  
 1 5 10 15  
 Tyr Phe Arg Glu Trp Ser Asn Met Arg Tyr His Glu Gly Lys Thr Phe  
 20 25 30  
 Lys Ser Asn Pro Arg Leu Phe Lys Arg Asp Lys Ala Leu Tyr Phe Pro  
 35 40 45

## 18510

Asn Met Tyr Gly Ile Thr Leu Ala Ser Pro Lys Gln Pro Gln Asn Thr  
 50 55 60  
 Thr Ser Ile Leu Arg Gly Lys Val Ser Val Val Asn Val Phe Ser Ser  
 65 70 75 80  
 Val Trp Ala Glu Ser Gln Val Ala Thr Phe Thr Gly Pro Lys Gln Asn  
 85 90 95  
 Pro Gly Leu Trp Glu Ala Met Lys Ser Gly Ser Glu Leu Val Gln Lys  
 100 105 110  
 Val Asp Ile Asn Leu Glu Glu Asn Ala Met Lys Ala Trp Leu Val Arg  
 115 120 125  
 Met Phe Met Trp Arg Met Arg Ala Asn Leu Pro Lys Glu Gln His Glu  
 130 135 140  
 Arg Tyr Phe Leu Val Arg Lys Gly Leu Thr Asp Gly Leu Lys Glu Ala  
 145 150 155 160  
 Ile Gly Met Met Asn Ser Lys Val Gly Tyr Val Tyr Leu Leu Asp Glu  
 165 170 175  
 Asn Cys Arg Ile Arg Trp Ala Gly Ser Gly Pro Ala Glu Glu Gly Glu  
 180 185 190  
 Leu Asn Gly Leu Asn Asn Gly Val Arg Lys Leu Ile Gln Glu Arg Arg  
 195 200 205  
 Ile Ser Leu Glu Ser Lys Leu Pro Ala Glu Glu Trp Ala Gly Arg Asn  
 210 215 220  
 Gln Gly Glu Ser Ala Ser Pro Lys Pro Arg Val Ile Met Arg  
 225 230 235

&lt;210&gt; 41736

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41736

Thr Arg Asn Pro Ser Leu Cys Ile Cys Asn Phe Thr Ser Lys Asn Glu  
 1 5 10 15  
 Thr Pro His Gly Thr Glu Ile Tyr Trp Lys Asp Asn Gly Thr Thr His  
 20 25 30  
 Trp Glu Glu Ser Gly Leu Pro Glu Ser Gln Ile Ala Gln Tyr Thr Gln  
 35 40 45  
 Asp Ala Met Phe Gly Asp Arg Asn Ala Asp Leu Leu Arg Phe Tyr Ser  
 50 55 60  
 His Asp Val Arg Lys Ser Ile Ala Arg Val Leu Thr Val Ile Asn Ala  
 65 70 75 80  
 Asn Gln Arg Ala Gln Leu Arg Leu Phe Tyr Lys Asn Lys Lys Tyr Thr  
 85 90 95  
 Pro Leu Asp Leu Arg Pro Arg Leu Thr Arg Ala Leu Arg Arg Arg Leu  
 100 105 110  
 Thr Lys His Glu Ala Thr Leu Lys Thr Glu Lys Gln Arg Lys Lys Glu  
 115 120 125  
 Ile His Phe Pro Gln Arg Lys Tyr Ala Val Lys Val Cys Phe Leu Leu  
 130 135 140  
 His His Thr Met Arg Asn Lys Asn Pro Ala Ile Val Gln Ala Phe Pro  
 145 150 155 160  
 Ile Leu Ala Ser

&lt;210&gt; 41737

&lt;211&gt; 201



18511

<212> PRT

<213> A.fumigatus

<400> 41737

```

Arg Pro Ser Ser Pro Ser Ser Val Ser Arg Arg Ser Leu Pro Val Pro
1          5          10          15
Arg Arg Arg Leu Arg Glu Cys Ala Phe Glu Leu Glu Thr Leu Pro Cys
          20          25          30
Ala Ser Ala Ile Leu Pro Arg Lys Met Lys Pro Leu Met Ala Arg Lys
          35          40          45
Phe Thr Gly Lys Thr Thr Glu Arg His Thr Gly Lys Asn Arg Ala Tyr
          50          55          60
Gln Asn Arg Arg Leu Arg Asn Ile His Lys Met Gln Cys Leu Gly Thr
65          70          75          80
Gly Met Leu Ile Cys Cys Gly Ser Thr Ala Thr Thr Phe Ala Ser Arg
          85          90          95
Ser Leu Ala Phe Ser Pro Ser Ser Thr Pro Thr Ser Ala Pro Ser Ser
          100          105          110
Val Cys Ser Thr Arg Thr Arg Ser Thr Leu Leu Leu Thr Ser Asp Pro
          115          120          125
Ala Ser Pro Val Pro Ser Ala Ala Asp Ser Pro Ser Thr Arg Pro Pro
          130          135          140
Ser Arg Arg Arg Ser Ser Ala Arg Arg Arg Ser Thr Ser Pro Ser Gly
145          150          155          160
Ser Thr Pro Ser Arg Tyr Val Ser Tyr Cys Ile Thr Pro Cys Gly Thr
          165          170          175
Lys Thr Pro Gln Ser Phe Lys His Phe Gln Phe Trp Pro Val Glu Ser
          180          185          190
Leu Met Arg Ser Phe Tyr Arg Pro Lys
          195          200

```

<210> 41738

<211> 72

<212> PRT

<213> A.fumigatus

<400> 41738

```

Ile Ala Val Gly Ile Asn Val Gly Ala Asp Val Arg Gln Lys Ile Gly
1          5          10          15
Ser Val Ala Gly Leu Gly Asp Cys Gly Val Gln Ala Leu Gln Phe Ala
          20          25          30
Ala Met Ile Leu Glu Asp Phe Ala Ile Ala Gly Lys Ile Ala Leu Phe
          35          40          45
Gln Gly Arg Cys Gly Lys Ser Gly Phe Gly Val Lys Glu Thr Gly Glu
          50          55          60
Leu Gly Asp Glu Gly Phe Thr Leu
65          70

```

<210> 41739

<211> 167

<212> PRT

<213> A.fumigatus

<400> 41739

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Arg Glu Ala Leu Ile Ser Gln Leu Ser Arg Leu Leu Asp Ser Glu Ala
1          5          10          15

```

## 18512

Thr Leu Thr Ala Ser Ala Leu Lys Gln Ser Asn Leu Ala Arg Asn Arg  
                   20                  25                  30  
 Glu Val Leu Gln Asp His Arg Arg Glu Leu Gln Arg Leu Asn Ala Ala  
                   35                  40                  45  
 Ile Ala Glu Ser Arg Asp Arg Ala Asn Leu Leu Ser Asn Val Arg Ser  
                   50                  55                  60  
 Asp Ile Asp Ala Tyr Arg Asn Ser Asn Pro Ala Ala Ala Glu Ala Asp  
 65                  70                  75                  80  
 Tyr Met Leu Glu Glu Arg Gly Arg Ile Asp Glu Ser His Asn Met Ile  
                   85                  90                  95  
 Asp Gly Val Leu Ser Gln Ala Tyr Ala Ile Asn Glu Ser Phe Gly Leu  
                   100                  105                  110  
 Gln Arg Glu Thr Leu Ala Ser Ile Asn Arg Arg Ile Val Gly Ala Ala  
                   115                  120                  125  
 Asn Lys Val Pro Gly Met Asn Ala Leu Ile Gly Lys Ile Gly Thr Lys  
                   130                  135                  140  
 Arg Arg Arg Asp Ala Ile Ile Leu Gly Ala Phe Ile Gly Phe Cys Phe  
 145                  150                  155                  160  
 Leu Met Val Phe Phe Arg  
                   165

&lt;210&gt; 41740

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41740

Trp Cys Ser Ser Ser Asp Glu Met Leu Val Leu Arg Ile Pro Pro Ile  
 1                  5                  10                  15  
 Phe Leu Cys Tyr Asn Ser Leu Leu Asn Val Ile Tyr Ile Gly Tyr Arg  
                   20                  25                  30  
 Thr Glu Phe Gly Cys Phe His Val Leu Leu Phe Cys Met Gln Ala Leu  
                   35                  40                  45  
 Ile Thr Met Val Met Ala Phe Gln Val Val Tyr Phe Thr Phe Met Tyr  
                   50                  55                  60  
 Ile Gln Gly His Thr Ala Val Ala Leu Arg Leu Thr Ala  
 65                  70                  75

&lt;210&gt; 41741

&lt;211&gt; 390

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41741

Met Gln Pro Leu Asp Pro Leu Glu Glu Asp Ser Val Gly Val Asn Asp  
 1                  5                  10                  15  
 Thr Glu Thr Ser Asp Ala Ser Asp Thr Glu Ser Val Gly Lys Lys Glu  
                   20                  25                  30  
 Ser His Leu Ser Glu Glu Asp Lys Met Ile Glu Ala Trp Gln Gln Lys  
                   35                  40                  45  
 Phe Ala Cys Met Gln Lys His Asp Ser Ser Ser Asn Leu Asp Asn Pro  
                   50                  55                  60  
 Asn Cys Lys Thr Ile Glu Val Leu Gln Gln Met Leu Asp Tyr Tyr Thr  
 65                  70                  75                  80  
 Arg Thr Ser Asp Gln Trp Arg Thr Leu Ala Tyr Arg Lys Ala Ile Ala  
                   85                  90                  95

## 18513

Ala Leu Arg Arg Gln Pro Arg Lys Ile Val Thr Arg Ala Gln Ala Leu  
 100 105 110  
 Ala Ile Pro Gly Ile Gly Pro Arg Leu Ala Asp Lys Ile Glu Glu Ile  
 115 120 125  
 Val Phe Thr Asn Arg Leu Arg Arg Leu Glu Ser Thr Asn Asn Arg Pro  
 130 135 140  
 Glu Asp Leu Ile Leu Gln Glu Phe Leu Gly Val Tyr Gly Ala Gly Ile  
 145 150 155 160  
 Ser Gln Ala Ser Arg Trp Ile Ala Gln Gly Tyr Arg Thr Leu Asp Asp  
 165 170 175  
 Leu Lys Thr Lys Ala Ala Leu Thr Arg Ser Gln Arg Ile Gly Val Glu  
 180 185 190  
 His Tyr His Asp Phe Ala Gln Arg Ile Pro Arg Arg Glu Val Glu Ala  
 195 200 205  
 His Gly Glu Ile Val Arg Lys Ala Val Gln Lys Ala Asp Pro Gly Met  
 210 215 220  
 Gln Val Ile Ile Gly Gly Ser Tyr Arg Arg Gly Ala Ser Asp Ser Gly  
 225 230 235 240  
 Asp Ile Asp Leu Leu Ile Thr Lys Asp Asp Ala Thr Ile Glu Gln Ile  
 245 250 255  
 Thr Thr Met Met Met Asp Thr Val Ile Pro Arg Leu Phe Gln Asp Gly  
 260 265 270  
 Phe Leu Gln Val Ser Leu Ala Ser Thr Ser Arg Gly Asp Gly Ser Lys  
 275 280 285  
 Trp His Gly Ala Ser Val Leu Pro Gly Ser Lys Ile Trp Arg Arg Ile  
 290 295 300  
 Asp Leu Leu Phe Val Pro Gly Ser Glu Ile Gly Ala Ala Leu Ile Tyr  
 305 310 315 320  
 Phe Thr Gly Asn Asp Ile Phe Asn Arg Ser Met Arg Leu Leu Ala Ser  
 325 330 335  
 Lys Lys Gly Met Arg Leu Asn Gln Arg Gly Leu Tyr Ala Asp Val Gln  
 340 345 350  
 Cys Gly Glu Gln Arg Arg Lys Leu Ser Glu Gly Arg Leu Leu Glu Gly  
 355 360 365  
 Arg Asn Glu Arg Arg Ile Phe Glu Ile Leu Gly Val Pro Trp Arg Pro  
 370 375 380  
 Pro Glu His Arg Ile Cys  
 385 390

&lt;210&gt; 41742

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41742

Thr Tyr Gly Arg Ser Pro Trp Gln Asp Trp Ser Asn Glu Ile Arg Ala  
 1 5 10 15  
 Thr Leu Val Ser His Phe His Arg Cys Tyr Phe Pro Ala Ile Cys Pro  
 20 25 30  
 Glu Ala Asn Leu Arg Cys Arg Tyr Arg Lys Leu Ala Lys Phe Asp Arg  
 35 40 45  
 Lys Arg Ala Leu Asp Thr Phe Glu Lys His Lys Gly Phe Tyr His Pro  
 50 55 60  
 Ile Cys Arg Ala Met Val Glu Lys Asp Leu Phe Gly Lys Lys Asp Glu  
 65 70 75 80

&lt;210&gt; 41743

&lt;211&gt; 395

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41743

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Phe Leu Gly Arg Gly Glu Gln Pro Ala Asn Pro Ala Arg Gln Gly Ser
1      5      10      15
Leu Ser Thr Ala Val Ser Leu Ser Gly Leu Gly Ala Ala Gly Gln Phe
      20      25      30
Asn Ser Gly Ser Ser Arg Ser Thr Leu Leu Lys Leu Ala Leu Gln Asn
      35      40      45
Thr Asn Glu Asn Lys Val Asn Ala Met His Thr Gly Ser Ser Pro Leu
      50      55      60
Lys Gly Ala Gln Ser Thr Leu Ala His Arg Asp Thr Asp Glu Asn Gly
65      70      75      80
Glu Ser Arg His Thr Pro Leu Tyr Glu Gln Pro Gly Pro Lys Lys
      85      90      95
Leu His Leu Gly Met Phe Glu Ile Gly Lys Pro Leu Gly Lys Gly Lys
      100      105      110
Phe Gly Arg Val Tyr Leu Ala Lys Glu Arg Ser Ser Gly Phe Val Cys
      115      120      125
Ala Leu Lys Val Leu His Lys Ser Glu Leu Gln Gln Gly Gly Val Gln
      130      135      140
Lys Gln Val Arg Arg Glu Ile Glu Ile Gln Ser Asn Leu Arg His Pro
145      150      155      160
Asn Val Leu Arg Leu Tyr Gly His Phe His Asp Ser Lys Arg Ile Phe
      165      170      175
Leu Ile Leu Glu Phe Ala Gly Arg Gly Glu Leu Tyr Lys His Leu Arg
      180      185      190
Lys Glu His Arg Phe Pro Glu Trp Lys Ala Ala Gln Tyr Ile Ala Gln
      195      200      205
Met Ala Ala Ala Leu Lys Tyr Leu His Lys Lys His Val Met His Arg
210      215      220
Asp Ile Lys Pro Glu Asn Ile Leu Val Gly Ile His Gly Glu Ile Lys
225      230      235      240
Ile Ser Asp Phe Gly Trp Ser Val His Ala Pro Asn Asn Arg Arg Gln
      245      250      255
Thr Met Cys Gly Thr Leu Asp Tyr Leu Pro Pro Glu Met Leu Lys Pro
      260      265      270
Asn Ser Gln Asp Asn Tyr Tyr Ser Glu Lys Val Asp Leu Trp Ser Leu
      275      280      285
Gly Val Leu Thr Tyr Glu Phe Leu Val Gly Glu Ala Pro Phe Glu Asp
      290      295      300
Thr Pro Val Met Thr Gln Arg Arg Ile Ala Arg Ala Asp Met Thr Val
305      310      315      320
Pro Ser Phe Val Ser Pro Glu Ala Lys Asp Leu Ile Lys Arg Val Cys
      325      330      335
Glu Pro Tyr Arg Ser Arg Gln Val His Phe Leu Thr Phe Lys Gln Leu
      340      345      350
Leu Val Leu Asp Pro Asp Lys Arg Ile Ser Leu Asp Glu Ile Gln Arg
      355      360      365
His Pro Trp Ile Leu Lys His Cys Leu Lys Asp Asp Arg Val Thr Lys
      370      375      380
Gln Ser Ser Gly Ser Ser Lys Glu Val Lys Ala
385      390      395

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<210> 41744  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 41744  
 Arg Val Ser Glu Arg Gln Leu Thr Pro Glu Leu Ser Lys Leu Met Gly  
 1 5 10 15  
 Glu Ile Tyr Gly Leu Ala Ala Ser Gln Asn Ile Glu Val Ala Asn Leu  
 20 25 30  
 Tyr Phe Gln Val Gly Leu Gln Ala Gly Asp Ala Ser Val Val Glu Pro  
 35 40 45  
 Thr Ala Asp Leu Leu Gly Lys Ile Gly Arg Met Lys Phe Val Arg Pro  
 50 55 60  
 Leu  
 65

<210> 41745  
 <211> 222  
 <212> PRT  
 <213> A.fumigatus

<400> 41745  
 Val Leu Glu Pro Leu Glu Val Phe Ile Leu Thr Ser His Gly Ile Ala  
 1 5 10 15  
 Ile His Ser Cys Pro Leu Val Ile Ser Pro Ser Glu Leu Gly Pro Tyr  
 20 25 30  
 Gly Asn Arg Leu Thr Asn Ile Cys Cys Pro Gly Pro Ile Ile Arg Phe  
 35 40 45  
 Leu Ser Asp Asn Ile Arg Gln Leu Gly Gly Asp Leu Ser Ser His Asn  
 50 55 60  
 Ile Tyr Cys Arg Arg Cys Thr Ser Arg Lys Ala Gly Gly Phe Asp Pro  
 65 70 75 80  
 Glu Tyr Gly Ile Leu Leu Cys Ala Asn Glu Met Lys Asp Gln Gly His  
 85 90 95  
 Leu Glu Asp Thr Met Ala His Glu Met Val His Ala Tyr Asp His Leu  
 100 105 110  
 Arg Phe Lys Val Asp Trp Thr Asp Asn Leu Arg His Ala Ala Cys Thr  
 115 120 125  
 Glu Val Leu Lys Ser Leu Ala Arg Pro Lys Pro Ala Ser Thr Thr Asp  
 130 135 140  
 Ser Leu Gln Ile Arg Ala Ser Ser Leu Ser Gly Glu Cys Arg Trp Ala  
 145 150 155 160  
 Arg Glu Phe Phe Arg Arg Gly Gln Trp Lys Phe Thr Gln Gln His Gln  
 165 170 175  
 Glu Cys Val Arg Arg Arg Ala Ile Leu Ser Val Arg Ala Arg Pro Gly  
 180 185 190  
 Cys Lys Asp Glu Ala His Ala Glu Lys Val Val Asn Glu Val Trp Asp  
 195 200 205  
 Ser Cys Phe Arg Asp Thr Arg Pro Phe Asp Glu Ile Tyr Arg  
 210 215 220

<210> 41746  
 <211> 178  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41746

Arg Ala Gly Ser Cys Arg Gln Asp Gly His Leu Tyr Ala Gln Ser Arg  
 1 5 10 15  
 Ala Phe Lys Gly Met Ala Lys Glu Gln Val Ser Gln Phe Arg Ile Val  
 20 25 30  
 Gln Leu Ser Leu Ile Tyr Leu Thr Arg Asn Arg Glu Lys Ala His Glu  
 35 40 45  
 Gly Ile Lys Asp Val Val Lys Pro Phe Asp Trp Ser Tyr Thr Thr Asp  
 50 55 60  
 Tyr Thr Gly Thr Val His Pro Asn Ser Arg Pro Phe Glu Thr Thr Thr  
 65 70 75 80  
 Lys Pro Ile Pro Ile Glu Leu Leu Lys Arg Pro Asp Pro Ile Leu Phe  
 85 90 95  
 Phe Asp Glu Val Ile Leu Tyr Glu Asp Glu Leu Ala Asp Asn Gly Ile  
 100 105 110  
 Ala Met Leu Ser Cys Lys Ile Arg Val Met Pro Asp Arg Leu Leu Leu  
 115 120 125  
 Leu Ser Arg Phe Phe Met Arg Leu Asp Asn Val Leu Phe Arg Leu Arg  
 130 135 140  
 Asp Thr Arg Leu Tyr Val Asp Phe Glu Ser Lys Glu Val Ile Arg Glu  
 145 150 155 160  
 Tyr Gln Ser Lys Glu Cys Asp Tyr Glu Arg Val Arg Gln Val Leu Cys  
 165 170 175  
 Ser Lys

&lt;210&gt; 41747

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41747

Val Arg Pro Glu Leu Gly Leu Ile Pro Thr Phe Ser Thr Trp Ser Gln  
 1 5 10 15  
 Val Thr Phe Leu His Met Tyr Leu Leu Thr Val Arg Leu Arg Ala Leu  
 20 25 30  
 Pro Ser Tyr Glu Ser Leu Gln Thr Tyr Ser Arg His Leu Ile Asp His  
 35 40 45  
 Phe Ser His Asn Ala Glu His Arg Met Asp Val Leu His Gly Leu Thr  
 50 55 60  
 Ser Arg Ala Ile Arg Asn Lys Phe Leu Lys Asp Leu Phe Ile Gln Trp  
 65 70 75 80  
 Arg Gly Val Leu Ala Tyr Asp Glu Gly Leu Val Lys Gly Asp Ala  
 85 90 95  
 Val Leu Gly Ala Ala Val Trp Arg Asn Leu Trp Lys Ala Ser His Thr  
 100 105 110  
 Gly Pro His Gly Glu Asp Met Asp Trp Thr Lys Val Ala Arg Val Val  
 115 120 125  
 Ala Tyr Met Arg Arg Val Ile Ser Glu Leu Ser Gln Ile Asn Glu Ala  
 130 135 140  
 Asp Leu Ile Leu His Ile Gly Pro Arg Pro Gly Gly Lys Pro Gly Ile  
 145 150 155 160  
 Phe Ser Tyr Ser Glu Leu Asp Lys Gln Leu Val Asp Gly Lys Arg  
 165 170 175

<210> 41748  
 <211> 125  
 <212> PRT  
 <213> A.fumigatus

<400> 41748  
 Arg Gly Ser Thr Ile Lys Ser His Phe Leu Val Leu Glu Arg Asn Gln  
 1 5 10 15  
 Arg Met Ala Ser Ala Gly Ser Thr Ser Thr Met Asn Ala Ala Val  
 20 25 30  
 Ser Pro Gly Val Gln Arg Pro Asn Val Ile Ser Val Lys Gly Phe Arg  
 35 40 45  
 Ile Ile Thr Gln Lys Leu Pro Ile Leu Lys Ala Glu Pro Ile Glu Glu  
 50 55 60  
 Met Thr Arg Arg Leu Gly Ile Ala Pro Pro Glu Met Ile Phe Gly Asp  
 65 70 75 80  
 Asn His Val Thr Ile Glu Ser Glu Asn Lys Asp Trp Gly Ile Thr Phe  
 85 90 95  
 Asn Ala Phe Asp Ala Leu Asp Arg Val Asp Lys Thr Gly Thr Ser Met  
 100 105 110  
 Leu Arg Val Ala His Ser Lys Glu Trp Gln Lys Ser Arg  
 115 120 125

<210> 41749  
 <211> 173  
 <212> PRT  
 <213> A.fumigatus

<400> 41749  
 Pro Asp Asn His Arg Gln Ala Ser Arg Ala Leu Gln Gly Lys Thr Phe  
 1 5 10 15  
 Tyr Arg Asn Pro Asp Thr Ile Met Asp Asp Glu His His Ser Thr Asp  
 20 25 30  
 Glu Tyr Ile Ala Phe Leu Asn Thr Asn Ala Ser Asn Ala Asp Arg Pro  
 35 40 45  
 Arg Asp Ile Tyr Trp Gly Leu Ala Met Ile Pro Leu Phe Leu Tyr Gly  
 50 55 60  
 His His Thr Lys Val Ile Glu Thr Gly Met Ser Met Met Asp Thr Ile  
 65 70 75 80  
 Pro Arg Leu Trp Ser Ala Arg Val Gly Tyr Val Val Tyr Phe Tyr Leu  
 85 90 95  
 Ala Leu Ser Leu Leu Thr Leu His Asn Asp Tyr Pro Ala Gly Gly Tyr  
 100 105 110  
 Met Asp Gly Asp Asn Leu Lys Thr Val Leu Lys Tyr Lys Ala Glu Val  
 115 120 125  
 Asp Phe Ala Arg Ser Ala Cys Asp Ala Asn Tyr Gly Met Trp Ser Leu  
 130 135 140  
 Ile Leu Glu Ala Leu Ile Ser Glu Val Arg Asn Asp His Thr Ser Ala  
 145 150 155 160  
 Ile Gln Ala Phe Glu Val Ser Leu Gln Arg Asn Asp Thr  
 165 170

<210> 41750  
 <211> 667  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41750

Ala Thr Ser Ala Arg Ser Phe His Val Thr Asn Gly Ser Leu Asp Ile  
 1 5 10 15  
 Ile Asp Leu Ser Ser Ile Leu Glu Ser Ser Gln Val Met Ser Ser Glu  
 20 25 30  
 Leu Gln Ile Asp Lys Leu Leu Thr Lys Met Ile Glu Ile Val Leu Glu  
 35 40 45  
 Ser Cys Asn Gly Ser Asp Phe Ala Ala Ile Ala Thr Asp Phe Asp Asp  
 50 55 60  
 Asn Gly Phe Ala Val Ala Ala Thr Gly Asp Leu Glu Thr Gly Gln Arg  
 65 70 75 80  
 Ser Phe Val Asp Gly Leu Pro Leu Ser Glu Phe Asp Asp Lys Met Ala  
 85 90 95  
 Gln Gln Ile Cys His Tyr Val Ile Arg Thr Lys Glu Glu Val Leu Val  
 100 105 110  
 His Asn Leu Leu Glu Asp Asp Arg Phe Ser Asn Thr Ser Glu Ala Tyr  
 115 120 125  
 Gln Asn Lys Tyr Pro Met Gly Arg Ser Val Ile Ala Leu Pro Ile Met  
 130 135 140  
 Gln Ala Asp His Leu Leu Gly Val Ile His Ile Glu Gly Lys Pro Asn  
 145 150 155 160  
 Ser Phe Thr Gln Arg Asn Val Val Val Leu His Leu Leu Cys Asn Gln  
 165 170 175  
 Ile Gly Ile Ser Leu Ala Asn Ala Leu Leu Phe Arg Glu Val Arg Arg  
 180 185 190  
 Val Ser Ala Thr Asn Ala Ala Met Ile Glu Ala Gln Lys Arg Ala Leu  
 195 200 205  
 Ala Gln Ala Arg Glu Ala Glu His Lys Ala Lys Val Ala Glu Ala Glu  
 210 215 220  
 Ala Lys His Asn Val Lys Leu Lys Glu Asp Ala Ala Arg Ala Lys Ser  
 225 230 235 240  
 Ile Phe Leu Ala Asn Ile Ser His Asp Leu Arg Thr Pro Met Asn Gly  
 245 250 255  
 Val Ile Gly Leu Ser Glu Leu Leu Lys Gly Thr Ile Leu Ser Lys Glu  
 260 265 270  
 Gln Asp Glu Tyr Val Glu Ser Ile Arg Val Cys Ala Asp Thr Leu Leu  
 275 280 285  
 Thr Leu Ile Asn Asp Ile Leu Asp Phe Ser Lys Leu Glu Ala Gly Lys  
 290 295 300  
 Met Lys Ile Ser Thr Val Pro Leu Asn Val Lys Glu Thr Ile Ser Glu  
 305 310 315 320  
 Val Val Arg Ala Leu Arg Tyr Thr His Arg Asp Arg Gly Leu Val Thr  
 325 330 335  
 Ile Glu Asp Leu Asp Lys Val Pro Pro Asp Leu Val Val Leu Gly Asp  
 340 345 350  
 Pro Val Arg Leu His Gln Ile Phe Met Asn Leu Leu Ser Asn Ser Tyr  
 355 360 365  
 Lys Phe Thr Pro Lys Gly Ser Ile Thr Val Arg Ala Lys Val Ser Arg  
 370 375 380  
 Glu Gly Lys Asn Arg Val Arg Leu Glu Cys Ala Val Ser Asp Thr Gly  
 385 390 395 400  
 Ile Gly Ile Pro Glu Glu Gln Lys Ser Arg Leu Phe Lys Pro Phe Ser  
 405 410 415  
 Gln Ala Asp Ser Ser Thr Ala Arg Ser Tyr Gly Gly Ser Gly Leu Gly



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<210> 41751
<211> 1006
<212> PRT
<213> A.fumigatus
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Leu	Val	Glu	Met	Glu	Glu	Asp	Asn	His	Ile	Leu	Gly	Glu	Asp	Leu	Pro
1				5					10					15	
Leu	Pro	Pro	Ala	Arg	Leu	Phe	Glu	Thr	Leu	Ala	Gln	Leu	Pro	Gly	Tyr
			20					25					30		
Ile	Trp	Asp	Gln	Ser	Val	Glu	Pro	Phe	His	Ser	Thr	Tyr	Asn	His	Trp
		35					40					45			
His	Val	Leu	Gly	Leu	Arg	His	Cys	Ala	Glu	Ser	Asp	Val	Ser	Thr	Pro
	50					55					60				
Ala	Ala	Thr	Ser	Ser	Gly	Pro	Ser	Ser	Leu	Ala	Arg	Asn	Ser	Pro	Arg
65					70					75				80	
Ala	Glu	Pro	Arg	Pro	Phe	Phe	Arg	His	His	Trp	Arg	Ser	Ser	Leu	Ser
				85					90					95	
Glu	Ser	Ser	Ser	Glu	Leu	Ser	Leu	Ser	Arg	Ala	Asp	His	Glu	Pro	Val
			100					105					110		
Trp	Ala	Pro	Val	Val	Ala	Arg	Val	Ser	Ser	His	Val	Val	Arg	Leu	Glu
		115					120					125			
Arg	Glu	Phe	His	Met	Leu	Arg	Ser	Ile	Val	Gln	Thr	Ser	Asp	Pro	Asp
	130					135					140				

## 18520

Cys Asn His Thr Ile Arg Pro Ile Asp Leu Ile Arg Leu Pro Pro Asp  
 145 150 155 160  
 Pro Gly Asp Ile Gly Pro Leu Leu Val Ala Ile Phe Glu Ser Pro Gly  
 165 170 175  
 Pro Asn Phe Leu Arg Glu Leu Val Ala Phe Gly Pro Ala Trp Phe Ala  
 180 185 190  
 Ala Gly Val Lys Ser Asp Asn Ile Pro Thr Pro Asp Glu Gln Val Ser  
 195 200 205  
 Leu Pro Val Phe Leu Asp Phe Ala Ile Gly Ala Cys Asp Cys Leu Glu  
 210 215 220  
 Leu Leu His Tyr Gly Leu Lys Thr Val His Gly Glu Ile Arg Gly Asp  
 225 230 235 240  
 Ala Phe His Phe Asp Arg Glu Thr Gly Ser Val Lys Leu Leu Ser Thr  
 245 250 255  
 Gly Asn Gly Ala Arg Ser Phe Glu Asn Ile Leu Ser Asp Gly Trp Ser  
 260 265 270  
 Ser Leu Ser Arg Glu Leu Gly Val Lys Asn Lys Leu Gln Phe Val Ala  
 275 280 285  
 Pro Glu Gln Thr Gly Arg Met Pro Thr Glu Pro Asp Ser Arg Thr Asp  
 290 295 300  
 Ile Tyr Ala Leu Gly Val Leu Phe Trp Thr Met Leu Ile Gly Lys Pro  
 305 310 315 320  
 Ala Phe Thr Gly Ala Asp Pro Val Glu Val Val Gln Asn Val Phe Gly  
 325 330 335  
 Lys Lys Leu Pro Pro Val Ser Ser Lys Arg Met Asp Val Pro Asp Ala  
 340 345 350  
 Ile Ser Ala Val Ile Gln Lys Met Thr Gln Lys Ala Val Asn Glu Arg  
 355 360 365  
 Tyr His Thr Ile Ser Ser Val Lys Arg Asp Leu Thr Gln Ile Ser Gln  
 370 375 380  
 Leu Leu Gly Asp Gly Asp Ser Glu Ala Leu Lys Asp Phe Gln Ile Ala  
 385 390 395 400  
 Gln Arg Asp Val Ser Phe Phe Thr Leu Pro Thr Gly Met Phe Gly  
 405 410 415  
 Arg Arg Glu Glu Tyr Asp Lys Val Ile Ser Val Val Glu Arg Val Tyr  
 420 425 430  
 Arg Arg Gln Gln Ser Ala His Ala Arg Ala Ala Ala Gln Ser Ser Ser  
 435 440 445  
 Gly Val Gly Ser Asn Ser Ser Val Ser Asp Gly Arg Val Asp Ser Phe  
 450 455 460  
 Glu Ile Ala Ser Gly Ser Ser Asp Ser Gly Ser Phe Gln Leu Ala Pro  
 465 470 475 480  
 Arg Thr Asn Ser Tyr Asn Thr Gln Tyr Asn Phe Gly Arg Val Ser Thr  
 485 490 495  
 His Glu Ser Leu His Ser Thr Glu Ser Ser Leu Ser Thr Thr Ile His  
 500 505 510  
 Gly Tyr Ala Ser Asn Lys Ala Lys Ile Pro Val Glu Pro Arg Ala Ser  
 515 520 525  
 Val Asp Ser Thr Glu Arg Asp Thr His Ser Pro Ser Val Ala Asn Ala  
 530 535 540  
 Gln Thr Tyr Thr Asp Pro Val Val Pro Asp Ala Arg Gln Lys Ala Ala  
 545 550 555 560  
 Asn Lys Leu Arg Lys Asn Gly Lys Cys Glu Val Ile Thr Ile Ser Gly  
 565 570 575  
 Pro Ala Gly Ile Gly Lys Thr Asp Leu Val Asn Arg Val Gln Pro Ala  
 580 585 590

## 18521

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Ile Arg Lys Leu Gly Tyr Ile Gly Ile Ala Arg Leu Asp Arg Ala Arg
    595                                600                                605
Arg Ile Pro Phe Glu Pro Phe Ala Lys Ile Leu Ala Ser Leu Leu Arg
    610                                615                                620
Gln Ile Phe Ser Glu Arg Asp Val Thr Thr Asp Tyr His Asn Ser Val
    625                                630                                635                                640
Arg Met Ala Leu Arg Pro Met Trp Thr Thr Leu His Arg Val Leu Glu
    645                                650                                655
Leu Pro Glu Gln Leu Met Ser Ala Gly Gly Lys Asp Leu Glu Phe Ser
    660                                665                                670
Pro Lys Leu Ser Val Ala Gln His Ile Phe Arg Asp Val Ser Asn Arg
    675                                680                                685
Gly Ser Asp Pro Ser Lys Arg Leu Ala Met Pro Arg Leu Asp His Gly
    690                                695                                700
Gln Ser Ser Val Glu Phe Leu Ser Asn Ala Ala Ser Lys Asn Met
    705                                710                                715                                720
Arg Leu Met Glu Thr Phe Leu Glu Ile Leu Arg Thr Leu Ser Gln Phe
    725                                730                                735
Lys Leu Ile Cys Val Cys Val Asp Asp Leu His Tyr Ala Asp Asp Glu
    740                                745                                750
Thr Leu Glu Leu Ile Leu Asn Ile Leu Arg Ala Lys Ile Pro Cys Val
    755                                760                                765
Leu Ile Val Thr Ser Arg Lys Ala Glu Leu Glu Ser Glu Ala Ile Lys
    770                                775                                780
Ser Leu Phe Glu Ser Glu Asp His Asn Val Thr Arg Ile Glu Leu Ser
    785                                790                                795                                800
Ser Leu Gly Glu Asn Glu Ile Met Gln Tyr Val Ala Val Thr Met His
    805                                810                                815
Gln Asp Pro Asn Pro Gly Leu Thr Pro Leu Ala Ala Val Ile Gln Glu
    820                                825                                830
Lys Ser Leu Gly Asn Pro Phe Tyr Val Arg Leu Met Leu Glu Thr Cys
    835                                840                                845
Tyr Ser Lys Asn Cys Ile Trp Tyr Ser Trp Lys Asn Ser Arg Trp Glu
    850                                855                                860
Phe Asp Leu Asp Arg Ile Phe Thr Glu Phe Val Ala Pro Arg Tyr Gly
    865                                870                                875                                880
Glu Gly Leu Gly Leu Gly Phe Ile Ala Lys Arg Leu Gln Glu Ile Pro
    885                                890                                895
Val Ala Ala Arg Ser Ile Leu Ile Trp Gly Ala Leu Leu Gly Ser Pro
    900                                905                                910
Phe Pro Phe Ser Leu Val Gln Lys Leu Leu Thr Ser Glu Phe Leu Tyr
    915                                920                                925
Ser Ser Glu Asp Asp Asp Glu Ala Val Asp Leu Thr Cys Pro Gln Ser
    930                                935                                940
Ala Ser Met Ile Arg Gln Ser Glu Ala Asp Ile Val Val Gly Leu Gln
    945                                950                                955                                960
Tyr Leu Val Gln Ala Asn Leu Ile Val Pro Gly Lys Thr Asp Asp Glu
    965                                970                                975
Phe Arg Cys Ala Leu Ser Ile Leu Ser Phe Tyr Leu Leu Phe Phe Leu
    980                                985                                990
Pro Phe Leu Phe Phe Glu Leu Cys Phe Arg Asp Pro Thr Arg
    995                                1000                                1005

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&lt;210&gt; 41752

&lt;211&gt; 402

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41752

Leu Leu Thr Leu Thr Arg Phe Ala Asn Asp Arg Leu Ala Gln Ala Ala  
 1 5 10 15  
 Thr Ser Leu Thr Glu Gly Arg Asn Val Asp Lys Met His Phe Ile Ile  
 20 25 30  
 Ser Gln Ala Met Met Lys Tyr Tyr His Asp Ser Arg Ser Arg Tyr Ala  
 35 40 45  
 Ile Ala Arg His Ile Gly Leu Ala Ser Arg Ile Val Arg Ser Arg Val  
 50 55 60  
 Ile Gln Arg Val Asp Tyr Arg Lys Ile Leu Trp Asp Ala Ala Gln Thr  
 65 70 75 80  
 Ala Ser Gln Ser Gly Ala Arg Pro Thr Ala Leu Trp Tyr Phe His His  
 85 90 95  
 Cys Ile Ala Leu Leu Gln Asp Asn Pro Trp Asp Asp Asn Asn Thr Asp  
 100 105 110  
 Val Tyr Tyr Asp Glu Thr Leu Arg Leu His Ile Ala Thr Ala Glu Met  
 115 120 125  
 Leu Trp Ser Gln Gly His His Thr Glu Ala Leu Arg Leu Leu Asp Glu  
 130 135 140  
 Val Phe Ala His Gly Lys Ser Ala Val Cys Lys Ala Arg Ala Trp Ile  
 145 150 155 160  
 Val Lys Ala Lys Ile Tyr Ala Gln Met Gly Asn His Tyr Lys Ser Met  
 165 170 175  
 Asp Ser Leu Leu Thr Cys Leu Glu Glu Leu Gly Val His Leu Arg Glu  
 180 185 190  
 Pro Thr Thr Tyr Glu Ala Cys Asp Ala Ala Tyr Gly Asn Leu Lys Ala  
 195 200 205  
 Tyr Ile Glu Asn Ala Asp Leu Glu Val Ile Val Arg Lys Pro Lys Ser  
 210 215 220  
 Lys Asp Ile Asn Met Val Thr Ile Gly Ala Val Met Ala Glu Ala Met  
 225 230 235 240  
 Ala Val Thr Tyr Trp Asp Asp Ala Leu Thr Phe Tyr Arg Met Ala Ile  
 245 250 255  
 Glu Met Met Asn Leu His Leu Phe Lys Gly Gly Phe Val Gln Ile Ser  
 260 265 270  
 Ile Gly Cys Ser His Leu Ser Met Ile Ser Phe Ser Arg Phe Arg Asp  
 275 280 285  
 Leu Glu Phe Ala Ala Lys Leu Asn Glu Cys Ala Leu Thr Leu Leu Asp  
 290 295 300  
 Cys Cys Pro Glu Pro Trp Thr Gln Arg Arg Gly Thr Ile Val His Asn  
 305 310 315 320  
 Leu Tyr Ile Ser His Leu Arg Val Pro Met Pro Ser Thr Leu Pro Val  
 325 330 335  
 Leu Glu Arg Ser Val Glu Val Ser Phe Thr Met Gly Asp Pro Tyr Ile  
 340 345 350  
 Thr Leu Ile Ser Leu Ser Ser Met Ala Met Thr Arg Leu Trp Leu Gly  
 355 360 365  
 His Asp Val Gly Gln Val Glu Gln Phe Cys Thr Glu Ser Pro Asp Asp  
 370 375 380  
 Ile Pro Asp Trp Ser Lys Asp Thr Arg Gly Gly Ala Ser Leu Leu Ala  
 385 390 395 400  
 Val Arg

<210> 41753  
 <211> 406  
 <212> PRT  
 <213> A.fumigatus

<400> 41753

Leu	Gln	Glu	Lys	Val	Asn	Cys	Ser	Phe	Gln	Ser	Arg	Thr	Gln	Leu	Ile
1				5					10					15	
Phe	Phe	Asn	Pro	Ala	Ile	Pro	Val	Arg	Lys	Pro	Arg	Pro	Ser	Tyr	Leu
		20						25					30		
Ile	Thr	Gly	Thr	Met	Thr	Ser	Ser	Glu	Lys	Val	Thr	Tyr	Val	Pro	Ala
	35					40						45			
Gly	Glu	Ile	Asp	Lys	Val	Phe	Ala	His	Thr	Thr	Asn	Leu	Ala	Ser	Ser
	50				55						60				
Gly	Leu	Asn	Thr	Lys	Ile	Leu	Ala	Cys	Ser	Asp	Glu	Phe	Phe	Ala	Ala
65				70					75					80	
Ala	Ser	Asn	Leu	Leu	Thr	Pro	Thr	Pro	Pro	Ile	Asn	Arg	Pro	Gly	Val
			85					90						95	
Phe	Val	His	Thr	Gly	Ala	Trp	Tyr	Asp	Gly	Trp	Glu	Thr	Arg	Arg	His
			100					105					110		
Asn	Pro	Glu	Pro	Tyr	Asp	Trp	Val	Val	Ile	Lys	Leu	Gly	Val	Ala	Ser
	115					120						125			
Gly	Ala	Ile	Gln	Gly	Val	Glu	Val	Asp	Thr	Gly	Phe	Phe	His	Gly	Asn
	130					135					140				
Tyr	Gly	Glu	Lys	Ala	Glu	Leu	Gln	Gly	Thr	Tyr	Ala	Pro	Val	Asp	Ser
145				150					155					160	
Gly	Val	Thr	Asp	Glu	Gln	Ile	Ala	Asp	Pro	Ser	Phe	Asn	Gly	Trp	Thr
			165					170						175	
Thr	Ile	Leu	Pro	Pro	Gln	Pro	Cys	Gly	Pro	Ser	Gln	Arg	Arg	Ala	Trp
		180						185				190			
Lys	Leu	Asn	Asp	Tyr	Asp	Pro	Ser	Asn	Pro	Lys	Pro	Tyr	Thr	His	Val
	195					200						205			
Arg	Leu	Leu	Met	Tyr	Pro	Asp	Gly	Gly	Phe	Ala	Arg	Leu	Arg	Leu	Tyr
	210					215					220				
Gly	His	Ala	Ile	Pro	Pro	Ala	Pro	Glu	His	Ile	Asn	Ser	Ala	Glu	
225				230					235					240	
Ala	Pro	Val	Glu	Glu	Leu	Ser	Ser	Ala	Leu	Leu	Gly	Gly	Leu	Ala	Leu
			245					250					255		
Ser	Ala	Ser	Asn	Gln	His	Tyr	Thr	Pro	Ile	Ser	Asn	Leu	Ile	Leu	Pro
		260						265				270			
Gly	Arg	Gly	Lys	Asp	Met	Gly	Asp	Gly	Trp	Glu	Thr	Ala	Arg	Ser	Arg
	275					280						285			
Ile	Pro	Gly	Tyr	Thr	Asp	Trp	Ala	Ile	Phe	Gln	Leu	Gly	Leu	Pro	Gly
	290					295					300				
Ser	Val	Ala	Lys	Ile	Val	Val	Asp	Thr	Lys	Asp	Phe	Arg	Gly	Asn	Phe
305				310						315				320	
Pro	Arg	Ala	Val	Arg	Val	His	Gly	Leu	Leu	Glu	Gly	Ser	Val	Ala	Ala
			325					330						335	
Gly	Glu	Val	Pro	Ala	His	Asp	His	Pro	Asp	Trp	Ile	Pro	Leu	Leu	Ser
		340						345				350			
Gly	Asp	Lys	Phe	Cys	Lys	Ala	Asp	Thr	Glu	His	Val	Tyr	Glu	Gly	Ala
	355					360					365				
Glu	Leu	Ala	Ala	Gly	Gly	Glu	Asp	Thr	Arg	Thr	Phe	Thr	His	Met	Lys
	370					375					380				
Leu	Thr	Leu	Ile	Pro	Asp	Gly	Gly	Val	Lys	Arg	Phe	Arg	Ile	Phe	Gly
385				390						395					400

Arg Arg Ala Asn Arg Ala  
405

<210> 41754  
<211> 155  
<212> PRT  
<213> A.fumigatus

<400> 41754  
Arg Lys Ala Arg Thr Thr Ser Glu Met Val Ser Leu Thr Leu Arg Gly  
1 5 10 15  
Thr Val Glu Ile Phe Ile Phe Pro Ala Ser Asn Phe Glu Lys Ser Lys  
20 25 30  
Met Ser Leu Met Ser Val Arg Ser Val Ser Ala Gln Thr Arg Ile Asp  
35 40 45  
Ser Thr Tyr Ser Ser Cys Ser Leu Leu Lys Ile Val Pro Leu Arg Ser  
50 55 60  
Ser Asp Lys Pro Ile Thr Pro Phe Ile Gly Val Arg Arg Ser Trp Glu  
65 70 75 80  
Met Leu Ala Arg Lys Met Asp Leu Ala Leu Ala Ala Ser Ser Phe Ser  
85 90 95  
Phe Thr Leu Cys Leu Ala Ser Ala Ser Ala Thr Leu Ala Leu Cys Ser  
100 105 110  
Ala Ser Arg Ala Cys Ala Arg Ala Arg Phe Cys Ala Ser Ile Ile Ala  
115 120 125  
Ala Phe Val Ala Leu Thr Leu Arg Thr Ser Arg Lys Ser Ser Ala Leu  
130 135 140  
Ala Lys Glu Met Pro Ile Trp Leu Gln Ser Arg  
145 150 155

<210> 41755  
<211> 122  
<212> PRT  
<213> A.fumigatus

<400> 41755  
Asn Gly Lys Ser Thr Pro Lys Leu Val Val Cys Leu Ser Trp Asp Asn  
1 5 10 15  
Gln Val Arg Leu Asp Lys Ile Leu Lys Ser Asn Tyr Tyr Ile Ser Leu  
20 25 30  
Arg Leu Ser Asp His Thr Gly Thr Leu Trp Ala Cys Gln Val Asp Ser  
35 40 45  
Leu Ile Ile Val Phe Ala Gly Ile Gln Glu Leu Ala Gly Lys Gln Phe  
50 55 60  
Leu Asn Lys Arg Lys Arg Lys Gly Thr Ser Gln Gln Ser Ser Pro Tyr  
65 70 75 80  
Gln Asp Gly Pro Gly Ser Tyr Trp Asp Phe Leu Glu Ala Phe Cys Asp  
85 90 95  
Glu Ser Lys Ala Lys Pro Leu Ala Val Pro Trp Ser Asp Lys Leu Gly  
100 105 110  
Glu Asn Thr Ile Gln Val Lys Leu Pro Pro  
115 120

<210> 41756  
<211> 89  
<212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41756

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Ser Ser Trp Val Leu Pro Ala Ala Pro Ser Lys Ala Ser Lys Trp Thr
1          5          10          15
Gln Val Ser Ser Met Ala Thr Met Ala Arg Arg Pro Ser Cys Arg Glu
          20          25          30
Pro Thr Pro Pro Ser Thr Ala Ala Ser Gln Thr Asn Arg Ser Pro Ile
          35          40          45
Pro Ala Ser Thr Ala Gly Pro Leu Phe Tyr Pro Leu Ser Pro Ala Asp
          50          55          60
Arg Arg Ser Val Ala Pro Gly Asn Ser Thr Thr Thr Thr Pro Pro Thr
65          70          75          80
Pro Ser Pro Thr Pro Met Ser Val Cys
          85

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&lt;210&gt; 41757

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41757

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Ile Thr Ser Lys Asn His His Lys Ile Ser Gln Ala Lys Met Pro Ser
1          5          10          15
Ile Pro Leu His Pro His Ala Ser Ser Ser Pro His His Pro His Asn
          20          25          30
Pro Leu Pro Gln Ile Leu Gln Thr Pro Ser Gly Leu Ala Ile Leu Glu
          35          40          45
Leu Gln Gly Thr Ile Asn Leu Pro Ser Leu Asp Asp Gln Gly Ala Val
          50          55          60
Pro Arg Ser Ala Asp Ala Asp Asp Pro Asn Ala Ala Ile Thr Thr Phe
65          70          75          80
Glu Thr Pro Ile Gly Lys Leu Met Phe Pro Asp Tyr Ser Pro Gln Asn
          85          90          95
Thr Ser Leu Asp Asp Thr Lys Trp Met Lys Arg Val Tyr Leu Tyr Val
          100          105          110
Gly Arg Tyr Gln Arg Met Thr Gly Glu Val Lys Lys Leu Ala Gln Pro
          115          120          125
Leu Ala Leu Val Gln Lys Arg Lys Lys Arg Pro Asp Asp Asn Asn Gly
          130          135          140
Ile Ala Glu Ser Glu Gly Glu Glu Leu Glu Ile Val Glu Ile Ile Lys
145          150          155          160
Tyr Lys Leu Leu Phe Lys Asn Arg Pro Glu Pro Val Asn Asp Ser
          165          170          175

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&lt;210&gt; 41758

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41758

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Ser Glu Leu Ser Thr Ala Arg Asn Ile Ala Thr Leu Thr Thr Ser Leu
1          5          10          15
Val Asp Leu Val Ala Phe Cys Val Ser Ala Gly Asp Thr Phe Leu Pro
          20          25          30
Asp Pro Ala Ser Tyr Asp Asp Leu Phe Tyr Lys Leu Val Glu Thr Gly

```

35	40	45
Pro Ile Thr Arg Phe Arg Asp Val Tyr Ser Leu Lys Pro Pro Thr		
50	55	60
Pro Ser Ala Ser Lys Ile Pro Asp Pro Thr Thr Ile Ala Ser Lys Asp		
65	70	75
Ile His Val Ala Ala Ile Asp Thr Leu Ile Ser Val Ser Thr His Phe		
85	90	95
Tyr Ala Leu Leu Phe Asn Pro Asp Arg Asn Val Asp Val Ser Leu Lys		
100	105	110
Pro Gly Gly Glu Ala Ser Asn Pro Val Pro Ile Pro Ala Asn Arg Lys		
115	120	125
Lys Asn Leu Ser Pro Arg Glu Val His Arg Ile Ile Lys Gln Gly Tyr		
130	135	140
Asp Thr Leu Ser Ile Gln Pro Pro Glu Gly Leu Ser Ala Trp Thr Arg		
145	150	155
Trp Arg Glu Ala Asp Trp Lys Thr Glu Leu Lys Arg Ala Ala Arg Cys		
165	170	175
Ala Val Glu Asp Ala Arg Gln Leu Val Ala		
180	185	

&lt;210&gt; 41759

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41759

Ser Tyr Leu Pro Ser Val Ile Gln Glu Phe Ser His Gln Ser Glu Asp		
1	5	10
Thr Ser Trp Leu His His Pro Ile Arg Gln Ala Ser Tyr Cys Ala Gly		
20	25	30
Val Lys Asp Gln His Arg Arg Gln Glu Tyr Asn Cys Arg Arg Leu Ala		
35	40	45
Asn Arg Leu Gly Glu Pro Glu Tyr Leu Ser Gly Pro Lys His Ala Lys		
50	55	60
Glu Gly Arg Val Ser Leu Ala Leu Leu Leu Cys Ser His His Phe Ser		
65	70	75
Met Ala Pro Ser Glu Ala Ser Ile Leu Ser Asn Phe Leu Leu Ser Pro		
85	90	95
Ala Ser Leu Pro Thr Ile Ile Ser Leu Gln Gln Phe Thr Glu Leu Phe		
100	105	110
Pro Lys Lys Leu Arg Ala His Pro His Ile Arg Val Leu Tyr Arg Glu		
115	120	125
Leu Gln Gln Leu Arg Glu Gln Asp Met Asp Thr Val Asn Gly Asn Ile		
130	135	140
Asp Gln Glu Val Arg Gln Ala Glu Thr Gln Lys Ala Glu Leu Arg Lys		
145	150	155
Lys Ile Met Lys Asn Gly Val Asp Gly Met Glu Glu Asn Asp Arg Arg		
165	170	175
Glu Met Asp Met Asp Val Gln Leu Phe Gly Gln Gly Val Asn Ala Ala		
180	185	190
Ser Ser Glu Tyr His Ser Ile Ser Ser Leu Leu Ser Ala Met Glu Thr		
195	200	205
Ala Cys Ser Asn Ile Glu His Glu Ile Ser Gln Val Asp Gln Glu Ala		
210	215	220
Ala Asn Val Leu Thr Gly Leu Ser Ala Thr Val Gly Glu Leu Ser Asp		
225	230	235
		240



## 18527

Leu Arg Tyr Gly Lys Met Gln Gly Pro Ala Gly Ser Ser Gly Glu Glu  
                   245                  250                  255  
 Met Val Lys Glu Ala Ile Asp Gly Leu Glu His Leu Glu Gln Ala Cys  
                   260                  265                  270  
 Asn Arg Lys Thr Ser Gln  
                   275

&lt;210&gt; 41760

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41760

Leu Gln Glu Glu His Phe Tyr Thr Arg Pro Ser Val Arg Ile Val Met  
 1                  5                  10                  15  
 Pro Asp Asn Leu Lys Ser Leu Leu Val Asp Asp Trp Glu Asn Val Thr  
                   20                  25                  30  
 Lys Asn Gln Gln Val Val Ala Leu Pro Ala Lys Ala Ser Val Asn Gln  
                   35                  40                  45  
 Ile Leu Glu Asp Phe Val Ala Glu Glu Lys Pro Lys Arg Thr Ser Ser  
                   50                  55                  60  
 Ala Asp Leu Asp Val Leu Glu Glu Val Ile Met Gly Ile Lys Glu Tyr  
 65                  70                  75                  80  
 Phe Asp Lys Ala Leu Asp Lys Ile Leu Leu Tyr Arg Phe Glu Arg Glu  
                   85                  90                  95  
 Gln Tyr Lys Ala Leu Arg Lys Lys Trp Glu Ala Gly Ser Gly Glu Tyr  
                   100                  105                  110  
 Ser Glu Lys Gly Pro Leu Asp Val Tyr Gly Ala Glu His Leu Thr Arg  
                   115                  120                  125  
 Leu Phe Gly Met Leu Leu Asp Asn Leu Phe Ser Glu Asp His Leu Leu  
                   130                  135                  140  
 Thr Tyr Ser Ser Ser Asn Tyr Ala Gly Ala His Cys Ala Asp Lys His  
 145                  150                  155                  160  
 Gly Ser Pro Val His Glu Gln Thr Pro Gly Gly Ala Val Glu Ile His  
                   165                  170                  175  
 Ala Leu Ala Gln Gln Glu Leu Arg Gln Ile Phe Cys His Glu Val His  
                   180                  185                  190  
 Asp Cys Asn Lys  
                   195

&lt;210&gt; 41761

&lt;211&gt; 2331

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1131)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41761

Arg Asp Arg Leu His Arg Ala Ile Arg Glu Trp Ile His Ser Phe Asn  
 1                  5                  10                  15  
 Glu Ala Lys Glu Gln Gln Ser Ala Ser Gln Leu Ser Ile Gly Thr Gln  
                   20                  25                  30  
 His Pro Ala Ala Gly Glu Pro Glu Ala Val Ser Tyr Lys Ile Glu Phe



													485						490						495		
Arg	His	Trp	Gln	Lys	Ile	Tyr	Lys	Ala	Leu	Lys	Pro	Gly	Lys	Arg	Phe												
			500						505						510												
Ser	Leu	Val	Ser	Leu	Thr	Leu	Gly	Asp	Val	Trp	Asp	Leu	Gln	Leu	Ala												
			515						520						525												
Thr	Ser	Glu	Ser	Val	Ile	Arg	Asp	Ile	Ile	Ala	Gln	Ala	Gln	Gly	Glu												
			530						535						540												
Met	Ala	Leu	Glu	Glu	Phe	Leu	Lys	Ser	Val	Arg	Glu	Thr	Trp	Gln	Asn												
545						550						555						560									
Tyr	Ser	Leu	Asp	Leu	Val	Asn	Tyr	Gln	Asn	Lys	Cys	Arg	Leu	Ile	Arg												
			565						570						575												
Gly	Phe	Asp	Asp	Leu	Phe	Ala	Lys	Cys	Ser	Glu	Asn	Leu	Asn	Ser	Leu												
			580						585						590												
Gln	Ala	Met	Arg	His	Ser	Pro	Tyr	Lys	Glu	Phe	Glu	Glu	Glu	Ala													
			595						600						605												
Ala	Ser	Trp	Glu	Asp	Lys	Leu	Asn	Arg	Val	His	Val	Leu	Phe	Asp	Val												
			610						615						620												
Trp	Ile	Asp	Val	Gln	Arg	Gln	Trp	Val	Tyr	Leu	Glu	Gly	Val	Phe	Thr												
625						630						635						640									
Gly	Asn	Ala	Asp	Ile	Lys	His	Leu	Leu	Pro	Leu	Glu	Ser	Ser	Arg	Phe												
			645						650						655												
Gln	Asn	Ile	Asn	Ser	Glu	Phe	Phe	Ala	Val	Met	Lys	Lys	Val	Tyr	Lys												
			660						665						670												
Ser	Pro	Phe	Val	Leu	Asp	Val	Leu	Ala	Ile	Asn	Gly	Val	Gln	Lys	Ser												
			675						680						685												
Leu	Glu	Arg	Leu	Ala	Glu	Leu	Leu	Asn	Lys	Ile	Gln	Lys	Ala	Leu	Gly												
			690						695						700												
Glu	Tyr	Leu	Glu	Arg	Glu	Arg	Ile	Ser	Phe	Pro	Arg	Phe	Tyr	Phe	Val												
705						710						715						720									
Gly	Asp	Glu	Asp	Leu	Leu	Glu	Ile	Ile	Gly	Asn	Ser	Asn	Asp	Ile	Phe												
			725						730						735												
Arg	Val	Ala	Lys	His	Phe	Lys	Lys	Met	Phe	Ala	Gly	Leu	Ser	Gly	Val												
			740						745						750												
Leu	Met	Asp	Asp	Glu	Asn	Asn	Ile	Val	Gly	Ile	Thr	Ser	Lys	Glu	Gly												
			755						760						765												
Glu	Glu	Val	Arg	Leu	Lys	Arg	Glu	Ile	Ser	Leu	Val	Lys	Thr	Pro	Arg												
			770						775						780												
Ile	Asn	Asp	Trp	Leu	Thr	Ala	Leu	Glu	Thr	Ser	Met	Lys	Leu	Thr	Leu												
785						790						795						800									
Ala	Glu	Leu	Leu	Gly	Glu	Ala	Ile	Glu	Gln	Phe	Glu	Thr	Ile	Tyr	Asn												
			805						810	</																	

## 18530

930 935 940  
 Ala Lys Leu Ser Tyr Gly Phe Glu Tyr Leu Gly Val Pro Glu Arg Leu  
 945 950 955 960  
 Val Arg Thr Pro Leu Thr Asp Arg Cys Phe Leu Thr Leu Thr Gln Ala  
 965 970 975  
 Leu Cys Gln Arg Leu Gly Gly Ser Pro Tyr Gly Pro Ala Gly Thr Gly  
 980 985 990  
 Lys Thr Glu Ser Val Lys Ala Leu Gly Leu Gln Leu Gly Arg Phe Thr  
 995 1000 1005  
 Leu Val Phe Cys Cys Asp Asp Thr Phe Asp Phe Gln Ala Met Gly Arg  
 1010 1015 1020  
 Ile Phe Leu Gly Ile Cys Gln Val Gly Ala Trp Gly Cys Phe Asp Glu  
 1025 1030 1035 1040  
 Phe Asn Arg Leu Glu Glu Arg Ile Leu Ser Ala Val Ser Gln Gln Ile  
 1045 1050 1055  
 Gln Asn Ile Gln Leu Gly Leu Lys Thr Gly Val Asp Asn Glu Lys Ala  
 1060 1065 1070  
 Gln Ile Glu Leu Val Gly Arg Arg Leu Ser Val Asn Pro Asn Thr Gly  
 1075 1080 1085  
 Ile Phe Ile Thr Met Asn Pro Gly Tyr Ala Gly Arg Ser Asn Leu Pro  
 1090 1095 1100  
 Asp Asn Leu Lys Lys Leu Phe Arg Ser Val Ala Met Ser Lys Pro Asp  
 1105 1110 1115 1120  
 Lys Glu Leu Ile Ala Glu Val Met Leu Phe Xaa Gln Gly Phe Lys Gln  
 1125 1130 1135  
 Ala Lys Arg Leu Ser Lys Gln Thr Val Pro Phe Phe Asp His Cys Ala  
 1140 1145 1150  
 Ser Gln Leu Ser Lys Gln Ala His Tyr Asp Phe Gly Leu Arg Ala Leu  
 1155 1160 1165  
 Lys Ser Val Leu Val Ser Ser Gly Gly Leu Lys Arg Ala Arg Leu Ala  
 1170 1175 1180  
 Asn Thr Asp Gly Asp Leu Gly Pro Asp Glu Ile Ile Glu Pro Gln Ile  
 1185 1190 1195 1200  
 Ile Val Gln Ser Leu Arg Glu Thr Ile Ala Pro Lys Leu Val Arg Glu  
 1205 1210 1215  
 Asp Val Asp Lys Met Leu Glu Ile Gln Ala His Asn Phe Ser Gly Val  
 1220 1225 1230  
 Glu Tyr Val Pro Ala Asn Tyr Glu Lys Leu Thr Gln Ala Ile Arg Asp  
 1235 1240 1245  
 Ile Ala His Glu Gln His Tyr Val Asp Ser Glu Met Trp Ile Ala Lys  
 1250 1255 1260  
 Ile Leu Gln Leu Tyr Gln Ile Gln Ser Ile His His Gly Val Met Met  
 1265 1270 1275 1280  
 Val Gly Arg Ser Gly Ser Gly Lys Ser Ala Ala Trp Lys Ile Leu Leu  
 1285 1290 1295  
 Gln Ala Leu Gln Arg Ile Glu Gly Val Glu Gly Val Ser His Ile Ile  
 1300 1305 1310  
 Asp Ser Lys Val Met Ser Lys Glu Ala Leu Tyr Gly Asn Leu Asp Ser  
 1315 1320 1325  
 Thr Thr Arg Glu Trp Thr Asp Gly Leu Phe Thr Gly Ile Leu Arg Lys  
 1330 1335 1340  
 Ile Val Asp Asn Leu Arg Gly Glu Asp Thr Lys Arg His Trp Ile Val  
 1345 1350 1355 1360  
 Phe Asp Gly Asp Val Asp Pro Glu Trp Val Glu Asn Leu Asn Ser Val  
 1365 1370 1375  
 Leu Asp Asp Asn Lys Leu Leu Thr Leu Pro Asn Gly Glu Arg Leu Asn

## 18531

1380	1385	1390
Leu Pro Pro Asn Val Arg Ile Met Phe Glu Val Glu Ser Leu Lys Tyr		
1395	1400	1405
Ala Thr Leu Ala Thr Val Ser Arg Cys Gly Met Val Trp Phe Asn Asp		
1410	1415	1420
Asp Thr Val Thr Pro Leu Met Met Ile Ser Asn Tyr Val Glu Ser Leu		
1425	1430	1435
Arg Thr Lys Thr Phe Glu Asp Leu Asp Asp Asp Ser Ala Pro Ala Gly		
1445	1450	1455
Gln Ala Ala Ala Lys Thr Gln Asp Ala Gln Asn Met Leu Ser Thr Ile		
1460	1465	1470
Leu Lys Gln Leu Leu Glu Thr Asp Gln Leu Val Leu Lys Ser Leu Asp		
1475	1480	1485
Glu Ala Lys Lys Tyr Asn His Ile Met Glu Phe Thr Asp Ile Arg Ala		
1490	1495	1500
Leu Asn Thr Leu Phe Ser Leu Leu Asn Lys Ala Cys Arg Asn Val Leu		
1505	1510	1515
Glu Tyr Asn Ile Gln His Val Asp Phe Pro Leu Asp His Glu Gln Ile		
1525	1530	1535
Gln Ser Tyr Ile Ser Lys Lys Leu Leu Leu Ala Leu Val Trp Ser Phe		
1540	1545	1550
Thr Gly Asp Cys Pro Leu Ala Asp Arg Gln Ala Phe Gly Gln Phe Val		
1555	1560	1565
Ser Gly Met Ser Thr Thr Glu Leu Pro Pro Asp Gly Ala Ser Ser Leu		
1570	1575	1580
Ile Asp Phe Asp Ile Thr Leu Pro Lys Ser Glu Trp Met Ser Trp Gln		
1585	1590	1595
Ser Gln Val Pro Ser Ile Glu Ile Asn Thr His Ser Ile Thr Gln Thr		
1605	1610	1615
Asp Val Val Ile Pro Thr Val Asp Thr Val Arg His Glu Asp Val Leu		
1620	1625	1630
Tyr Ser Trp Leu Ala Glu His Lys Pro Leu Leu Leu Cys Gly Pro Pro		
1635	1640	1645
Gly Ser Gly Lys Thr Met Thr Leu Phe Ala Ala Leu Arg Lys Leu Pro		
1650	1655	1660
Asn Met Glu Val Val Gly Leu Asn Phe Ser Ser Ala Thr Thr Pro Asp		
1665	1670	1675
Leu Leu Ile Lys Thr Phe Glu Gln Tyr Cys Glu Tyr Lys Lys Thr Leu		
1685	1690	1695
Asn Gly Val Val Met Ser Pro Asn Gln Ile Gly Arg Trp Leu Val Ile		
1700	1705	1710
Phe Cys Asp Glu Ile Asn Leu Pro Ala Pro Asp Arg Tyr Gly Thr Gln		
1715	1720	1725
Arg Ala Ile Thr Phe Leu Arg Gln Leu Val Glu Gln Asn Gly Phe Trp		
1730	1735	1740
Arg Thr Ser Asp Lys Thr Trp Val Thr Leu Asp Arg Ile Gln Phe Val		
1745	1750	1755
Gly Ala Cys Asn Pro Thr Asp Ala Gly Arg Thr Pro Leu Ala Glu		
1765	1770	1775
Arg Phe Leu Arg His Ser Pro Leu Ile Met Val Asp Tyr Pro Gly Glu		
1780	1785	1790
Ile Ser Leu Met Gln Ile Tyr Gly Thr Phe Asn Ser Ala Val Leu Lys		
1795	1800	1805
Ile Ile Pro Leu Leu Arg Gly Tyr Ser Glu Ala Leu Thr Lys Ala Met		
1810	1815	1820
Val Gln Phe Tyr Leu Glu Ser Gln Arg Arg Phe Thr Pro Gln Ile Gln		

## 18532

1825                      1830                      1835                      1840  
 Pro His Tyr Val Tyr Ser Pro Arg Glu Leu Thr Arg Trp Val Arg Gly  
                                  1845                      1850                      1855  
 Val Tyr Glu Ala Ile Lys Pro Leu Glu Thr Leu Ser Val Glu Gly Leu  
                                  1860                      1865                      1870  
 Val Arg Ile Trp Ala His Glu Ala Leu Arg Leu Phe Gln Asp Arg Leu  
                                  1875                      1880                      1885  
 Val Pro Glu Glu Glu Arg Ser Trp Thr Ala Asp Ala Val Arg Arg Ile  
                                  1890                      1895                      1900  
 Ala Leu Asp Asn Phe Pro Thr Ile Asp Glu Glu Gln Ala Leu Lys Gly  
 1905                      1910                      1915                      1920  
 Pro Ile Leu Phe Ser Asn Trp Leu Ser Lys Asn Tyr Val Pro Val Glu  
                                  1925                      1930                      1935  
 Arg Glu Arg Leu Arg Asp Phe Val Lys Ala Arg Leu Lys Thr Phe Cys  
                                  1940                      1945                      1950  
 Glu Glu Glu Val Asp Val Pro Leu Val Leu Phe Asn Asp Val Leu Glu  
                                  1955                      1960                      1965  
 His Ala Leu Arg Ile Asp Arg Val Phe Arg Gln Pro Gln Gly His Leu  
                                  1970                      1975                      1980  
 Ile Leu Ile Gly Val Ser Gly Ser Gly Lys Thr Thr Leu Ser Arg Phe  
 1985                      1990                      1995                      2000  
 Val Ala Trp Met Asn Gly Leu Lys Val Phe Gln Ile Lys Val His Gly  
                                  2005                      2010                      2015  
 Lys Tyr Ser Ser Glu Asp Phe Asp Asp Asp Leu Arg Thr Val Leu Arg  
                                  2020                      2025                      2030  
 Arg Ala Gly Cys Lys Gly Glu Gln Ile Cys Phe Ile Met Asp Glu Ser  
                                  2035                      2040                      2045  
 Asn Val Leu Asp Ser Gly Phe Leu Glu Arg Met Asn Thr Leu Leu Ala  
                                  2050                      2055                      2060  
 Asn Ala Glu Val Pro Gly Leu Phe Glu Gly Asp Glu Phe Ser Ser Leu  
 2065                      2070                      2075                      2080  
 Met Thr Ala Cys Lys Glu Gly Ala Gln Arg Gln Gly Leu Leu Leu Asp  
                                  2085                      2090                      2095  
 Ser Gln Glu Glu Leu Tyr Lys Trp Phe Thr Gln Gln Ile Val Lys Asn  
                                  2100                      2105                      2110  
 Leu His Val Val Phe Thr Met Asn Pro Pro Glu Glu Gly Leu Ser Ser  
                                  2115                      2120                      2125  
 Lys Ala Ala Thr Ser Pro Ala Leu Phe Asn Arg Cys Val Leu Asn Trp  
                                  2130                      2135                      2140  
 Met Gly Asp Trp Ser Asp Gln Ala Leu Phe Gln Val Gly Ser Glu Leu  
 2145                      2150                      2155                      2160  
 Thr Gln Ser Leu Asp Leu Asp Lys Pro Asn Phe Val Ala Pro Asp Ser  
                                  2165                      2170                      2175  
 Ile Pro Val Ala Tyr Arg Asp Leu Ser Leu Pro Ala Ser His Arg Asp  
                                  2180                      2185                      2190  
 Ala Val Val Asn Ser Met Val Tyr Ile His Tyr Ser Leu Gln Arg Phe  
                                  2195                      2200                      2205  
 Asn Gln Arg Leu Gln Lys Gln Gln Gly Lys Thr Thr Phe Leu Thr Pro  
                                  2210                      2215                      2220  
 Arg His Tyr Leu Asp Phe Val Ala Gln Tyr Val Lys Leu Phe Asn Glu  
 2225                      2230                      2235                      2240  
 Lys Arg Glu Asp Leu Glu Glu Gln Gln Arg His Leu Asn Val Gly Leu  
                                  2245                      2250                      2255  
 Glu Lys Leu Arg Asp Thr Val Asp Lys Val Ser Asp Leu Arg Ala Ser  
                                  2260                      2265                      2270  
 Leu Ala Gln Lys Lys Met Gln Leu Glu Lys Lys Asp Ala Glu Ala Asn

## 18533

2275                      2280                      2285  
 Glu Lys Leu Gln Arg Met Val Ala Asp Gln Arg Glu Ala Glu Gln Arg  
 2290                      2295                      2300  
 Lys Ala Val Ser Leu Glu Val Gln Ala Ala Leu Gly Glu Thr Gly Glu  
 2305                      2310                      2315                      2320  
 Arg Ser Ser Ser Ala Gln Gly Ser Cys Ala Gln  
 2325                      2330

<210> 41762  
 <211> 349  
 <212> PRT  
 <213> A.fumigatus

<400> 41762  
 Arg Arg Arg Met Arg Lys Gln Thr Lys Ser Cys Asn Ala Trp Leu Pro  
 1                      5                      10                      15  
 Thr Lys Gly Arg Gln Ser Asn Glu Arg Leu Cys Leu Leu Arg Ser Arg  
 20                      25                      30  
 Gln Pro Trp Glu Lys Gln Glu Lys Glu Val Ala Leu Arg Lys Glu Val  
 35                      40                      45  
 Val Leu Asn Asp Leu Ala Arg Ala Glu Pro Ala Val Leu Glu Ala Gln  
 50                      55                      60  
 Lys Ser Val Gln Asn Ile Lys Arg Gln His Leu Thr Glu Val Arg Ser  
 65                      70                      75                      80  
 Met Gly Asn Pro Pro Ala Ser Val Arg Leu Ala Leu Glu Ala Val Cys  
 85                      90                      95  
 Thr Leu Leu Gly His Lys Val Asp Ser Trp Lys Thr Ile Gln Gly Ile  
 100                      105                      110  
 Val Arg Arg Asp Asp Phe Ile Ala Ser Ile Val Asn Tyr Asp Asn Glu  
 115                      120                      125  
 Lys Gln Met Thr Lys Asn His Arg Leu Lys Met Gln Asn Glu Phe Leu  
 130                      135                      140  
 Ser Lys Glu Asp Phe Thr Tyr Glu Arg Val Asn Arg Ala Ser Arg Ala  
 145                      150                      155                      160  
 Cys Gly Pro Leu Val Gln Trp Val Glu Ala Gln Val Asn Tyr Ser Glu  
 165                      170                      175  
 Ile Leu Asp Arg Val Gly Pro Leu Arg Glu Glu Val Gly Gln Leu Glu  
 180                      185                      190  
 Glu Gln Ala Leu Gln Thr Lys Ala Glu Ala Gln Ala Ile Glu Asn Thr  
 195                      200                      205  
 Val Gln Asn Leu Glu Arg Ser Ile Ala Thr Tyr Lys Ala Glu Tyr Ala  
 210                      215                      220  
 Ala Leu Ile Ser Glu Thr Gln Ala Ile Lys Ala Glu Met Ser Arg Val  
 225                      230                      235                      240  
 Gln Phe Lys Val Asp Arg Ser Val Arg Leu Leu Asp Ser Leu Ala Ser  
 245                      250                      255  
 Glu Arg Thr Arg Trp Glu Glu Gly Ser Lys Ser Phe Glu Thr Gln Ile  
 260                      265                      270  
 Ser Thr Leu Val Gly Asp Val Leu Ile Ala Ala Ala Phe Leu Ala Tyr  
 275                      280                      285  
 Ala Gly Leu Tyr Asp Gln Gln Phe Arg Lys Ala Met Ile Asp Asp Trp  
 290                      295                      300  
 Val Asn Gln Leu Ala Gln Ser Gly Ile Asn Phe Lys Pro His Asn Pro  
 305                      310                      315                      320  
 Ile Thr Glu Tyr Leu Ser Asn Ala Asp Glu Arg Leu Thr Trp Gln Val  
 325                      330                      335

## 18534

Phe Thr Thr Gly Trp Arg Ile Arg Pro Tyr Trp Arg Glu  
340 345

<210> 41763

<211> 212

<212> PRT

<213> A.fumigatus

<400> 41763

Met Glu Glu His Ala Gln Glu Pro Ser Arg Gln Asp Val Thr Gly Tyr  
1 5 10 15  
Ala Pro Ile His His Phe Gln Tyr Arg Ala Asn Arg Pro Gln Pro Tyr  
20 25 30  
Arg Glu Ser Gln Pro Asn Leu Gln Arg Leu Val Gln His Asp Gln Arg  
35 40 45  
Asp Gln Leu Tyr Lys His Arg Val Cys Leu His Arg Ser Ser Ser Ser  
50 55 60  
Leu Tyr Leu Thr Ile Leu Thr Leu Leu Tyr Ser Trp Gly Pro Thr Ile  
65 70 75 80  
Cys Gly Glu Trp Ser Gln Ala Asp Thr Asp Cys Ala Lys Tyr Leu Asn  
85 90 95  
Asn Val Gly Arg Gly Thr Arg Trp Glu Gly Thr Phe Ser Leu Thr Asp  
100 105 110  
Ser Thr Gln Tyr Cys Pro Thr Ala Asp Thr Gly Pro Pro Cys Ser Cys  
115 120 125  
Ala Asn Ala Asn Ala Asp Val Ser Lys Tyr Ser Ala Asp Tyr Lys Lys  
130 135 140  
Phe Leu Gln Thr Tyr Ala Glu Ala Gln Met Ser Ala Phe Glu Thr Gly  
145 150 155 160  
Gln Gly Trp Phe Tyr Trp Thr Trp Arg Thr Glu Ser Ala Ala Gln Trp  
165 170 175  
Ser Tyr Arg Thr Ala Trp Lys Asn Gly Phe Met Pro Ala Lys Ala Tyr  
180 185 190  
Ala Pro Ser Phe Arg Cys Gly Asp Ala Val Pro Asp Phe Gly Asp Leu  
195 200 205  
Leu Glu Tyr Tyr  
210

<210> 41764

<211> 68

<212> PRT

<213> A.fumigatus

<400> 41764

Cys Glu Lys Leu Phe Trp Leu Val Ala Lys Asp Phe Phe Gly Val Leu  
1 5 10 15  
Ala Arg Asn Leu Asp Asp Glu Ile Pro Phe Gly Phe Leu Gln His Tyr  
20 25 30  
Glu Cys Thr Lys Pro Met Asn Val Pro Glu Val Trp Phe Ile Leu His  
35 40 45  
Val Leu Tyr Pro Gly Cys Cys Phe Ser Leu Val Asp Pro Gly Pro Cys  
50 55 60  
Ser Gly Glu Val  
65

<210> 41765



<211> 304  
 <212> PRT  
 <213> A.fumigatus

<400> 41765

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Arg Pro Glu Gly Ala Ala Asp Glu Glu Leu Leu Gly Asn Glu Arg Asp
1          5          10          15
Pro Gly Pro Arg Ala Ser Arg Ser Tyr Gly Asp Asp Tyr Asp Ala Arg
          20          25          30
Arg Arg Glu His Ser Arg Ala Arg Glu Ala Pro Arg Arg Ser Glu Arg
          35          40          45
His Arg Asp Arg Asp Arg Glu Gly Arg Ser Arg Arg Arg Ala Tyr Glu
          50          55          60
Asp Asp Gly Arg His Arg Thr Arg Asp Gly Arg Arg Asp Arg Gly Arg
65          70          75          80
Glu Ser Asp Gly Glu Ala Arg Arg Ser Arg Pro Arg Glu Ala Gly Arg
          85          90          95
Glu Thr Ala Ala Arg Lys His Arg Ser Ser Asp Ser Thr Asn Ser Ala
          100          105          110
Ser His Leu Leu Ser Ala Asp Ala Leu Ala Lys Leu Gly Ala Gln Tyr
          115          120          125
Glu Lys Glu Glu Arg Arg Lys Arg Glu Ile Ala Lys Asp Ala Ala Lys
          130          135          140
Ala Glu Arg Lys Arg Gln Lys Lys Leu Ala Val Val Gly Glu Glu Thr
145          150          155          160
Arg Ala Leu Arg Asp Pro Pro Gly Glu Ser His Arg Asp Arg Thr Lys
          165          170          175
Ala Arg Val Ala Ser Gly Ala Tyr Leu Glu Glu Gly Arg Ser Pro Glu
          180          185          190
Met Arg Val Arg His Arg Gly Gly Gly Gly Pro Ala Met Glu Ala Arg
          195          200          205
Trp Arg Lys Glu Gly Ser Trp Gly Gly Thr Met Asp Asp Ser Gly Gly
          210          215          220
Gly Arg Pro Phe Trp Lys Arg Lys Arg Trp Ile Gly Leu Gly Ala Leu
225          230          235          240
Ile Ile Ile Leu Val Ile Val Ile Pro Val Ala Val Val Val Ser Lys
          245          250          255
Lys His Asp Asn Lys Ser Asp Pro Ala Asp Ser Gln Gly Thr Ser Pro
          260          265          270
Gly Lys Ser Asn Leu Asp Gly Leu Ser His Asp Ser Ile Pro Val Arg
          275          280          285
Leu Ile Ser Lys Arg Ile Tyr Thr Leu Gly Leu Ile Leu Met Leu Phe
290          295          300

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<210> 41766  
 <211> 352  
 <212> PRT  
 <213> A.fumigatus

<220>

<221> UNSURE

<222> (226)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41766

Ala Tyr Ala Gln Gly Thr Tyr Leu Asp Pro Trp Thr Trp Tyr Asp Thr

## 18536

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1           5           10           15
Thr Asp Phe Asn Val Thr Phe Thr Asn Glu Thr Val Gly Gly Leu Ser
      20           25           30
Ile Met Gly Leu Asn Ser Thr Trp Asp Asp Ser Ala Arg Pro Asn Asp
      35           40           45
Asn Val Pro Pro Leu Asn Glu Pro Phe Pro Tyr Gly Ser Gln Pro Ile
      50           55           60
Arg Gly Val Asn Leu Gly Gly Trp Leu Ser Ile Glu Pro Phe Ile Val
65           70           75           80
Pro Ser Leu Phe Asp Ser Tyr Ser Ser Val Ser Gly Ile Ile Asp Glu
      85           90           95
Trp Thr Leu Ser Lys Arg Leu Gly Ser Ser Ala Ala Ser Thr Leu Glu
      100          105          110
Lys His Tyr Ala Thr Phe Ile Thr Glu Gln Asp Phe Ala Asp Ile Arg
      115          120          125
Asp Ala Gly Leu Asp His Val Arg Ile Gln Tyr Ser Tyr Trp Ala Val
      130          135          140
Ala Thr Tyr Asp Asp Asp Pro Tyr Val Ala Lys Ile Ser Trp Arg Tyr
145          150          155          160
Leu Leu Arg Ala Ile Glu Tyr Cys Arg Lys Tyr Gly Leu Arg Val Asn
      165          170          175
Leu Asp Pro His Gly Ile Pro Gly Ser Gln Asn Gly Trp Asn His Ser
      180          185          190
Gly Arg Glu Gly Val Ile Gly Trp Leu Asn Gly Thr Asp Gly Glu Leu
      195          200          205
Asn Arg Asn Arg Ser Leu Ala Val His Asp Ser Val Ser Lys Phe Phe
      210          215          220
Ala Xaa Asp Arg Tyr Lys Asn Ile Val Thr Ile Tyr Gly Leu Val Asn
225          230          235          240
Glu Pro Leu Met Leu Ser Leu Ser Ile Glu Asp Val Leu Asp Trp Thr
      245          250          255
Thr Glu Ala Thr Lys Leu Val Gln Lys Asn Gly Ile Thr Ala Tyr Val
      260          265          270
Ala Leu His Asp Gly Phe Leu Asn Leu Ser Lys Trp Lys Ser Met Leu
      275          280          285
Lys Asn Arg Pro Asp Lys Met Leu Leu Asp Thr His Gln Tyr Thr Ile
      290          295          300
Phe Asn Thr Gly Gln Ile Gly Leu Asn His Thr Ala Lys Val Asn Leu
305          310          315          320
Ile Cys Asn Asp Trp Tyr Asn Met Ile Lys Glu Ile Asn Ser Thr Ser
      325          330          335
Thr Gly Phe Val Phe Ile Val Leu Pro His Leu Phe Ile Ser Pro Tyr
      340          345          350

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&lt;210&gt; 41767

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41767

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Pro Phe Ser Ile Ala Gly Ala Gln Arg Ser Ala Ala Asn Gly Pro Lys
1           5           10           15
Pro Ile Gln Thr Ala Pro Asn Thr Ser Thr Thr Ser Val Ala Ala Pro
      20           25           30
Val Gly Lys Glu Pro Ser Pro Ser Gln Thr Gln Pro Asn Thr Val Gln
      35           40           45

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## 18537

Pro Pro Thr Leu Gly Leu Leu Ala Ala Ala Pro Thr Pro Thr Gln Met  
 50 55 60  
 Ser Ala Ser Thr Gln Pro Thr Thr Arg Ser Ser Cys Arg His Thr Gln  
 65 70 75 80  
 Arg Arg Arg Cys Leu Arg Ser Arg Pro Asp Arg Val Gly Ser Thr Gly  
 85 90 95  
 Pro Gly Ala Gln Ser Leu Arg His Ser Gly Ala Thr Gly Pro Leu Gly  
 100 105 110  
 Arg Met Ala Ser Cys Gln Pro Arg His Met Arg His His Ser Gly Ala  
 115 120 125  
 Glu Met Gln Cys Leu Ile Ser Glu Thr Cys Trp Ser Thr Ile Asp Leu  
 130 135 140  
 Pro Met Ser Glu Arg Leu Val Leu Arg Leu Trp Phe Ala Phe Ser Leu  
 145 150 155 160  
 Pro Trp Val Lys Ser Pro Ala Ser Cys Arg Arg Cys Thr Ser Tyr Ser  
 165 170 175

&lt;210&gt; 41768

&lt;211&gt; 1171

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41768

Thr Leu Lys Trp Asn Gln Pro Leu Arg Leu His Ser Asp Lys Met Arg  
 1 5 10 15  
 Ser Asn Arg Ile Leu Arg Ser Arg Lys Pro Arg Ala Pro Arg Asn Thr  
 20 25 30  
 Pro Asp Glu His Gly Ser Asn Pro Glu Pro Leu Arg Val Leu Asn Phe  
 35 40 45  
 Ala Asn Asp Asp Glu Pro Ser Pro Ser Ala Pro Gly Ile Phe Val Leu  
 50 55 60  
 Lys Leu Pro Asn Leu Ser Pro Glu Ser Thr Glu Arg Ile Phe Pro Ile  
 65 70 75 80  
 Ser Ser Val Val Ser Val Asp Ser Ser Thr Pro Pro Thr Pro Ala Val  
 85 90 95  
 Glu Asn Pro Glu Glu Gln Asn Ser Pro Trp Ala Glu Ser Leu Arg Ser  
 100 105 110  
 Glu Ile Thr Gly Gly Lys Gln Ser Pro Gly Gln Ser Ala Thr Pro Ser  
 115 120 125  
 Pro Asp Asp Arg Lys Asp Ala Pro Ser Ile Gln Ser Thr Val Glu Ala  
 130 135 140  
 Tyr Gly Ser Ser Leu Asn Val Ile Thr Ala Ser Arg Lys Arg Asn Pro  
 145 150 155 160  
 Leu Lys Ile Gly Leu Ala Arg Gly Ile Ser Asp Ile Ser Phe Gly Asp  
 165 170 175  
 Ala Asn Ala Ser Ser Gln Gly Thr Ser Gly Leu Pro Ser Ser Ala Glu  
 180 185 190  
 Ala Pro Asp Ser Tyr Phe Ala Gly Ala Gly Ser Trp Ile Asp Gln Ala  
 195 200 205  
 Glu Thr Ala Ala Trp Val Gln Asn Met Lys Asn Glu Pro Asn Phe Arg  
 210 215 220  
 His Ile His Gly Leu Gly Ala Leu Ile Val Leu Gln Glu Ser Lys Gly  
 225 230 235 240  
 Asn Leu Ile Val Gln Ile Ala Ser Lys Asn Thr Glu Glu Val Leu Gly  
 245 250 255  
 Tyr Lys Pro Glu Gln Leu Phe Ala Leu Pro Thr Phe Cys Asp Ile Val

										260					265					270					
Gln	Asn	Asp	Gln	Lys	Glu	Asn	Phe	Leu	Gly	Arg	Phe	Asn	Leu	Val	Arg										
										275					280					285					
Gly	Lys	Trp	Tyr	Asp	Val	Glu	Gln	His	Gly	Pro	Asp	Ile	His	Glu	Val										
										290					295					300					
Asp	Val	Arg	Gln	Ser	Cys	Gly	Ala	Thr	Arg	Arg	Leu	Trp	Cys	Thr	Ile										
305											310					315					320				
His	Ala	Thr	Lys	Ala	Asn	Thr	Asp	His	Ile	Val	Cys	Glu	Phe	Glu	Leu										
										325					330					335					
Lys	Gly	Ala	Val	Leu	Glu	Ser	Trp	Arg	Asn	Ser	Arg	Pro	Ser	Lys	Ser										
										340					345					350					
Val	Tyr	Ala	Val	Tyr	Asp	Asn	Thr	Ser	Ser	Asp	Gly	Arg	Ser	Asp	Glu										
										355					360					365					
Lys	Asn	Ser	Thr	Pro	Ser	Met	Pro	Pro	Glu	Met	Gln	Asn	Met	Leu	Arg										
										370					375					380					
Gly	Ile	Arg	Gly	Lys	Ile	Arg	Ser	Ser	Asp	Met	Leu	Cys	Ala	Leu	Ser										
385											390					395					400				
Leu	Ile	Ile	Gln	Leu	Ala	Ala	Ser	Ala	Ser	Ser	Leu	Ser	Met	Leu	Phe										
										405					410					415					
Asn	Tyr	Phe	Thr	Gly	Ile	Ile	Arg	Glu	Leu	Thr	Gly	Phe	Ser	Arg	Val										
										420					425					430					
Thr	Val	Phe	Tyr	Phe	Asp	Arg	Asp	Gly	Asn	Ala	Ile	Pro	Met	Asn	Asp										
										435					440					445					
Ala	Val	Asp	Ser	His	Ile	Ile	Ala	Asn	Phe	Pro	Glu	Asp	Leu	His	Tyr										
										450					455					460					
Pro	Lys	Pro	Leu	Ser	Pro	Arg	Asp	Leu	Glu	Arg	Phe	His	Leu	Gly	Ser										
465											470					475					480				
Lys	Val	Cys	Leu	Glu	Tyr	Ser	His	Arg	Gln	Phe	His	Thr	Glu	Leu	Val										
										485					490					495					
Tyr	Arg	Asp	Ser	Glu	Asn	Leu	Pro	Ser	Glu	Phe	Asp	Leu	Asp	His	Ser										
										500					505					510					
Tyr	Met	Leu	Ala	Arg	Ser	Pro	Tyr	Ile	Leu	Asp	Pro	Val	Thr	Gly	Met										
										515					520					525					
Pro	Val	Phe	Ala	Cys	Met	Ser	Ile	Asn	Ile	Asn	Ala	Leu	Gly	Arg	Ala										
										530					535					540					
Trp	Gly	Leu	Ile	Met	Cys	Gln	Ser	Tyr	Glu	Glu	Glu	Met	Arg	Leu	Pro										
545											550					555					560				
Pro	Pro	Val	Gln	Lys	Phe	Phe	Trp	Leu	Val	Ser	Asp	Thr	Leu	Ser	Ser										
										565					570					575					
Asn	Ile	Glu	Arg	Leu	Ser	Asn	Thr	Met	Thr	Ala	Gln	Met	Gln	Gly	Pro										
										580					585					590					
Phe	Thr	Ser	Ser	His	Asp	Gly	Asp	Glu	Lys	Gly	Asp	Ser	Phe	Gln	Val										
										595					600					605					
Lys	Asp	Leu	Leu	Thr	Leu	Phe	Lys	Ala	Asp	Tyr	Ala	Ala	Ser	Leu	Met										
										610					615					620					
Leu	Gly	Glu	Thr	Arg	Ile	Leu	Gly	Lys	Pro	His	Asp	Ala	Gln	Glu	Val										
625											630					635					640				
Leu	Ala	Leu	Val	Glu	Tyr	Leu	Lys	Leu	Lys	Glu	Leu	Ser	Ala	Val	Leu										
										645					650					655					
Cys	Ser	Thr	Asp	Ile	Thr	Arg	Asp	Phe	Pro	Asp	Leu	Asn	Tyr	Thr	Pro										
										660					665					670					
Gly	Phe	Lys	Tyr	Leu	Ser	Asn	Leu	Leu	Tyr	Val	Pro	Leu	Ser	Thr	Asp										
										675					680					685					
Gly	Arg	Glu	Phe	Ile	Val	Phe	Phe	Lys	Glu	Ser	Gln	Arg	Gly	Asp	Thr										
										690					695					700					
Phe	His	Ala	Gly	Thr	Asp	Asp	Asn	Ala	Arg	Cys	Leu	Asn	Gln	Gly	Arg										

## 18539

705                      710                      715                      720  
 Pro Thr Glu Leu Gly Ser Glu Ala Lys Leu Val Asp Arg Glu Thr Ala  
                          725                      730                      735  
 Ile Trp Asn Ala Gly Asp Leu Gln Lys Gly Pro Phe Leu Ser Leu Ile  
                          740                      745                      750  
 Tyr Arg Ala Met Leu Lys Glu Val Trp Gln Gln Lys Glu Thr Thr Met  
                          755                      760                      765  
 Gln Ser Thr Gln Leu Met Arg Leu Leu Leu Ala Asn Cys Ala His Glu  
                          770                      775                      780  
 Phe Arg Thr Pro Leu Asn Ala Ile Ile Asn Tyr Leu Glu Ile Ala Leu  
 785                      790                      795                      800  
 Asp Gly Asp Leu Thr Gln Glu Thr Arg Glu Ser Leu Ser Arg Ser His  
                          805                      810                      815  
 Ser Ala Ser Lys Ser Leu Ile Tyr Ile Ile Asn Asp Leu Leu Asp Leu  
                          820                      825                      830  
 Thr Asn Ala Glu Asn Gly Ile Ser Leu Ile Lys Asp Glu Asn Phe Asp  
                          835                      840                      845  
 Leu Val Glu Thr Ile His Glu Ala Ser Arg Ile Phe Asn Glu Glu Ala  
                          850                      855                      860  
 Arg Gln Lys Gly Val Glu Leu His Val Val Arg Tyr Thr Gly Ile Pro  
 865                      870                      875                      880  
 Pro Val Leu Gly Asp Gln Arg Arg Val Arg Gln Val Ile Thr Asn Leu  
                          885                      890                      895  
 Ile Ser Asn Ala Val Gln His Thr Thr Ser Ser Gly Thr Val Thr Val  
                          900                      905                      910  
 Glu Ser Cys Leu Leu Pro Asp Tyr Thr Glu Thr Gly Lys Val Gly Ile  
                          915                      920                      925  
 Glu Val Ala Ile His Asp Thr Gly Thr Gly Met Ser Gln Asn Asp Ile  
                          930                      935                      940  
 Glu Ala Leu Phe Cys Glu Leu Glu Gln Val Ser Asn Lys Asp Tyr Ile  
 945                      950                      955                      960  
 Arg Ser Arg Gly Pro Gln Arg Cys Asp Asn Val Ile Thr Ser Asp Gly  
                          965                      970                      975  
 Ser Gly Ser Gly Asn Ile Leu Gly Leu Gly Leu Ala Leu Val Ala Arg  
                          980                      985                      990  
 Ile Val Arg Asn Met Asn Gly Gln Leu Ser Val Lys Ser Glu Glu Gly  
                          995                      1000                      1005  
 His Gly Ser Cys Phe Arg Ile Lys Met Gln Phe Pro Leu Pro Phe Asp  
                          1010                      1015                      1020  
 Glu Ala Asn Asp Glu Asn Leu Asp Ser Asn Arg Ala Leu Pro Val Gly  
 1025                      1030                      1035                      1040  
 Lys Gly Lys Gly Arg Glu Ser Glu Pro Glu Asp Asp Arg Asn Val Pro  
                          1045                      1050                      1055  
 Pro Lys Pro Asp Glu Thr Gln Cys Ser Glu Asp Asp Gly Ala Trp Ala  
                          1060                      1065                      1070  
 Gly Lys Asn Pro Ala Phe Ser Asp Ser Ala Gly Ser Thr Lys Asn Asp  
                          1075                      1080                      1085  
 Ser His Thr Ser Asp Asp Thr Val Thr Ala Asp Val Ala Gln His Asp  
                          1090                      1095                      1100  
 Ser Ala Ser Lys Gln Glu Ser Thr Leu Arg Pro Asp Ile Arg Asn  
 1105                      1110                      1115                      1120  
 Lys Pro Pro Ser Thr Glu Glu Val Arg Gln Ala His Gln Ala His Ser  
                          1125                      1130                      1135  
 Arg Pro Ala Glu Gln Cys Tyr Gln Ser Ser Ile Arg Ser Thr Asp Lys  
                          1140                      1145                      1150  
 Ala Asn Arg Gly Ser Asn Val Gly Val Leu Arg Glu Asp Gly Arg Thr

## 18540

1155 1160 1165  
 Glu Ser Asn  
 1170

<210> 41769  
 <211> 145  
 <212> PRT  
 <213> A.fumigatus

<400> 41769  
 Gly Thr Asn Pro Arg Leu Pro Arg Arg Ser Gly Lys Leu Ile Lys Arg  
 1 5 10 15  
 Ile Leu Gly Pro Arg Ser Asn Ala Thr Arg Val Leu Ser Asp Gln Pro  
 20 25 30  
 Thr Lys Pro Ile Gly Glu Ala Thr Ser Glu Ser Ser Glu Arg Thr Ala  
 35 40 45  
 Glu Gln Ser Gln Ile Lys Ala Lys Thr Gln Ser Asp Ile Pro Pro Lys  
 50 55 60  
 Glu Gly Ala Thr Thr Ala Ser Glu Gly Ser Ser Lys Lys Asn Leu His  
 65 70 75 80  
 Ile Leu Val Ala Glu Asp Asp Pro Thr Asn Ser Ala Ile Leu Arg Lys  
 85 90 95  
 Arg Leu Glu Lys Ser Ala His Thr Val His Ile Thr Glu Asn Gly Lys  
 100 105 110  
 Glu Cys Ala Ser Ala Phe Arg Asp Asn Ala His Ser Phe Asp Ala Val  
 115 120 125  
 Leu Met Asp Ile Gln Val Ser His Arg Thr Pro Val Gly Ser Asp Gln  
 130 135 140  
 Ser  
 145

<210> 41770  
 <211> 110  
 <212> PRT  
 <213> A.fumigatus

<400> 41770  
 Thr Asp Leu Gln Gln Met Pro Ile Val Asp Gly Met Gly Ser Thr Lys  
 1 5 10 15  
 Met Ile Arg Glu Tyr Glu Ala Leu Thr Ala Ser Pro Thr Ser Val Ser  
 20 25 30  
 Ala Thr Cys Arg Arg Gln Arg Ile Pro Ile Phe Ala Val Ser Ala Ser  
 35 40 45  
 Leu Val Glu Lys Asp Arg Gln Thr Tyr Ile Asp Ala Gly Phe Asp Gly  
 50 55 60  
 Trp Ile Met Lys Pro Ile Asp Phe Lys Arg Val Ala His Leu Leu Asp  
 65 70 75 80  
 Gly Val Tyr Lys Glu Asp Val Arg Glu Asp Ser Leu Tyr Lys Pro Gly  
 85 90 95  
 Met Trp Glu Lys Gly Gly Trp Phe Asp Lys Gly Gly Glu Ser  
 100 105 110

<210> 41771  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41771

Ile Ala Phe Ala Cys Thr Gly Ala Trp Pro Gln Arg Ala Ser Asp Tyr  
 1 5 10 15  
 Gln Ile Tyr Ala Leu Phe Cys Leu Phe Leu Phe Ser Leu Ile Leu Phe  
 20 25 30  
 Leu Arg Phe Leu Pro Phe Leu Pro Ser Phe Pro Leu Pro Ile Thr Thr  
 35 40 45  
 Val Ala Ser Thr Leu Asp Val Ser Gln Ser Phe Arg His Pro Thr  
 50 55 60

&lt;210&gt; 41772

&lt;211&gt; 737

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41772

His Ile Asn Ile Leu Ala Ser Asp His Ile Ser His Gly Met Phe Arg  
 1 5 10 15  
 Leu Leu Pro Trp Ser Ser Ala Leu Gly Gly Asn Lys Val Met Ala Glu  
 20 25 30  
 Glu Leu Lys Met Leu Ala Ile Ser Pro His Cys Ala Ser Pro Gly Leu  
 35 40 45  
 Asn Ser Ile Gly Leu Pro Gln Leu Lys Arg Lys Arg Ser Asp Ser Ser  
 50 55 60  
 Asp Ala Ala Ala Val Glu Asp Ala Pro Val Ala Thr Lys Leu Arg Ser  
 65 70 75 80  
 Asp Asp Ala Ser Ser Asn Ser Leu Ser Gly Lys Lys Thr Leu Ser Ser  
 85 90 95  
 Thr Val Asn Gly Glu Pro Val Ala Ser Arg Met Ser Ala Ser Leu Gly  
 100 105 110  
 Glu Ser Ser Ser Asn Ser Ala Ile Ser Lys Ser Ser Lys Ser Pro Arg  
 115 120 125  
 Arg Arg Gln Ser Ser Ser Ser Ser Gly Ser Ile Val Ala Asp Lys Arg  
 130 135 140  
 Ala Ala Pro His Lys Ile Asp Val Asp Thr Leu Arg Glu Thr Leu Glu  
 145 150 155 160  
 Ala Gln Leu Ser Leu Glu Val Leu Leu Lys His Asn Glu Leu Arg Leu  
 165 170 175  
 Ile Asp Gln Glu Ile Ala Lys Cys Gln Ile Ala Leu Glu Gln Leu Arg  
 180 185 190  
 Arg Cys Ala Glu Ile Pro Tyr Pro Gly Ser His Val Ala Gly Val Ser  
 195 200 205  
 Gln Ala Val Ser Asn Gly Thr Gly Met Ala Val Arg Ala Pro Gly Asn  
 210 215 220  
 Gly Val Ala Pro Ile Ser Pro Ala Pro Trp Gly Val Thr Asp Gly Pro  
 225 230 235 240  
 Tyr Thr Arg His Tyr Ala Arg Trp Leu Ile Pro Asp Pro Arg Phe Asp  
 245 250 255  
 Gly Gly Glu Phe Asp Ser Gly Asn Pro Leu Thr Pro Gly Ala Leu Gly  
 260 265 270  
 Thr Pro Leu Val Glu Gly Arg Ser Thr Arg Gly Asn Pro Ile Asp Gly  
 275 280 285  
 Gly Tyr Leu Ala Ser Lys Thr Arg Pro Gln Arg Gly Thr Ala Gly Ala  
 290 295 300  
 Lys Leu Gln Ser Leu Pro Ser Gly Tyr Pro Thr Pro Lys Glu Lys Ala

## 18542

305 310 315 320  
 Gly Pro Met Ile Ile Arg Arg Lys Ser Asp Gly Val Leu Val Lys Leu  
 325 330 335  
 Ile Cys Leu Asp Cys Arg Arg Asp Asn Phe Ser Ser Thr Gln Gly Phe  
 340 345 350  
 Ile Asn His Cys Arg Ile Ala His Asn Arg Asn Phe Ala Ser His Asp  
 355 360 365  
 Ala Ala Ala Met Ala Ser Gly Glu Pro Val Glu Val Asp Glu Ala Gly  
 370 375 380  
 Ala Val Val Pro Gly Lys Asn Glu Thr Pro Ser Ala Thr Ala Ala Gly  
 385 390 395 400  
 Phe Val His Pro Leu Ile Arg Ser Ala His Val Ile Glu Pro Ser Thr  
 405 410 415  
 Lys Thr Pro Ser Leu Val Pro Glu Gly Thr Gly Asp Thr Thr Thr Pro  
 420 425 430  
 Arg Arg His Thr Val Ala Ser Arg Glu Ala Ser Ser Ala Val Glu Thr  
 435 440 445  
 Pro Ala Met His Phe Gln Ala Gly Lys Arg Thr Thr Ser Val Gly Gly  
 450 455 460  
 Lys Ala Ser His Arg Asn Ser Phe Thr Gly Ser Ser Asp Thr Pro His  
 465 470 475 480  
 Leu Ser Ser Leu Met Gln Arg Arg Gly Val Gly Val Asp Leu Asp Lys  
 485 490 495  
 Leu Val Gly Glu Ala Lys Thr Thr Met Asp Leu Glu Ala Tyr Ser Ser  
 500 505 510  
 Asp Ala Glu Ser Glu Asp Asp Pro Ala Glu Thr Ser Val Asp Ala Ala  
 515 520 525  
 Thr Gln Ala Gln Lys Pro Leu Gly Asn Arg Ala Val Arg Gln Ser Met  
 530 535 540  
 Arg Thr Thr Gly Ser Lys Ile Ala Ser Gln Arg Pro Gly Ser Gly Lys  
 545 550 555 560  
 Gly Phe Asp Asn Lys Asn His His Ser Pro Ser Pro Asn Gly Tyr Phe  
 565 570 575  
 Gln Ser Ser Tyr Gly Pro Ala Ser Ser Val Ser Arg Ser Thr Ala Met  
 580 585 590  
 Glu Asp Leu Arg Glu Glu Leu Ser Pro Thr Thr Leu Glu Ser Asn Gln  
 595 600 605  
 Ala Pro Ser Leu Val Ser Asp Asp Asp Asp Tyr Gly Ala Ala Ser Glu  
 610 615 620  
 Pro Asp Ser Pro Glu Pro Ser Ser Ser Glu Ala Gly Asp Arg Asp Glu  
 625 630 635 640  
 Glu Phe Ser His Ile Asp Val Glu Asp Asp Glu Asp Ala Ala Ala Ser  
 645 650 655  
 Pro Ala Thr Thr Gly Ser Lys Ser Asp Pro Asp Met Ala Ser Gly Ala  
 660 665 670  
 Ala His Pro Ser Lys Ser Leu Ser Arg Ser Leu Arg Arg Ser Ser Thr  
 675 680 685  
 Lys Lys Lys Asp Arg Val Ile Ser Ala Ser Ile Ala Pro Val Lys Arg  
 690 695 700  
 Ser Lys Asp Glu Lys Arg Val Ser Phe Val Ser Pro Asn Ser Lys Ser  
 705 710 715 720  
 Ala Lys Gly Lys Arg Asn Ala Ser Lys Lys Ser Ser Gly Gly Arg Lys  
 725 730 735  
 Gln



18543

<210> 41773  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 41773  
 Arg Ser Gln Asn Ala Ile Asp Val Gln Ile Gln Glu Ile Ile Pro Ile  
 1 5 10 15  
 Ile Pro Leu Ile Arg Asn Ile Arg Pro Pro Ile Ser Thr Ile His Phe  
 20 25 30  
 Tyr Pro Phe Thr Leu Phe Pro Leu Ile Tyr Leu Asn Cys Val Arg Leu  
 35 40 45  
 His Arg Cys Met Ala Ser Thr Arg Ile Arg Leu Pro Asn Leu Arg Ser  
 50 55 60  
 Val Leu Ser Ile Leu Val  
 65 70

<210> 41774  
 <211> 121  
 <212> PRT  
 <213> A.fumigatus

<400> 41774  
 Cys Ser Glu Thr Val Trp Leu Lys Tyr Ile Ser Val Asp Pro Thr Thr  
 1 5 10 15  
 Pro Gly Tyr Leu Leu Asp Asp Asp Asp Asp Asn Asn Ser Met Ala Leu  
 20 25 30  
 Ser Glu Arg Lys Asp Ser Pro Ser Asp Pro Gly Ile Glu Pro Arg Gly  
 35 40 45  
 Gln Leu Glu Gly Leu Ser Lys Phe Ser Pro Ser His Ile Thr Ile Asp  
 50 55 60  
 Met Phe Asn Asn Leu Leu Ala Arg Tyr Pro Asn Thr Val Lys Thr Val  
 65 70 75 80  
 Ile Arg Arg Lys Glu Thr Ala Arg Ala Thr Lys Ala Ala Thr Ala Arg  
 85 90 95  
 Glu Glu Glu Asn Lys Arg Lys Gly Glu Glu Thr Arg Gly Arg Phe Cys  
 100 105 110  
 Tyr Leu Glu Ala Tyr Ile Asp Thr Arg  
 115 120

<210> 41775  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

<400> 41775  
 Arg Lys Arg Cys Tyr Asn Asn Cys Pro Gly His Pro Asp Ser Phe Gly  
 1 5 10 15  
 Ala Glu Gln Ser Lys Thr Ser Tyr Cys Asn Ala Ala Gln Ala Tyr Ser  
 20 25 30  
 Pro Ser Ser Thr Ser Thr Thr Gly Thr Ala Thr Arg Ala Ser Ser Ala  
 35 40 45  
 Thr Gln Thr Thr Glu Thr Ala Ala Thr Thr Thr Thr Thr Ser Ser Gly  
 50 55 60  
 Phe Ser Pro Thr Pro Ser Gly Ala Ala Ala Gly Leu Ala Val Glu Gly  
 65 70 75 80

18544

Gly Ser Val Leu Ala Ala Ile Leu Ala Gly Phe Val Ala Leu  
85 90

<210> 41776  
<211> 99  
<212> PRT  
<213> A.fumigatus

<400> 41776  
Pro Gly Val Val Gly Ser Thr Glu Ile Tyr Phe Asn His Thr Val Ser  
1 5 10 15  
Glu His His Asp Met Ser Ser Thr Gln Ser Val Lys Ser Asp Ser Ile  
20 25 30  
Ala Val Leu Ile Leu Gln Leu Ile Thr Arg Leu Ala Leu Asn Phe Ala  
35 40 45  
Met Ala Gly Leu Ile Tyr Ala Val Met Thr Arg Ala Asn Cys Leu Arg  
50 55 60  
Leu Leu Ile Gln Ala Pro Ser Ala Lys Ala Tyr Tyr Asn Arg Ile Asn  
65 70 75 80  
Thr Pro Glu Arg Leu Arg Glu Thr Leu Asn His Arg His Met Trp Arg  
85 90 95  
His Asp Cys

<210> 41777  
<211> 81  
<212> PRT  
<213> A.fumigatus

<400> 41777  
Ser Leu His Ser Cys Pro His Asn Val Ile Ser Asp Gly Glu Ser Ala  
1 5 10 15  
Asp Leu Ser Thr Thr Tyr Thr Asp Arg Ser Ser Ala Thr Tyr Leu Glu  
20 25 30  
Pro Ala Pro Thr Trp Leu Asp Cys Ile His Lys Phe Ile Tyr Leu Phe  
35 40 45  
Ser Leu Val Lys Phe Ala Ser Ser Gln Ser Asn Gln Tyr His Leu Val  
50 55 60  
Lys Cys Val His Gly Val Cys Ser Pro Asp Trp Pro Pro Thr Arg Gln  
65 70 75 80  
Glu

<210> 41778  
<211> 301  
<212> PRT  
<213> A.fumigatus

<400> 41778  
Arg Lys Asn Leu Pro Asp Pro Glu Ala Asp Val Lys Ala Leu Phe Met  
1 5 10 15  
Glu Thr Lys Arg Cys Val Leu Tyr Ile Ile Arg Val Gln Thr Gly Ala  
20 25 30  
Asn Leu Met Glu Ile Met Val Lys Pro Pro Thr Lys Glu Asp Glu Glu  
35 40 45  
Arg Trp Met Thr Leu Val Arg Asp Glu Leu Thr Thr Asn Thr Ser Gln

## 18545

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      50              55              60
Arg Ser Ala Tyr Ser Glu Ala Ser Thr Leu Val Asp Ile Ala Ser Met
65              70              75              80
Thr Tyr Ser Glu Leu Lys Arg Thr Ala Leu Glu Asn Ile Leu Gln Leu
      85              90              95
Glu Arg Thr Gly Lys Ile Arg Arg Asp Asn His Tyr Gln Asp Leu Leu
      100              105              110
Asn Ala Ile Ala Ile Asp Ile Arg Thr Lys His Arg Arg Arg Ile Gln
      115              120              125
Arg Gln Arg Glu Leu Glu Ser Ala Arg Leu Thr Leu Gly Arg Leu Asn
      130              135              140
Asp Gln Ala Ala Trp Leu Glu Gln Gln Leu Lys Thr Tyr Asn Asp Tyr
145              150              155              160
Ile Glu Gln Ala Met Val Thr Leu Gln Asn Lys Lys Gly Lys Lys Arg
      165              170              175
Phe Leu Met Pro Phe Thr Lys Gln Trp Asp His Gln Arg Glu Leu Gln
      180              185              190
Lys Ser Gly Lys Val Phe Lys Phe Gly Ser Tyr Lys Tyr Ser Ala Arg
      195              200              205
Asn Leu Ala Asp Lys Gly Val Leu Val Tyr Trp Lys Gly Tyr Ser Glu
      210              215              220
Arg Gln Trp Asp Arg Val Asp Leu Thr Ile Ser Ser Asn Glu Val Gly
225              230              235              240
Val Phe Thr Leu Asp Gly Ser Ser Gly Pro Met Met Val Pro Gly Ala
      245              250              255
Asn Ala Gln Val Pro Leu Asp Asp Leu Leu Gln Ala Gln Phe Asn Asn
      260              265              270
Met Gln Phe Met Asp Phe Phe Asp Gly His Leu Arg Val Asn Val Asn
      275              280              285
Leu Phe Leu His Leu Ile Met Arg Lys Phe Tyr Asn Glu
      290              295              300

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<210> 41779  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

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<400> 41779
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Gly Leu Gly Ser Met Leu Thr Ser Val Ala Asn Ser Gln Leu Leu Asn
      20              25              30
Glu Ile Met Pro Met Ile Tyr Lys Arg Phe Thr Asp Lys Ser Ala Glu
      35              40              45
Glu Trp Arg Gln Ile Tyr Lys Val Arg Leu Arg Gly Leu Ala Ser Thr
      50              55              60
Arg Asp Arg Leu Asp
65

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<210> 41780  
 <211> 1398  
 <212> PRT  
 <213> A.fumigatus

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<400> 41780
Ser Ser Lys Phe Pro Ile Ser Leu Asp Leu Cys Ile Leu Ala His Thr

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Thr	Ser	Ser	Val	Met	Ala	Ser	Gln	Pro	Ile	Ser	Pro	Arg	Arg	Thr	Gln
		20						25					30		
Thr	Asp	His	Pro	Gln	His	Thr	Ser	Ser	Pro	Leu	Arg	His	Gly	Ser	Thr
	35						40					45			
Ala	Ser	Thr	Ser	Ser	Ser	Ile	Tyr	Ser	Leu	Ser	Ser	Asn	Ser	Gln	Ala
	50					55					60				
Pro	Ser	Arg	Thr	Ser	Thr	Ile	Ser	Ser	Asn	Ala	Ser	Met	Gly	Ser	Ala
65					70					75					80
Pro	Arg	Ile	Gly	His	Arg	Arg	Gly	Lys	Ser	Glu	Leu	Asn	Ser	Ile	Thr
				85					90					95	
Leu	Gly	Ala	Met	Ala	Lys	Asp	Thr	Ser	Gly	Gly	Glu	Ser	Trp	Thr	Ser
		100						105					110		
Ala	Ala	Thr	Thr	Tyr	Glu	Asn	Val	Arg	Arg	Ser	Leu	Arg	Pro	Leu	Pro
	115							120				125			
Gln	Ala	Pro	Asn	Ala	Asp	Pro	Pro	Thr	Ser	Lys	Thr	Ser	Ile	Tyr	Arg
	130					135					140				
His	Thr	Arg	Ser	Gln	Thr	Val	Asp	Asn	Pro	His	Tyr	Trp	Lys	Glu	Asn
145					150					155					160
Arg	Pro	Gly	Thr	Pro	Asp	Ser	Arg	His	Pro	His	Ser	Leu	Glu	Thr	Gly
				165					170					175	
Gly	Leu	Ser	Glu	Arg	Gln	Ser	Leu	Asn	Ser	Gln	Thr	Pro	Pro	Lys	Lys
			180					185					190		
Asn	Ser	Ile	Gln	Pro	Gly	Ser	Leu	His	Ala	Val	Ser	Pro	His	Ser	Arg
	195						200					205			
Pro	His	Ile	Arg	Pro	His	His	Ser	His	Ser	Leu	Ser	Ser	Pro	Leu	Pro
	210					215						220			
Pro	Pro	Leu	Thr	Thr	Thr	Leu	Ser	Thr	Pro	Glu	Leu	Glu	Thr	Phe	Lys
225					230					235					240
Lys	Ser	Ser	Thr	Gly	His	Leu	Arg	Thr	Leu	Ser	Lys	Phe	Ala	Lys	Ser
			245						250					255	
Gly	Glu	Thr	Glu	Glu	Phe	Ala	Leu	Glu	Ala	Tyr	Ser	Pro	Ser	Val	Val
		260						265					270		
Gly	Leu	Gln	Gly	Arg	Arg	Arg	Leu	Lys	Arg	Ala	Gly	Ser	Val	Ala	Gly
	275						280					285			
Ala	Gln	Gly	Ser	Arg	Val	Ala	Arg	Lys	Gln	Asn	Ala	Ser	Ala	Trp	Ala
	290					295					300				
Ala	Gly	Asn	Trp	Met	Asp	Lys	Gln	Arg	Gln	Phe	Leu	Gln	Ala	Tyr	Glu
305				310						315					320
Tyr	Leu	Cys	His	Ile	Gly	Glu	Ala	Lys	Glu	Trp	Ile	Glu	Glu	Val	Ile
			325						330					335	
Gln	Lys	Gln	Ile	Pro	Pro	Ile	Val	Gln	Leu	Glu	Glu	Ala	Leu	Arg	Asp
		340						345					350		
Gly	Val	Thr	Leu	Ala	Glu	Val	Val	Gln	Ala	Met	Tyr	Pro	Asn	Arg	Thr
	355						360					365			
Phe	Arg	Ile	Phe	Arg	His	Pro	Lys	Leu	Gln	Tyr	Arg	His	Ser	Asp	Asn
	370				375						380				
Ile	Ala	Leu	Phe	Phe	Arg	Phe	Leu	Asp	Glu	Val	Glu	Leu	Pro	Glu	Leu
385					390					395					400
Phe	Arg	Phe	Glu	Leu	Ile	Asp	Leu	Tyr	Glu	Lys	Lys	Asn	Ile	Pro	Lys
			405						410					415	
Val	Ile	His	Cys	Val	His	Ala	Leu	Ser	Trp	Leu	Leu	Phe	Lys	Lys	Gly
		420						425				430			
Leu	Val	Asp	Phe	Arg	Met	Gly	Asn	Leu	Val	Gly	Gln	Leu	Glu	Phe	Glu
	435						440					445			
His	His	Glu	Leu	Glu	Gln	Thr	Gln	Lys	Gly	Leu	Asp	Lys	Ser	Gly	Val

450 455 460  
 Ser Met Pro Ser Phe Ser Gly Met Ala Ala Asn Phe Gly Ala Glu Pro  
 465 470 475 480  
 Glu Pro Glu Pro Glu Pro Glu Pro Glu Thr Glu Glu Glu Arg Ile Glu  
 485 490 495  
 Arg Glu Leu His Glu Asn Glu Thr Ser Ile Ala Glu Phe Gln Ala Gln  
 500 505 510  
 Ile Lys Gly Ala Met Leu Arg Leu Lys Leu Gly Asn Val Met Asn Glu  
 515 520 525  
 Leu Trp Asp Phe Glu Pro Phe Leu Ile Asp Leu Gln Ser Arg Leu Arg  
 530 535 540  
 Gly Asp Trp Ala Arg Gln Val Ile Gln Tyr Arg Leu Asn Met Arg Ser  
 545 550 555 560  
 Phe Ala Val Asn Leu Gln Ala Ala Cys Arg Gly Phe Ile Val Arg Ser  
 565 570 575  
 Arg Gln Gln Gly Asp Arg Glu Trp Cys Arg Ala Gln Glu Leu Asp Val  
 580 585 590  
 Leu Arg Leu Gln Ala Leu Ile Arg Gly Ala Lys Ala Arg Thr Gln Val  
 595 600 605  
 Gln Tyr Leu Arg Arg Gln Ser Arg Lys Glu Glu Ser Gly Ile Lys Gln  
 610 615 620  
 Phe Gln Ala Ala Ile Arg Gly Ala Leu Gln Arg Lys Thr Val Tyr Ala  
 625 630 635 640  
 Val Tyr Glu Asp Thr Arg Ala Ile Glu Pro Gln Val Ile Val Leu Gln  
 645 650 655  
 Ala Ala Val Arg Gly Ala Leu Cys Arg Arg Met Ile Ser Glu Gln His  
 660 665 670  
 Glu Glu Thr Gln Cys Ala Glu Asp Gly Ile Thr Gln Leu Gln Ser Leu  
 675 680 685  
 Ile Arg Gly Ala His Phe Arg Arg Gln Leu Ser Ala Gln Gln Asp Asp  
 690 695 700  
 Ile Lys Asn Thr Gly Asn Asn Val Gln Gln Leu Gln Ala Ala Ile Arg  
 705 710 715 720  
 Gly Thr Leu Thr Arg Lys Ala Val Ile Gln Leu Lys Ser Ser Leu Ala  
 725 730 735  
 Glu Ala Thr Pro Thr Val Ile Ser Ile Gln Ala Gly Val Arg Ala Leu  
 740 745 750  
 Ala Thr Arg Glu Arg Tyr Phe Gln Leu Ile Asp Gly Leu Ala Lys Lys  
 755 760 765  
 Lys Asn Glu Cys Ile Ser Leu Gln Ala Phe Val Arg Gly Gly Ala Val  
 770 775 780  
 Arg Gly His Leu Asn Ser Leu Arg Gln Ala Leu Glu Glu His Thr Leu  
 785 790 795 800  
 Ser Ile Ile Gly Leu Gln Ser Ile Leu Arg Glu Lys Ala Val Arg Val  
 805 810 815  
 Ala Leu Asp Ala Gln Arg Ala Ala Leu Val Gln Glu Glu Arg Ser Ile  
 820 825 830  
 Leu Gln Leu Gln Ser Ala Ala Arg Ala Val Ile Leu Arg Arg Arg Leu  
 835 840 845  
 Glu Ala Asp Ala Glu Ala Leu Arg Ala Gln Glu His Ile Ile Val Asp  
 850 855 860  
 Leu Gln Ala Leu Ser Arg Ala Ala Ile Leu Arg Ile Lys Val Gly Ala  
 865 870 875 880  
 Val Leu Asp Glu Leu Glu Asp Cys Glu Asp Glu Val Ser Gln Leu Gln  
 885 890 895  
 Ala His Ile Arg Ala Met Ile Val Arg Val Asp Val Gly Gln Asp Leu

	900		905		910										
Ala	Asp	Leu	Ala	Glu	Glu	Glu	Leu	Ile	Thr	Asp	Leu	Gln	Ser	Arg	
	915					920					925				
Met	Arg	Gly	His	Ile	Ile	Arg	Ser	Lys	Phe	Glu	Glu	Lys	Arg	Gln	Tyr
	930					935					940				
Tyr	Arg	Ala	Asn	Met	Glu	Lys	Val	Ile	Lys	Ala	Gln	Ser	Ile	Val	Arg
	945				950					955				960	
Gly	Arg	Ile	Gln	Gly	Gln	Ala	Tyr	Lys	Ser	Leu	Thr	Thr	Gly	Lys	Asn
			965						970					975	
Pro	Pro	Val	Asn	Thr	Val	Lys	Gly	Phe	Val	His	Leu	Leu	Asn	Asp	Ser
			980					985					990		
Glu	Phe	Asp	Phe	Asp	Glu	Glu	Ile	Glu	Phe	Glu	Arg	Leu	Arg	Lys	Leu
	995						1000					1005			
Val	Val	Gln	Gln	Val	Arg	Gln	Asn	Glu	Leu	Ala	Glu	Gln	Tyr	Ile	Ser
	1010					1015					1020				
Gln	Leu	Asp	Ile	Lys	Ile	Ala	Leu	Leu	Val	Lys	Asn	Lys	Ile	Thr	Leu
	1025				1030					1035					1040
Asp	Glu	Val	Val	Lys	His	Gln	Lys	His	Phe	Gly	Gly	His	Val	Gly	Ser
			1045						1050					1055	
Leu	Leu	Ser	Asn	Ala	Asp	Ile	Ser	Ser	Lys	Asp	Pro	Phe	Asp	Leu	Lys
			1060					1065				1070			
Ala	Leu	Asn	Lys	Thr	Ser	Arg	Lys	Lys	Leu	Glu	His	Tyr	Gln	Val	Leu
	1075						1080					1085			
Phe	Phe	Leu	Leu	Gln	Thr	Gln	Ser	Gln	Tyr	Leu	Ala	Lys	Leu	Phe	Arg
	1090					1095					1100				
Arg	Leu	Arg	Glu	Leu	Asn	Thr	Pro	Glu	Lys	Glu	Tyr	Glu	Arg	Ile	Arg
	1105				1110				1115					1120	
His	Leu	Met	Met	Gly	Leu	Phe	Gly	Tyr	Ser	Gln	Lys	Arg	Arg	Glu	Glu
			1125					1130						1135	
Tyr	Tyr	Leu	Ile	Lys	Leu	Leu	Ser	Arg	Ser	Ala	Lys	Glu	Glu	Ile	Glu
	1140						1145					1150			
Ser	Phe	Asp	Ser	Leu	His	Glu	Tyr	Leu	Arg	Cys	Asn	Ser	Phe	Trp	Asn
	1155						1160					1165			
Lys	Leu	Phe	Ala	Ser	Tyr	Ile	Lys	Ser	Pro	Arg	Asp	Arg	Lys	Phe	Met
	1170					1175					1180				
Arg	Asp	Val	Leu	Gly	Pro	Leu	Ile	Lys	Glu	Asn	Val	Val	Glu	Asn	Pro
	1185				1190				1195					1200	
Glu	Leu	Asp	Leu	Glu	Ser	Asp	Pro	Ile	Gln	Ile	Tyr	Arg	Ser	Ala	Ile
			1205					1210						1215	
Asn	Asn	Glu	Glu	Leu	Arg	Thr	Gly	Arg	Arg	Ser	Arg	Arg	Pro	Leu	Asp
			1220					1225					1230		
Leu	Pro	Arg	Glu	Glu	Ala	Ile	Arg	Asp	Pro	Glu	Thr	Arg	Ala	Thr	Phe
	1235						1240					1245			
Ile	Gln	Asn	Leu	Gln	Asp	Leu	Arg	Asp	Ile	Ala	Asp	Gln	Phe	Phe	Thr
	1250					1255					1260				
Ala	Leu	Lys	Glu	Leu	Leu	Tyr	Arg	Met	Pro	Phe	Gly	Ile	Arg	Tyr	Ile
	1265				1270				1275					1280	
Ser	Gln	Gln	Met	Tyr	Glu	Cys	Leu	Leu	Ser	Arg	Phe	Pro	Gly	Glu	Asp
			1285					1290						1295	
Pro	Gly	Phe	Ile	Leu	Gln	Ala	Val	Gly	His	Trp	Val	Trp	Arg	Asn	Tyr
	1300						1305						1310		
Phe	Gln	Pro	Ala	Met	Val	Glu	Pro	Glu	Lys	Phe	Gly	Val	Ile	Glu	Arg
	1315						1320					1325			
Gly	Leu	Thr	Gln	Glu	Gln	Lys	Arg	Asn	Leu	Ser	Glu	Ile	Ala	Lys	Val
	1330					1335				1340					
Val	Ala	Gln	Val	Ala	Ser	Gly	Arg	Leu	Phe	Gly	Ala	Glu	Asn	Val	Tyr

## 18549

1345                      1350                      1355                      1360  
 Leu Gln Pro Leu Asn Ser Tyr Val Ala Asp Ser Ile Gln Arg Leu Gly  
                          1365                      1370                      1375  
 Arg Ile Trp Gly Asp Ser Lys Leu Ala Ala Phe Leu Ser Thr Trp Leu  
                          1380                      1385                      1390  
 Tyr His Ala Glu Ala Asn  
                          1395

<210> 41781  
 <211> 101  
 <212> PRT  
 <213> A.fumigatus

<400> 41781  
 Asn Ile Val Val Ser Val Gln Asp Ala Glu Thr Tyr Phe Asp Ile Asp  
 1                      5                      10                      15  
 Glu Phe Asn Asp Leu Tyr Ala Lys Thr Lys Pro Thr Leu Tyr Ile Lys  
                          20                      25                      30  
 Met Ser Asp Ile Phe Ser Ile His Gln Leu Val Ala Ser Glu Ile Asn  
                          35                      40                      45  
 Tyr Ile Cys Pro His Pro Asp Asp Ile Leu Arg Glu Ile Ile Arg Asp  
                          50                      55                      60  
 Leu Gly Asn Val Lys Thr Asn Glu Asn Glu Leu Met Ser Val Asn Ser  
 65                      70                      75                      80  
 Ser Glu Ile Asn Leu Thr Leu Asn Pro Lys Leu Ala Gln Val Glu Gly  
                          85                      90                      95  
 Lys Leu Cys Cys Tyr  
                          100

<210> 41782  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 41782  
 Val Ala Pro Ser His Pro Thr Pro Cys Ser Ser Ile Leu Tyr Leu Asn  
 1                      5                      10                      15  
 Pro Ala Leu Phe Phe Ser Pro Pro Pro Pro Leu Ala Phe Thr Tyr Pro  
                          20                      25                      30  
 Lys Arg Ser Asn Arg Phe Phe Ile Val Val Asp Phe Ser Phe Asn Leu  
                          35                      40                      45  
 Ser Gln Leu Thr Leu Ser Leu Leu Leu Ser Ile Leu Ser Gln Ser Ser  
                          50                      55                      60  
 Ser Thr Lys Arg Glu  
 65

<210> 41783  
 <211> 99  
 <212> PRT  
 <213> A.fumigatus

<400> 41783  
 Val Cys Ala Met Asp Phe Ser Ser Leu Lys Glu Gln Val Ser Asn Leu  
 1                      5                      10                      15  
 Thr Leu Tyr Asp Ile Lys Ala Gly Val Arg Lys Val Gln Asn Gly Arg  
                          20                      25                      30

## 18550

Tyr Ser Asn Pro Ala Ser Ser Gly Ile Pro Ser Ser Ser Pro Asp Ser  
           35                          40                          45  
 Phe Ser Pro Glu Pro Thr Val Tyr Asn Gly Val Arg Ala Asn Asn Phe  
       50                          55                          60  
 Ser Cys Phe Leu Ala Val Met Asn Tyr Thr Glu Met Glu Ser Lys Val  
 65                          70                          75                          80  
 Cys Cys His Arg Pro Ala Asn Arg Ile Gly Arg Phe Ala Leu Val Leu  
                           85                          90                          95  
 Arg Glu Arg

<210> 41784  
 <211> 101  
 <212> PRT  
 <213> A.fumigatus

<400> 41784  
 Gln Pro Ala Val Lys Arg Asn Tyr Ala Asp Asp Leu Gln Ala Ile His  
 1                          5                          10                          15  
 Arg Gln Glu Arg Gly Gly Met Ala Thr Asp Leu Gln Gly Thr Ile Ala  
                           20                          25                          30  
 Arg Ala Gly Val Tyr Gln Arg Pro Ala Arg Leu Ile Cys Leu Phe Phe  
       35                          40                          45  
 Asp Ile Gln Ser Leu Gln Leu Leu Glu Phe Leu Ile Lys Asn Gly Ser  
       50                          55                          60  
 Glu Arg Val Val Asp Asp Ala Arg Ser His Leu Ser Leu Ile Arg Met  
 65                          70                          75                          80  
 Leu Arg Gln Phe His Tyr Ile Asp Gln Asn Gly Lys Asp Gln Gly Val  
                           85                          90                          95  
 Asn Val Arg Thr Arg  
                           100

<210> 41785  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 41785  
 Ile Ser Gln Ile Leu Ala Asp Val Asp Pro Asn Asp His Arg Thr Asp  
 1                          5                          10                          15  
 Met Arg Leu Gln Leu Ala Asn Leu Ile Leu Thr Ile Phe Gln Leu Ile  
                           20                          25                          30  
 Lys Asn Ser Ser Asn Phe Asp Ser Gln Asn Cys Arg Ser Gly Glu Ser  
       35                          40                          45  
 Leu Lys Ile His Asp Asp Val Phe Leu Cys Ser Glu Gly Phe Cys Val  
       50                          55                          60  
 Gly Phe Gln Ser Pro Ser  
 65                          70

<210> 41786  
 <211> 631  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE



&lt;222&gt; (523),(529)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41786

Glu	Ser	Val	Ser	Phe	Val	Arg	Ala	Trp	Tyr	Val	Arg	His	Arg	Ala	Leu
1				5					10					15	
Phe	Ala	Glu	Leu	Ser	Leu	Leu	Leu	Asp	Thr	Thr	Arg	Phe	Val	Asp	Glu
			20					25					30		
Leu	Phe	Ala	Thr	Phe	Gly	Pro	Lys	Gln	Gln	Ala	Pro	Pro	Ala	Val	Ser
			35				40					45			
His	Thr	Gln	Ala	Gln	Pro	Pro	Leu	Thr	His	Asp	Leu	Pro	Gln	Pro	Val
	50					55				60					
Ser	Leu	Pro	Gln	Gln	Ala	Phe	Pro	Tyr	Asn	Val	Pro	Ser	Gly	Pro	Ser
65					70					75					80
Thr	Asp	Ala	Tyr	Gly	Ala	Pro	Met	Gly	Gly	Ala	Ala	Pro	Ala	His	Thr
				85					90					95	
Gly	His	Asp	Gly	Leu	Asn	Phe	Asn	Arg	Lys	Arg	Thr	Tyr	His	Glu	Gly
			100					105					110		
Phe	Gln	Thr	Glu	Gln	Glu	Arg	Glu	Asp	Val	Pro	His	Asn	Arg	Thr	Tyr
		115					120					125			
Lys	Thr	Pro	Arg	Arg	Gly	Arg	Gly	Gly	Gly	Arg	Gly	Asp	Trp	Met	Gly
	130					135						140			
Arg	Asp	Gly	Arg	Ala	Pro	Gln	Gly	Ala	Pro	Gly	Gln	Phe	Pro	Pro	Thr
145					150					155					160
Gly	Ala	Gly	Phe	Pro	Val	Met	Pro	Pro	Ser	Phe	Pro	Ala	Ile	Asp	Gln
				165					170					175	
Asn	Asp	Pro	Met	Ala	Ala	Met	Met	Ala	Leu	Gln	Ser	Met	Gly	Phe	Pro
			180					185					190		
Gln	Met	Pro	Gly	Met	Pro	Pro	Met	Pro	Met	Ala	Ala	His	Gly	Gly	Ala
		195					200					205			
Gly	Gln	Pro	Gln	Glu	Gln	Met	Met	Ala	Lys	Ser	Ser	Glu	Arg	Cys	Pro
	210					215						220			
Phe	Tyr	Glu	Thr	Gln	Gly	Ile	Cys	Tyr	Leu	Gly	Ala	Ala	Cys	Pro	Tyr
225					230					235					240
Gln	His	Asp	Thr	Gly	Pro	Ser	Ala	Lys	Glu	Asp	Gly	Lys	Arg	Leu	Ala
				245					250					255	
Ser	Cys	Phe	Gln	Arg	Arg	Leu	Leu	Leu	Ile	Ser	Asp	Thr	Thr	Glu	Tyr
			260					265					270		
Asp	Pro	Lys	Ser	Ala	Ser	Ile	Met	Val	Asp	Leu	Gln	Arg	Arg	Asp	Gly
		275					280					285			
Gly	Pro	Met	Arg	Gly	Gly	Asp	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Gly
	290					295					300				
Asp	Arg	Gly	Gly	Phe	Gly	Gly	Arg	Gly	Arg	Arg	Ser	Glu	Phe	Ser	Ala
305					310					315					320
Ala	Gly	Pro	Ser	Asp	Asp	Pro	Ser	Met	Lys	Thr	Ile	Val	Val	Glu	Gln
				325					330					335	
Ile	Pro	Asp	Glu	Lys	Leu	Asp	Glu	Ala	Thr	Val	Arg	Asp	Phe	Phe	Ala
			340					345					350		
Gln	Tyr	Gly	Glu	Ile	Val	Glu	Ile	Ser	Leu	Gln	Pro	His	Arg	Lys	Leu
		355					360					365			
Ala	Leu	Ile	Thr	Tyr	Asp	Ser	His	Ala	Ala	Ala	Lys	Arg	Ala	Trp	Ser
	370					375						380			
Ser	Pro	Lys	Val	Ile	Phe	Asp	Asn	Arg	Phe	Val	Lys	Val	Tyr	Trp	His
385					390					395					400
Lys	Pro	Lys	Ala	Glu	Arg	Asn	Gly	Asp	Gln	Arg	Pro	Arg	Gly	Asp	Ala
				405					410					415	

## 18552

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Met Asp Glu Ser Pro Ala Phe Asp Pro Gln Glu Phe Gln Arg Gln Gln
      420      425      430
Glu Glu Ala Gln Lys Ala Tyr Glu Glu Lys Met Arg Lys Arg Lys Glu
      435      440      445
Thr Glu Glu Ala Lys Gln Arg Leu Glu Lys Gln Arg Glu Glu Leu Leu
      450      455      460
Lys Lys Gln Gln Glu Glu Lys Glu Arg Leu Leu Arg Lys Leu Gly Ala
465      470      475      480
Arg Ala Thr Ser Asn Gly Thr Ser Pro Asp Gly Glu Ala Arg Gln Ser
      485      490      495
Pro Ala Asp Glu Asn Val Ser Glu Gln Thr Lys Gln Leu Arg Ala Gln
      500      505      510
Leu Ala Ala Phe Glu Ala Glu Ala Lys Thr Xaa Gly Ile Asp Pro Asn
      515      520      525
Xaa Ser Glu Ala Gly Ala Thr Leu Phe Ser Tyr Arg Gly Arg Gly Arg
      530      535      540
Gly Tyr Thr Gly Tyr Arg Gly Gly Phe Ala Pro Arg Ala Arg Gly Tyr
545      550      555      560
Ala Pro Pro Phe Arg Gly Ser Phe Arg Gly Arg Gly Ala Ala Arg Gly
      565      570      575
Arg Gly Gly Val Leu Arg Leu Asp Asn Arg Pro Lys Arg Ile Ala Val
      580      585      590
Ser Gly Val Glu Leu Asn Thr Glu Lys Asp Glu Ala Leu Arg Gln Phe
      595      600      605
Leu Ile Val Ser Ile Phe Pro Pro Pro Leu Ser Leu Phe Phe Phe Lys
      610      615      620
Phe Thr Arg Ile Asp Asn Tyr
625      630

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&lt;210&gt; 41787

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41787

```

Gln Leu Pro Phe Gln Gly Val Gly Glu Tyr Glu Ser Ile Glu Ser His
1      5      10      15
Pro Glu Gln Pro Asn Thr Val Val Val Ala Phe Lys Glu Arg Tyr Gln
      20      25      30
Ala Glu Lys Phe Met Arg Gly Pro Trp Asn Ile Pro Ser Val Gly Glu
      35      40      45
Val Gln Leu Ser Trp Val Pro Asn Pro Ala Val Ser Ala Ala Thr Ser
      50      55      60
Ala Gln Ile Ser Gly Pro Gly Ser Asp Thr Lys Pro Thr Ser Asp Glu
65      70      75      80
Asp Thr Val Met Glu Ser Thr Ala Gly Ser Ser Gln Pro Ala Asp Gln
      85      90      95
Leu Asn Ser Arg Lys Asp Gly Ser His Asp Val Asp Tyr Asp Val Ala
      100      105      110
Glu Met Asp Asp Ser Trp Gly Val Glu
      115      120

```

&lt;210&gt; 41788

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 18553

&lt;400&gt; 41788

```

Phe Phe Val Phe Ser Thr Phe Glu Pro Phe Val Leu Ile Gln Gln Leu
1           5           10           15
Leu Leu Ile Val Leu Ser Phe His Asn Ser His Phe Ser Ser Leu Phe
20           25           30
Ser Ala Asn Ile Ile Thr Leu Ile Ile Phe Arg Leu Phe Gln His Leu
35           40           45
Thr Thr Ala Glu Glu Thr Asp Thr Thr Leu Cys Leu Thr Glu Gln Phe
50           55           60
Ala Leu Thr Leu Gln Thr Asp Asn Gln Leu Leu Ser Gln Ala Ala Ile
65           70           75           80
Leu Ile Val Ile Ile Phe Thr Ser Phe Glu Ile Arg Cys Leu Asp Val
85           90           95
Asn Val Asn Gly Ile Leu Ile Asp Gln Asn Thr Thr Asp Ile
100          105          110

```

&lt;210&gt; 41789

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41789

```

Val Pro Ala Leu Lys Pro Ser Ala Leu Ala Leu Glu Ala Gly Ser Arg
1           5           10           15
Val Ser Asn Ser Ala Arg Leu Met Ser Cys Cys Phe Cys Ser Phe Ala
20           25           30
Phe Cys Ser Ser Tyr His Trp Ser Ser Pro Asn Ser Ser Ser Pro Thr
35           40           45
Pro Pro Cys Arg Ala Leu Ser Phe Glu Leu Ala Lys Pro Ser Arg Ser
50           55           60
Ser Ser Ser Asn Arg Ser Arg Ser Ser Ser Phe Leu Ala Leu Arg
65           70           75           80
Ser Arg Ser Ala Ser Arg Ser Thr Gly Pro Ser Ser Phe Leu Gly Ser
85           90           95
Ser Pro Ser Ser Leu Ser Glu Ser Pro Leu Asn Thr Ser Pro Val Ser
100          105          110
Arg Ser Ser Lys Ala Pro Ser Pro Ser Ser Ser Ser Ser Lys Ala Ser
115          120          125
Ser Arg Ser Ser Ser Ser Thr Ser Ser Ser Ser Ser Cys Pro Pro Glu
130          135          140
Ser Leu Ala Val Ala Lys Arg Leu Arg Arg Ala Ser Ile Ile Ser Leu
145          150          155          160
Ser Cys His Phe Cys Ser Ser Phe Ser
165

```

&lt;210&gt; 41790

&lt;211&gt; 1099

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (6)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

## 18554

&lt;400&gt; 41790

Phe	Val	Val	Ile	Pro	Xaa	Arg	His	Leu	Val	His	Pro	Lys	Gly	Leu	Trp
1				5					10					15	
Thr	Val	Val	Thr	Ala	Lys	Arg	Arg	Arg	Leu	Thr	Ile	Ile	Glu	Cys	Pro
			20					25					30		
Ser	Asp	Ser	Phe	Ala	Ser	Met	Ile	Asp	Ile	Ser	Lys	Ile	Ala	Asp	Ile
		35					40					45			
Val	Leu	Leu	Met	Ile	Asp	Gly	Asn	Tyr	Gly	Phe	Glu	Met	Glu	Thr	Met
	50					55					60				
Glu	Phe	Leu	Asn	Val	Leu	Ala	Ser	Ser	Gly	Met	Pro	Gly	Asn	Val	Phe
65					70					75					80
Gly	Ile	Leu	Thr	His	Leu	Asp	Leu	Phe	Lys	Lys	Gln	Ser	Thr	Leu	Arg
				85					90					95	
Ala	Ala	Lys	Lys	Arg	Leu	Lys	His	Arg	Phe	Trp	Ser	Glu	Leu	Tyr	Asn
			100					105					110		
Gly	Ala	Lys	Leu	Phe	Tyr	Leu	Ser	Gly	Val	Val	Asn	Gly	Arg	Tyr	Pro
		115					120					125			
Asp	Arg	Glu	Ile	His	Asn	Leu	Ser	Arg	Phe	Leu	Ser	Val	Met	Lys	Asn
		130				135						140			
Pro	Arg	Pro	Leu	Val	Trp	Arg	Asn	Ser	His	Pro	Tyr	Ala	Leu	Ala	Asp
145					150					155					160
Arg	Phe	Leu	Asp	Ile	Thr	Pro	Pro	Thr	Gln	Ile	Glu	Glu	Asn	Pro	Lys
				165					170						175
Cys	Asp	Arg	Thr	Val	Ala	Leu	Tyr	Gly	Tyr	Leu	Arg	Gly	Thr	Asn	Phe
			180					185					190		
Pro	Ala	Gln	Gly	Ala	Arg	Val	His	Val	Pro	Gly	Val	Gly	Asp	Leu	Thr
		195					200						205		
Val	Ala	Gly	Ile	Glu	Ala	Leu	Pro	Asp	Pro	Cys	Pro	Thr	Pro	Tyr	Met
210						215					220				
Asp	Gln	Gln	Leu	Ala	Lys	Thr	Ser	Gly	Lys	Ser	Ser	Lys	Arg	Arg	Leu
225					230					235					240
Gly	Glu	Lys	Gln	Lys	Leu	Leu	Phe	Ala	Pro	Met	Ser	Asp	Val	Gly	Gly
			245						250					255	
Val	Leu	Val	Asp	Lys	Asp	Ala	Val	Tyr	Ile	Asp	Val	Lys	Thr	Ser	Asn
			260					265					270		
Phe	Glu	Arg	Gly	Glu	Asp	Asp	Asp	Asn	Gln	Asp	Arg	Gly	Leu	Gly	Glu
		275					280					285			
Gln	Leu	Val	Val	Gly	Leu	Gln	Gly	Glu	Arg	Lys	Leu	Leu	Gly	Glu	Ala
	290					295					300				
Glu	Gly	Gly	Val	Arg	Leu	Phe	Ser	Gly	Gly	Glu	Val	Leu	Glu	Lys	Ala
305					310					315					320
Glu	Asp	Asp	Glu	Gly	Asp	Asn	Val	Gly	Arg	Lys	Glu	Arg	Arg	Lys	Val
				325					330					335	
Arg	Ile	Met	Glu	Gly	Glu	His	Asp	Gln	Gln	Glu	Leu	Leu	Asp	Glu	Asp
		340						345					350		
Glu	Gly	Phe	Glu	Ser	Gly	Glu	Asp	Glu	Glu	Leu	Asp	Glu	Asp	Gly	Glu
		355					360					365			
Asp	Asp	Asp	Leu	Ser	Asp	Glu	Glu	Asp	Gly	Asp	Leu	Glu	Asp	Val	Ser
		370				375					380				
Ala	Pro	Pro	Asp	Phe	Glu	Glu	Asn	Phe	Lys	Ala	Arg	Gln	Asn	Gly	Ser
385					390					395					400
Ala	His	Arg	Glu	Glu	Gly	Asp	Leu	Ala	Phe	Ala	Asp	Ser	Asp	Ser	Asp
				405					410					415	
Leu	Gly	Ser	Ile	Ser	Ser	Val	Glu	Asp	Gln	Glu	Leu	Glu	Ser	Asp	Val
			420					425					430		
Asp	Glu	Asp	Glu	Val	Glu	Glu	Asp	Asp	Asp	Gly	Ala	Leu	Arg	Trp	Lys

435					440					445						
Glu	Asn	Met	Ile	Ala	Asn	Ala	Lys	Ala	Leu	His	Gly	Lys	Arg	Pro	Lys	
450					455					460						
Phe	Arg	Val	Ala	Asp	Leu	Ser	Arg	Met	Met	Tyr	Asp	Glu	Ser	Ile	Ala	
465					470					475					480	
Pro	Ala	Asp	Val	Val	Lys	Arg	Trp	Arg	Gly	Glu	Asp	Asp	Glu	Asp	Glu	
					485					490					495	
Gln	Pro	Glu	Ala	Glu	Glu	His	Gln	Glu	Asp	Glu	Asp	Asp	Phe	Phe	Lys	
					500					505					510	
Lys	Thr	Asn	Thr	Glu	Lys	Glu	Glu	Gln	Ser	Asp	Tyr	Arg	Ala	Val	Pro	
					515					520					525	
Glu	Tyr	Asp	Tyr	Glu	Lys	Leu	Glu	Gln	Lys	Trp	Gln	Asp	Ser	Asp	Met	
530					535					540						
Ile	Glu	Ala	Leu	Arg	Ser	Arg	Phe	Ala	Thr	Ala	Lys	Leu	Ser	Gly	Gly	
545					550					555					560	
His	Asp	Asp	Asp	Asp	Asp	Val	Asp	Asp	Asp	Asp	Leu	Asp	Asp	Ala	Phe	
					565					570					575	
Asp	Glu	Asp	Asp	Glu	Gly	Asp	Gly	Ala	Phe	Glu	Asp	Leu	Glu	Thr	Gly	
					580					585					590	
Glu	Val	Phe	Asn	Gly	Leu	Ser	Asp	Asn	Glu	Asp	Gly	Glu	Glu	Pro	Lys	
					595					600					605	
Lys	Glu	Glu	Gly	Pro	Val	Asp	Leu	Glu	Ala	Glu	Arg	Glu	Arg	Asn	Ala	
610					615					620						
Lys	Lys	Lys	Glu	Glu	Leu	Arg	Leu	Arg	Phe	Glu	Glu	Glu	Asp	Arg	Glu	
625					630					635					640	
Gly	Phe	Ala	Asn	Ser	Lys	Asp	Asn	Ala	Arg	Gln	Gly	Gly	Val	Gly	Glu	
					645					650					655	
Glu	Glu	Phe	Gly	Glu	Asp	Gln	Trp	Tyr	Glu	Leu	Gln	Lys	Ala	Lys	Leu	
					660					665					670	
Gln	Lys	Gln	Gln	Asp	Ile	Asn	Arg	Ala	Glu	Phe	Glu	Thr	Leu	Asp	Pro	
					675					680					685	
Ala	Ser	Arg	Ala	Arg	Ala	Glu	Gly	Phe	Arg	Ala	Gly	Thr	Tyr	Ala	Arg	
690					695					700						
Ile	Val	Leu	Glu	Lys	Val	Pro	Cys	Glu	Phe	Ala	Thr	Lys	Phe	Asn	Pro	
705					710					715					720	
Arg	Phe	Pro	Val	Ile	Val	Gly	Gly	Leu	Ala	Pro	Thr	Glu	Asp	Arg	Phe	
					725					730					735	
Gly	Tyr	Val	Gln	Val	Arg	Ile	Lys	Arg	His	Arg	Trp	His	Lys	Lys	Ile	
					740					745					750	
Leu	Lys	Thr	Asn	Asp	Pro	Leu	Ile	Phe	Ser	Leu	Gly	Trp	Arg	Arg	Phe	
					755					760					765	
Gln	Thr	Leu	Pro	Met	Tyr	Ser	Thr	Ser	Asp	Asn	Arg	Thr	Arg	Asn	Arg	
770					775					780						
Met	Leu	Lys	Tyr	Thr	Pro	Glu	His	Met	His	Cys	Phe	Ala	Thr	Phe	Tyr	
785					790					795					800	
Gly	Pro	Leu	Val	Ala	Pro	Asn	Thr	Gly	Phe	Ser	Cys	Val	Gln	Ser	Leu	
					805					810					815	
Ser	Asn	Lys	Thr	Pro	Gly	Phe	Arg	Ile	Ala	Ala	Thr	Gly	Val	Val	Leu	
					820					825					830	
Ser	Val	Asp	Glu	His	Thr	Glu	Ile	Val	Lys	Lys	Leu	Lys	Leu	Thr	Gly	
					835					840					845	
Val	Pro	Tyr	Lys	Ile	Phe	Lys	Asn	Thr	Ala	Phe	Ile	Lys	Asp	Met	Phe	
850					855					860						
Asn	Ser	Ser	Leu	Glu	Ile	Ala	Lys	Phe	Glu	Gly	Ala	Ser	Ile	Arg	Thr	
865					870					875					880	
Val	Ser	Gly	Ile	Arg	Gly	Gln	Ile	Lys	Arg	Ala	Leu	Ala	Lys	Pro	Glu	

[illegible]

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<210> 41791
<211> 616
<212> PRT
<213> A.fumigatus
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Val	Cys	Phe	Pro	Leu	Arg	Thr	Ser	Phe	Ala	Ala	Phe	Leu	Cys	Gln	Pro
			20					25					30		
Ser	Ser	Leu	Ser	Arg	Ala	Val	Ile	Pro	Ser	Leu	Val	Ser	Leu	Lys	Val
		35					40					45			
Gly	Asp	Cys	Pro	Gly	Trp	Ser	Trp	Lys	Leu	Ser	Val	Cys	Arg	Arg	Thr
	50					55					60				
Ile	Leu	Asp	Arg	Leu	Pro	Ile	Leu	Gly	Phe	Leu	Leu	Asp	Pro	Lys	Leu
65					70					75				80	
Arg	Ala	Ala	Lys	Gln	Ala	Leu	Ser	Gly	Leu	Gly	Ser	Leu	Glu	Val	Ser
				85					90					95	
Thr	Gln	Lys	Ser	Pro	Val	Val	Gly	Tyr	Arg	Leu	Val	Ala	Met	Ser	Gly
			100					105					110		
Ser	Asn	Ile	Asp	Val	Pro	Leu	Pro	Glu	His	Ser	Thr	Ala	His	Ser	Thr
		115					120					125			
Cys	Leu	Asn	Asp	Ser	Phe	Ser	Ala	Ala	Gly	Glu	Asp	Asn	His	Pro	Val
	130					135					140				
Ser	Glu	Ser	Asp	Lys	Ala	His	Glu	Val	Ala	Lys	Gln	Thr	Ser	His	Ser
145					150					155				160	
Pro	Leu	Gly	Leu	Thr	Leu	Gln	Ser	Pro	Val	Ala	Arg	Gly	Glu	Pro	Val
				165					170					175	

Gly	Ser	Gly	Ser	Asn	Leu	Asp	Phe	Ser	His	Val	Ser	Arg	Gly	Gln	Leu
			180					185					190		
Pro	Glu	Val	Gly	Thr	Leu	Pro	Gly	Gly	Ser	Thr	Ala	Gly	Ser	Leu	Pro
		195					200					205			
Ser	Leu	Ser	Ser	Gln	Arg	Ser	Asn	Leu	Thr	Arg	Gly	Leu	Ser	Ser	Arg
	210					215					220				
Asn	Pro	Ser	Ser	Gly	Gln	Glu	His	Asp	Val	Ala	Ser	Ser	Ser	Gly	Thr
225				230						235					240
Glu	Arg	Ser	Pro	Gln	Leu	Ala	Arg	Ser	His	Lys	Arg	Thr	Ala	Thr	Gly
				245					250					255	
Glu	Ile	Lys	Pro	Ser	Asn	Thr	Ser	Val	Ala	Pro	Pro	Ser	Pro	Gly	Thr
			260					265					270		
Ile	Ser	Ala	Glu	Gly	His	Pro	Ala	Glu	Ser	Ile	Gly	Trp	Arg	Ser	Arg
		275					280					285			
Gly	Ser	Arg	Ile	Ala	Ala	Val	Asn	Trp	Pro	Cys	Asn	Ser	Ile	Phe	Cys
	290					295					300				
Ile	Ile	Leu	Leu	Val	Leu	Ile	Ser	Lys	Thr	Leu	Leu	Ser	Val	His	Leu
305					310					315					320
Arg	Thr	Arg	Leu	Ser	Tyr	Ala	Ala	Ala	Lys	Ile	Glu	Lys	Ser	Arg	Gln
				325					330					335	
Ser	Leu	Asn	Thr	Gln	Glu	Lys	Leu	Pro	Leu	Asp	Leu	Leu	Lys	Glu	Ser
			340					345					350		
Ser	Ser	Thr	Pro	Pro	Val	Ile	Val	Lys	Gly	Ala	Pro	Asn	Thr	Asp	Gly
		355					360					365			
Ser	Arg	Arg	Arg	Asp	Lys	Asp	Ser	Pro	Asn	Gly	Ser	Pro	Val	Ser	Ala
	370				375					380					
Pro	Asp	Ile	Pro	Ile	Gln	Ser	Asn	Phe	Phe	Ser	Pro	His	Thr	Arg	Val
385					390					395					400
Ser	Pro	Ala	Ala	Arg	Ser	Asp	Asp	Leu	Ser	Ser	Val	Ser	Gln	Ser	Lys
				405				410						415	
Tyr	Ser	Pro	Gly	Ser	Pro	Phe	Ser	Ser	Lys	Arg	Met	Ser	Ala	Thr	Pro
			420					425					430		
Thr	Leu	Ala	Pro	Pro	Ala	Asp	Ile	Val	Pro	Ser	Gly	Ser	Ser	Ser	Ser
		435				440						445			
Arg	Arg	Arg	Arg	Pro	Asn	Pro	Asn	Gln	Ala	Leu	Glu	Ala	Ser	Arg	Tyr
	450				455						460				
Ile	Ala	Ser	Phe	Asp	Asp	Arg	Gln	His	Arg	Phe	Gln	His	Glu	Ser	Thr
465					470					475					480
Asn	Gly	Ser	Gln	Lys	Ile	Leu	Val	Pro	Gly	Thr	Pro	Pro	Leu	Gln	Ser
				485					490					495	
Leu	Ser	Gln	Gln	Thr	Ser	Thr	Pro	Tyr	Asn	Gly	Leu	Ser	Arg	Gln	Ser
			500					505					510		
Thr	His	Ser	Gln	Asn	Ala	Ser	Met	Glu	Gln	Asp	Ala	Ile	Glu	Thr	Leu
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Leu	Phe	Met	Ser	Ser	Pro										

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 <212> PRT  
 <213> A.fumigatus

<400> 41792  
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 1 5 10 15  
 Ser Asn Ser Ser Ala Ser Thr Ser Ser Ser Leu Phe Asp Pro Gly Val  
 20 25 30  
 Phe Leu Pro Gly Gly His Asn Asn Asp Pro Pro Leu Pro Glu Asn Ser  
 35 40 45  
 Pro Thr Val Gly Tyr Lys Leu Asn His Phe Met Leu Arg Ile Arg Glu  
 50 55 60  
 Pro Gln Arg Ser Leu His Phe Tyr Ile Asn Leu Met Gly Met Arg Thr  
 65 70 75 80  
 Val Phe Thr Met Asn Ala Gly Pro Phe Thr Leu Tyr Tyr Leu Gly Tyr  
 85 90 95  
 Pro Pro Thr Ser Glu Asp Arg Ala Asp Leu Pro Ser Trp Ser Ala Arg  
 100 105 110  
 Val Ala Lys Pro Pro Val Leu Thr Gln Thr Pro Gly Leu Leu Glu Leu  
 115 120 125  
 Tyr His Val His Gly Thr Glu Lys Ala Asp Ala Glu Gly Gly Phe Asn  
 130 135 140  
 Met Ser Thr Gly Asn Thr Ala Pro His Leu Gly Phe Gly His Leu  
 145 150 155

<210> 41793  
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 <212> PRT  
 <213> A.fumigatus

<400> 41793  
 Ile Pro Cys Gly Lys Ile Ile Asp Lys Ser Ser Arg Met Gln Leu Arg  
 1 5 10 15  
 Gln Ser Lys Ile Leu Ser Cys Trp Phe Ser Tyr Ser Leu Ser His His  
 20 25 30  
 His Leu Arg Glu Cys Ser Val Phe Arg Lys Asp Ser Ile Val Thr Arg  
 35 40 45  
 Thr His Ile Tyr Pro Val Ser Val Cys Ile Gln Lys Arg Pro Gln Ala  
 50 55 60  
 Thr Lys Glu His Asn Ser Arg Gly Met Leu Arg Arg  
 65 70 75

<210> 41794  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 41794  
 Ser Ile Ser Phe Ile Asp Ser Thr Arg Phe Tyr Ile Ile Phe Gln Arg  
 1 5 10 15  
 Gly Thr Ile Ala Gln Leu Ala Asp Ala Val Gln Gly Leu Pro Val Asn  
 20 25 30  
 Asn Lys Ala Val Phe Leu Phe Ile Tyr Thr Gln Gly Arg Lys Cys Leu



## 18559

35                      40                      45  
 Leu Trp Leu Tyr Tyr Phe Val Phe Thr His Gln Ile Leu Asn Ile Phe  
     50                      55                      60  
 Ile  
 65

<210> 41795  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 41795  
 Pro Val Ser His Gly Gly Ser Ala Gly Ser Gly Glu Arg Met Thr Asp  
 1                      5                      10                      15  
 Ser Lys Thr Ser Asp Thr Arg Met Phe Arg Pro Leu Asp Val Phe Pro  
                     20                      25                      30  
 Lys Leu Glu Asn Cys His Gln Ser Ala Glu Phe Met Ile Tyr Gln Tyr  
                     35                      40                      45  
 Ser Val Trp Pro Ile Asp Pro Lys Arg Cys Arg Leu Ser Pro Glu Ala  
     50                      55                      60  
 Arg Val Leu Ile  
 65

<210> 41796  
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 <212> PRT  
 <213> A.fumigatus

<400> 41796  
 Leu Leu Ile Leu Gln Gly His Ser Asp Gln Pro Ile Val His Ile Phe  
 1                      5                      10                      15  
 Ser Gly Phe Ser Thr Asn Arg Leu Leu Ile Tyr Pro Phe Leu Leu Ser  
                     20                      25                      30  
 Ser Phe Ala Leu His Glu Leu Leu Val Lys Asp Leu Glu Met Asn Arg  
                     35                      40                      45  
 Trp Pro Ser Lys Arg Cys Glu Ser Gln Met Pro Cys Ser  
     50                      55                      60

<210> 41797  
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 <212> PRT  
 <213> A.fumigatus

<400> 41797  
 Phe Pro Leu Arg Val Leu Gly Arg Pro Gly Ala Gly Cys Ser Thr Phe  
 1                      5                      10                      15  
 Leu Arg Thr Val Ala Gly Tyr His Ser Ser Phe Leu Gly Val Thr Gly  
                     20                      25                      30  
 His Ile Asp Tyr Ser Gly Leu Thr Leu Glu His Val Thr Lys His Tyr  
                     35                      40                      45  
 Arg Gly Glu Val Val Tyr Val Pro Glu Asp Asp Ala His Phe Pro Thr  
     50                      55                      60  
 Leu Asn Val Gln Gln Thr Leu Glu Phe Ala Leu Gln Ser Lys Thr Pro  
 65                      70                      75                      80  
 Lys Arg Tyr Arg Glu Arg Ile Pro Arg Tyr Leu Glu Ile Tyr Gly Arg  
                     85                      90                      95

## 18560

Val Phe Gly Met Ser His Thr Met Lys Thr Leu Val Gly Asn Glu Tyr  
 100 105 110  
 Ile Arg Gly Val Ser Gly Gly Glu Arg Lys Arg Ile Ser Ile Ile Glu  
 115 120 125  
 Ser Leu Ala Thr Asp Ser Ser Val Met Cys Trp Asp Asn Ser Thr Arg  
 130 135 140  
 Gly Leu Asp Ala Ser Ser Ala Leu Asp Tyr Val Arg Ser Leu Arg Ile  
 145 150 155 160  
 Met Thr Asp Thr Cys Gly Lys Ala Thr Ile Leu Thr Leu Tyr Gln Ala  
 165 170 175  
 Ser Asp Ala Ile Phe Asp Leu Val Asp Lys Val Leu Leu Ile Asp Glu  
 180 185 190  
 Gly Arg Met Leu Tyr Gln Gly Pro Ala Gln Glu Ala Lys Gly Tyr Phe  
 195 200 205  
 Glu Asn Leu Gly Tyr Gln Cys Ala Glu Met Gln Thr Val Ser Asp Phe  
 210 215 220  
 Leu Thr Ser Ile Thr Ile Pro Glu Arg Arg Arg Phe Gln Pro Gly Trp  
 225 230 235 240  
 Glu Asn Arg Ala Pro Lys Gly Ala Ile Glu Leu Glu Asp Ala Phe Arg  
 245 250 255  
 Lys Ser Ala Ala Phe His Gln Ile Leu Glu Asp Leu Arg Asn Tyr Glu  
 260 265 270  
 Glu Lys Gln Ala Gly Ile Gln Gly Leu Arg Thr Ser Gln Ser Asp Cys  
 275 280 285  
 Asp Arg Arg Ser Leu Lys Ala Phe Lys Ser Thr Val Gln Ala Glu Lys  
 290 295 300  
 Ser Arg Phe Val Ser Ala Lys Ser Pro Tyr Thr Ile Ser Leu Phe Arg  
 305 310 315 320  
 Gln Val Val Leu Cys Gly Lys Arg Gln Met Trp Gln Val Lys Gly His  
 325 330 335  
 Ile Ser Pro Leu Leu Ile Lys Leu Val Ser Cys Val Ile Tyr Gly Leu  
 340 345 350  
 Leu Ile Gly Ser Met Phe Tyr Glu Leu Pro Glu Asn Thr Asp Gly Met  
 355 360 365  
 Tyr Ser Arg Gly Gly Val Ile Phe Tyr Ser Ser Ile Leu Leu Ala Trp  
 370 375 380  
 Leu Gln Met Ser Glu Leu Glu Glu Ala Met Gln Gly Arg Asp Ile Leu  
 385 390 395 400  
 Ser Arg Gln Lys Lys Phe Ala Phe Val Arg Pro Arg Ser Ser Pro Arg  
 405 410 415  
 Gly Ser Lys Asp Pro Arg  
 420

&lt;210&gt; 41798

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41798

Val Val Leu Ile Ile Cys Asp Pro Phe Met Leu Phe Leu His Ala Arg  
 1 5 10 15  
 Asn Arg Leu Gly Ser Cys Leu Leu Val Phe Leu Gln Leu Leu Lys Leu  
 20 25 30  
 Met Thr Lys Leu Leu His Leu Lys Ser Leu Phe Gly Asp Pro Gly Val  
 35 40 45  
 Leu Arg Phe Asp Cys Leu Leu Glu Phe Thr Gln Phe Leu Val Lys Thr

## 18561

50                      55                      60  
 Gly Gln Phe Ser Ser Leu Val Leu Lys Leu Arg Leu Gly Asn Val Met  
 65                      70                      75                      80  
 Ser Ile Leu Arg Asn Gly Ile Arg Ser Thr Gln Met Ile His Gly  
                     85                      90                      95

<210> 41799  
 <211> 147  
 <212> PRT  
 <213> A.fumigatus

<400> 41799  
 Thr Ala Leu Ser Tyr Phe Leu Tyr Ser Leu Phe Asn Phe Thr Lys Met  
 1                      5                      10                      15  
 Ser Lys Ser Asp Tyr Ile Gln Asn Met Phe Gln Thr Lys Ser Phe Val  
                     20                      25                      30  
 Asp Arg Tyr Lys Tyr Thr Glu Lys Leu Thr Gly Leu Tyr Ala Gln Thr  
                     35                      40                      45  
 Leu Val Asp Tyr Ser Gly Val Ala Asn Thr Ser Gln Lys Pro Leu Val  
                     50                      55                      60  
 Val Leu Asp Asn Ala Cys Gly Ile Gly Ala Val Ser Ser Val Leu Asn  
 65                      70                      75                      80  
 His Thr Leu Gln Asp Glu Ala Lys Lys Thr Trp Lys Leu Thr Cys Gly  
                     85                      90                      95  
 Asp Leu Ser Glu Gly Met Leu Glu Thr Thr Lys Arg Arg Leu Gln Asp  
                     100                      105                      110  
 Glu Gly Trp Val Asn Ala Glu Thr Lys Ile Val Asn Ala Leu Asp Thr  
                     115                      120                      125  
 Gly Leu Pro Asp Gly His Tyr Thr His Val Phe Val Ala Phe Gly Met  
                     130                      135                      140  
 Leu Ile Asn  
 145

<210> 41800  
 <211> 132  
 <212> PRT  
 <213> A.fumigatus

<400> 41800  
 Val Gln His Ile Val Asn Trp Ile Pro Ile Met Lys Ala Ala Ile Glu  
 1                      5                      10                      15  
 Thr Ile Pro Gly Asn Leu Pro Phe Pro Thr Gln Lys Glu Phe Ile Ala  
                     20                      25                      30  
 Leu His Asn Ala Gly Trp Asp Ser Glu Ser Tyr Ile Gln Ser Glu Leu  
                     35                      40                      45  
 Glu Lys Leu Gly Phe Arg Asp Val Lys Val Ile Pro Val Pro Lys Glu  
                     50                      55                      60  
 Thr Ser Ile Pro Ile Asp Glu Phe Phe Glu Val Cys Met Met Ile Ile  
 65                      70                      75                      80  
 Pro Tyr Leu Leu Pro Lys Phe Trp Thr Glu Glu Gln Arg Glu Ser His  
                     85                      90                      95  
 Glu Lys Asp Val Pro Met Val Leu Arg Gln Tyr Leu Gln Asp Thr Tyr  
                     100                      105                      110  
 Gly Ala Asn Gly Gln Val Pro Leu Glu Ala Val Ala Leu Ile Thr Thr  
                     115                      120                      125  
 Gly Leu Lys Pro

## 18562

130

<210> 41801  
 <211> 324  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41801

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Leu Leu Ser Gln Pro Ser Glu Pro His Ala His Pro Leu Thr Lys Glu
1      5      10      15
Gln Met Glu Phe Gln Asp Arg Lys Arg Arg Leu Gly Val Ser Ala Thr
      20      25      30
Arg Ala His Ser His Ser Leu Thr Lys Phe Gly Ile Gln Asp Leu Asn
      35      40      45
Val Thr Thr Met Ala Asn Gln His Asn Phe Thr Glu Gln Gln Gln Ala
50      55      60
Gln Gln Pro Gln Ala Ala Gly Glu Ala Gln Asp Val Thr Ala Ala
65      70      75      80
Ala Gln Ser Thr Glu Gln Gln Pro Leu Ala Gln Met Ser Glu Leu Asp
      85      90      95
Arg Phe Gly Leu Ala Gly Leu Leu Arg Met Ile His Ser Asp Ser Pro
      100     105     110
Asp Val Ala Ser Leu Ala Val Gly Gln Asp Leu Met Thr Leu Gly Leu
      115     120     125
Asp Leu Asn Gln Pro Glu Tyr Val Val Ala Val Met Ala Gln Lys Leu
130     135     140
Ser Phe Ala Leu Leu Thr Ser Val Val Arg Arg Pro Leu His Thr Ser
145     150     155     160
Phe Ala Ser Pro Phe Val Ala Ser Met Ser Ala Val Pro Met Glu Gln
      165     170     175
Asn Phe Ser Leu Pro Ala Cys Tyr Asn Val Ala Asn Ile Gln Pro Leu
      180     185     190
Gln Thr Arg Ile Pro Ser Phe Ser Asp Glu Thr Leu Phe Tyr Ile Phe
195     200     205
Tyr Ser Met Pro Arg Asp Ile Met Gln Glu Leu Ala Ala Glu Glu Leu
210     215     220
Met Gly Arg Lys Trp Arg Tyr His Lys Ile Glu Arg Cys Trp Leu Thr
225     230     235     240
Arg Asp Glu Thr Tyr Pro Gly Pro Val Asp Val Glu Pro Arg Val Ser
      245     250     255
Glu Arg Gly Val Tyr Leu Ile Trp Asp Pro Thr Thr Trp Lys Lys Ile
260     265     270
Arg Val Cys Ile Leu Gly Pro Ile Leu Asn Pro Ser Trp Asn Ala Asn
275     280     285
Thr Trp Tyr Gln Gln Arg Glu Phe Ile Leu Arg Tyr Glu Asp Leu Asp
290     295     300
Asn Arg Leu Asp His Asn Arg Gly Leu Ala Arg Pro Leu Gly Phe Pro
305     310     315     320
His Gln Ala Ser

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<210> 41802  
 <211> 268  
 <212> PRT  
 <213> A.fumigatus

## 18563

&lt;400&gt; 41802

Ser Glu Ser Phe Met Ala Asp Phe Val Ala Asp Arg Ala Ser Asn Arg  
 1 5 10 15  
 Thr Leu Cys Val Gln Ser Ser Gln Asp Gly Met Arg Phe Ser Cys Asp  
 20 25 30  
 Gly Phe Met Asp Cys Arg Leu Leu Phe Thr Ala Ile Phe Gly Cys Leu  
 35 40 45  
 Arg Phe Cys Ala Thr Val Ala Gly Arg Glu Leu Thr Val Met Arg Arg  
 50 55 60  
 Asp Glu Ser Phe Asn Ser Ile Thr Gly Leu Asn Gly Ser Gly Lys Ser  
 65 70 75 80  
 Asn Ile Leu Asp Ala Ile Cys Phe Val Leu Gly Ile Thr Asn Met Ser  
 85 90 95  
 Thr Val Arg Ala Gln Asn Leu Gln Asp Leu Ile Tyr Lys Arg Gly Gln  
 100 105 110  
 Ala Gly Val Thr Lys Ala Ser Val Thr Ile Val Phe Asp Asn Arg Asp  
 115 120 125  
 Thr Ala Lys Ser Pro Ile Gly Phe Glu Glu Tyr Ala Thr Ile Ser Val  
 130 135 140  
 Thr Arg Gln Ile Val Leu Gly Gly Thr Ser Lys Tyr Leu Ile Asn Gly  
 145 150 155 160  
 His Arg Ala Gln Gln Gln Thr Val Gln Asn Leu Phe Gln Ser Val Gln  
 165 170 175  
 Leu Asn Ile Asn Asn Pro Asn Phe Leu Ile Met Gln Gly Arg Ile Thr  
 180 185 190  
 Lys Val Leu Asn Met Lys Pro Val Glu Ile Leu Ser Met Ile Glu Glu  
 195 200 205  
 Ala Ala Gly Thr Arg Met Phe Glu Asp Arg Arg Glu Lys Ala Val Lys  
 210 215 220  
 Thr Met Ser Lys Lys Glu Leu Lys Leu Arg Glu Ile Glu Gly Leu Leu  
 225 230 235 240  
 Lys Glu Glu Ile Glu Pro Lys Leu Glu Lys Leu Arg Ala Glu Lys Arg  
 245 250 255  
 Ala Phe Leu Asp Phe Gln Gln Thr Gln Asn Asp Leu  
 260 265

&lt;210&gt; 41803

&lt;211&gt; 521

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41803

Arg Leu Thr Arg Leu Val Val Ala His Asp Tyr Leu Arg Ser Gly Glu  
 1 5 10 15  
 Arg Leu Arg Val Thr Gly Glu Glu Cys Glu Ser Lys Arg Arg Arg Met  
 20 25 30  
 Gln Ala Leu Glu Glu Asn Ala Ala Lys Leu Lys Asn Glu Ile Ser His  
 35 40 45  
 Leu Glu Glu Asp Met Lys Arg Val Arg Ala Ala Arg Asp Lys Glu Leu  
 50 55 60  
 Arg Lys Gly Gly Lys Phe Gln Ala Leu Glu Asn Glu Val Lys Ser His  
 65 70 75 80  
 Ser His Glu Leu Val Arg Leu Thr Thr Gln Leu Asp Leu Lys Asn Ala  
 85 90 95  
 Ser Val Ser Glu Glu Gln Glu Lys Arg Glu Thr Val Arg Lys Thr Val  
 100 105 110

## 18564

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Lys Asp Leu Glu Lys Val Leu Lys Glu Lys Arg Glu Val Tyr Asp Lys
115 120 125
Leu Gln Ala Glu Tyr Asp Ala Ala Lys Ala Glu Leu Asp Ala Gln Thr
130 135 140
Ala Glu Val Glu Gln Lys Glu Glu Leu Leu Gln Thr Leu Gln Thr Gly
145 150 155 160
Val Ala Ser Lys Glu Gly Gln Glu Ser Gly Tyr Gln Gly Gln Leu Gln
165 170 175
Asp Ala Arg Asn Arg Ala Ser Ala Ala Ala Thr Glu Gln Glu Gln Ala
180 185 190
Lys Leu Lys Ile Ala His Leu Glu Lys Arg Ile Lys Glu Asp Glu Pro
195 200 205
Arg Ala Lys Lys Ala Lys Gln Gln Asn Ser Gly Leu Leu Asp Glu Leu
210 215 220
Glu Gly Leu Arg Ala Gln Ala Lys Arg Leu Glu Ala Glu Leu Thr Arg
225 230 235 240
Leu Gly Phe Glu Pro Gly Lys Glu Glu Ala Ile Tyr Gln Glu Gln Ser
245 250 255
Glu Leu Gln Arg Asp Ile Arg Asp Leu Arg Glu Arg Ala Asp Gly Leu
260 265 270
Lys Arg Lys Val Ala Asn Val Asp Phe Thr Tyr Ala Asp Pro His Pro
275 280 285
Asn Phe Asp Arg Ser Lys Val Lys Gly Leu Val Ala Gln Leu Phe Thr
290 295 300
Leu Asp Lys Asp Lys Val Gln Ala Ala Thr Ala Leu Glu Ile Cys Ala
305 310 315 320
Gly Gly Arg Leu Tyr Asn Val Val Val Asp Thr Ala Glu Thr Gly Thr
325 330 335
Gln Leu Leu Gln Asn Gly Lys Leu Arg Lys Arg Val Thr Ile Ile Pro
340 345 350
Leu Asn Lys Ile Ser Ser Phe Arg Ala Ser Ala Glu Lys Ile Ala Ala
355 360 365
Ala Gln Asn Ile Ala Pro Gly Lys Val Asp Leu Ala Leu Ser Leu Ile
370 375 380
Gly Tyr Asp Glu Glu Val Thr Ala Ala Met Asn Tyr Val Phe Gly Asn
385 390 395 400
Thr Leu Ile Cys Glu Asp Ala Asp Thr Ala Lys Arg Val Thr Phe Asp
405 410 415
Pro Ala Val Arg Ile Met Ser Val Thr Leu Glu Gly Asp Val Tyr Asp
420 425 430
Pro Ser Gly Thr Leu Ser Gly Gly Ser Ser Pro Asn Ser Ser Gly Val
435 440 445
Leu Val Thr Leu Gln Lys Leu Asn Glu Ile Thr Arg Glu Met Arg Ser
450 455 460
Lys Glu Arg Arg Leu Ala Ala Leu Glu Asp Thr Met Arg Lys Glu Lys
465 470 475 480
Lys Lys Leu Asp Thr Val Arg Ala Val Lys Gln Glu Leu Asp Leu Lys
485 490 495
Ser His Glu Ile Lys Leu Thr Glu Glu Gln Ile Ser Asn Asn Ser Ser
500 505 510
Ser Ser Val Gly Gly Pro Thr Gly Ile
515 520

```

&lt;210&gt; 41804

&lt;211&gt; 135

&lt;212&gt; PRT

## 18565

&lt;213&gt; A.fumigatus

&lt;400&gt; 41804

```

Leu Trp Ser Ser Ser Asp Phe Gly Gln Ile Ile Gln Ala Val Glu Glu
1          5          10          15
Met Lys Ser Asn Ile Glu Gln Leu Lys Lys Asp Ile Ser Asp Ala Lys
          20          25          30
Thr Arg Gln Ala Glu Ala Met Lys Asp Ile Lys Arg Ile Glu Lys Asp
          35          40          45
Met Ser Glu Phe Asn Asn Asn Lys Asp Ser Lys Leu Ala Glu Leu Gln
          50          55          60
Ala Thr Leu Asp Ser Leu Lys Lys Lys Leu Ala Lys Asn Ser Asn Ser
65          70          75          80
Val Lys Ala Leu Gln Lys Glu Leu Gln Ile Ser Arg Leu Glu Ser Glu
          85          90          95
Gln Val Gly Ser Asp Leu Ser Ala Ala Glu Glu Gln Tyr Ala Glu Ala
          100          105          110
Glu Asn Thr Leu Lys Ala Gln Met Glu Glu Ile Gln Ser Met Lys Arg
          115          120          125
Glu Gln Ala Arg Val Lys Val
          130          135

```

&lt;210&gt; 41805

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41805

```

Phe Phe Arg Asp Phe Pro Ser Leu Ser Gly Ala Pro Gln Gln Ser Gln
1          5          10          15
Thr Pro Asn Pro Gly Leu Val Trp Gly Gln Arg Ala Leu Gln Gln Thr
          20          25          30
Pro Gln Arg Gln Gln His Pro Thr Ser Gln Ala Pro Ser Arg Ala Pro
          35          40          45
Gln Thr Gln Ser His His Pro Gln Gln Gln Ser Gln Pro Ser His Asp
          50          55          60
Asp Val Phe Leu Ser Gly Ala Gln Phe Ala Asn Arg Leu Asp Asp Phe
65          70          75          80
Arg Asn Gly Gly Gln Gly Ile Ser Gly Gln Leu Gly Gly Ser Ala Gln
          85          90          95
Pro Gln Thr Gly Asn Ile Asp Glu Phe Pro Pro Leu Gly Arg Asn Val
          100          105          110
Ala Ala Asp Leu Gly Gln Asp Arg Arg Glu Ser Leu Met Gln Ser Ala
          115          120          125
Gly Leu Gly Asn Phe Gly Gly Thr Met Pro Phe Thr Gly Ala Asn Gln
          130          135          140
Asn Gln Ser Ala Gln Asn Arg Thr Met Ile Gly Gly Ser Ile Asn Gly
145          150          155          160
Gln Asp Thr Ser Arg Met Met Ser Pro Thr Asn Ala Gly Ser Thr Gly
          165          170          175
Met Phe Phe Phe Leu Ile Phe Phe Asp Gly Glu Gln Gly Ala Asp Cys
          180          185          190
Phe Leu Ser His Arg Asn Leu Thr Leu Thr Arg
          195          200

```

&lt;210&gt; 41806

<211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 41806  
 Asp Ala His Asp Ile Ala Gln Ala Gln Leu Glu Asp Glu Arg Ala Lys  
 1 5 10 15  
 Leu Thr Gly Phe Asp Glu Glu Leu Arg Glu Leu Glu Glu Ala Ile Lys  
 20 25 30  
 Ser Lys Asn Ser Arg Ile Thr Glu Glu Gly Leu Glu Met Gln Lys Leu  
 35 40 45  
 Gly His Gln Leu Glu Lys Leu Gln Lys Asp Gln Gln Ala Ala Ala Gln  
 50 55 60  
 Thr Val Ala Arg Met Glu Glu Glu His Glu Trp Ile Ala Asp Asp Lys  
 65 70 75 80  
 Asp Asn

<210> 41807  
 <211> 200  
 <212> PRT  
 <213> A.fumigatus

<400> 41807  
 Arg Ile Pro Ser Ser Gln Leu His Ser Asn Arg Leu Lys Lys Glu Ala  
 1 5 10 15  
 Ala Arg Ala Glu Ala Thr Phe Lys Ser Glu Lys Ala Lys Ala Asp Lys  
 20 25 30  
 Ala Met Lys Asn Arg Glu Phe Gln Ile Ala Arg Ile His Ala Ala Ser  
 35 40 45  
 Ala Val Arg Glu Lys Arg Arg Gln Val Thr Leu Arg Ala Glu Ala Ala  
 50 55 60  
 Arg Ala Asp Val Ile Ile Asn Glu Leu Lys Ala Ala Gln Ser Thr Arg  
 65 70 75 80  
 Asp Thr Ser Arg Thr Leu Ala Leu Ala Ser Arg Gly Leu Asp Ala Ala  
 85 90 95  
 Ser Lys Ser Val Asn Leu Glu Asn Leu Val Ser His Ala Asn Asn Phe  
 100 105 110  
 Leu Ala Arg Ser Glu Asp Phe Lys Ile Ala Ser Ser Ala Ile Glu Asp  
 115 120 125  
 Val Ala Gln Gly Val Ser Met Gln Glu Tyr Gly Ala Glu Gly Glu Ala  
 130 135 140  
 Glu Val Asp Arg Leu Met Glu Gln Leu Ala Asp Glu Ala Gly Val Asp  
 145 150 155 160  
 Met Arg Leu Ala Leu Asp Ala Asp Ala Ala Pro Lys Glu Asp Val Lys  
 165 170 175  
 Glu Gln Lys Gln Ala Asp Ser Glu Leu Glu Asp Gly Leu Gly Ala Arg  
 180 185 190  
 Leu Arg Ala Leu Arg Ala Ala Ser  
 195 200

<210> 41808  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus



&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (9), (15), (39), (49), (61), (75)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41808

```

Tyr Met Leu Thr Ser Ala Cys Ser Xaa Arg Lys Gly Leu Asp Xaa Ala
1           5           10           15
Leu His Gln Ile Glu Glu Ala Ile Lys Arg Pro Lys Thr Asp Ala Ala
          20           25           30
Gly Ser Asp Ala Ala Arg Xaa Leu Ile Ser Asp Leu Gln Asp Leu Leu
          35           40           45
Xaa Arg Thr Gln Gly His Ser Ala Arg Ser Glu Val Xaa Glu Thr Ser
          50           55           60
Asp Asp Pro Asp Gln Ser Arg Thr Lys Ser Xaa
65           70           75

```

&lt;210&gt; 41809

&lt;211&gt; 443

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41809

```

Ser Pro Cys Leu Gly Thr Ser Ala Pro Ala Leu Pro Leu Leu Thr Val
1           5           10           15
Ser Pro Ala Asp Thr Ser Leu Lys Ala Pro Glu Thr Ile Val Gln Glu
          20           25           30
Thr Lys Thr Glu Glu Lys Asn His Leu Arg Lys Gly Ser His Gly Asp
          35           40           45
Arg Ser Tyr Pro Phe Gln Arg Pro Thr Cys Leu Gln Gly Met Phe Tyr
          50           55           60
Arg Val Arg Arg Ser Gln Leu Gly Gln Leu Thr Tyr Thr Ser Gln Arg
          65           70           75           80
Lys Arg Ala Lys Thr Glu Asp Glu Lys Glu Gln Arg Arg Ile Glu Arg
          85           90           95
Val Leu Arg Asn Arg Ala Ala Ala Gln Thr Ser Arg Glu Arg Lys Arg
          100          105          110
Leu Glu Met Glu Lys Leu Glu Asn Glu Lys Ile Gln Met Glu Gln Gln
          115          120          125
Asn Gln Phe Leu Leu Gln Arg Leu Ser Gln Met Glu Ala Glu Asn Asn
          130          135          140
Arg Leu Ser Gln Gln Leu Ala Gln Leu Thr Ala Glu Val Arg Asn Ser
          145          150          155          160
Arg Asn Ser Thr Pro Lys Pro Gly Ser Pro Ala Thr Ala Ser Pro Thr
          165          170          175
Leu Thr Pro Thr Leu Phe Lys Gln Glu Gly Asp Glu Leu Pro Leu Glu
          180          185          190
Arg Ile Pro Phe Pro Thr Pro Ser Ile Thr Asp Tyr Ser Pro Thr Leu
          195          200          205
Lys Pro Ser Ser Leu Ala Glu Ser Ser Asp Val Thr Gln His Pro Ala
          210          215          220
Ala Val Leu Cys Asp Leu Gln Cys Gln Leu Ala Asp Ser Lys Asp Leu
          225          230          235          240
Glu Val Pro Ser Arg Phe Leu Thr Ser Ala Leu Ala Trp Asn Met Thr
          245          250          255
Leu Gln Met Thr Leu Gln Leu Leu Phe Leu Thr Met Thr Ser Thr Ala

```

## 18568

260 265 270  
 Tyr Ser Thr Val Ile His Pro Leu Ser Gln Ile Leu Arg Ser Leu Lys  
 275 280 285  
 Thr Gly Ser Pro Leu Thr Phe Ser Thr Gln Glu Ile Tyr Gln His Phe  
 290 295 300  
 His Leu Ile Leu Trp Leu Ile Ser Thr Pro Ser Leu Ser Pro Ser Lys  
 305 310 315 320  
 Ala Ser Asn Arg Pro Thr Val Phe Arg Met Arg Leu Leu Thr Arg Leu  
 325 330 335  
 Leu Ala Cys Asn Pro Ala Leu Ala Arg Pro Leu Arg Asp Ala Thr Gly  
 340 345 350  
 Arg Ala Leu Gln Leu Ala Val Ser Glu Asn Val Ser Arg Gly Thr Trp  
 355 360 365  
 Ser Ala Gly Asp Asp Ala Gly Arg Leu His Trp Glu Ser Leu Leu Thr  
 370 375 380  
 Leu Val Trp Ala Ile Asp Arg Phe Glu Arg Thr Arg Gly Arg Gly Arg  
 385 390 395 400  
 Ile Leu Phe Ala Lys Phe Glu Arg Gly Ala Arg Arg Asp Thr Leu Gly  
 405 410 415  
 Asn Arg His Arg Ser Pro Arg Ser Ser Trp Ser Ser Lys Arg Leu Ser  
 420 425 430  
 Glu Thr Leu Thr Ser Leu Met Asp Lys Glu Arg  
 435 440

&lt;210&gt; 41810

&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41810

Val Ser Phe Pro Arg Ser Thr Leu Trp Glu His Ser Ser Gln Val Gln  
 1 5 10 15  
 Pro Lys Lys Met Ala Pro Ser His Ser Phe Pro Leu Ala Ser Leu Ser  
 20 25 30  
 Leu Ile Leu His Gln Thr Ser Cys Ala Phe Ala Ala Pro Trp Ile Val  
 35 40 45  
 Thr Lys Val Tyr Glu Gln Asp Val Tyr Thr Glu Asp Tyr Gly Tyr Arg  
 50 55 60  
 Thr Thr Thr Arg Thr Leu Ile Asp Glu Ile Thr Pro Thr Ala Ser Pro  
 65 70 75 80  
 Met Pro Ala Ala Leu Ser Thr Ala Thr His Val Thr Ser Asp Ser Tyr  
 85 90 95  
 Asp Asp Ala Val Thr Val Val Gln Val Leu Tyr Pro Ser Gly Ala Gly  
 100 105 110  
 Ile Glu Ser Thr Tyr Lys Tyr Tyr Ile Tyr Gln Asp Ser Asn Ile Ile  
 115 120 125  
 Thr Gln Tyr Phe Val Asp Met Val Leu Thr Ala Pro Thr Ser Cys Ser  
 130 135 140  
 Ser Gln Trp Thr Val Thr Thr Ala Val Pro Val Tyr Val Pro Asn Ala  
 145 150 155 160  
 Ile Glu Asp Ala Leu Leu Ala Thr Ser Met Ser Thr Ser Tyr Ser Val  
 165 170 175  
 Asp Asp Arg Gln Pro Phe Gln Pro Thr Thr Tyr Thr Arg Ala Leu Ala  
 180 185 190  
 Phe Ile Asp Pro Thr Gln Leu Pro Ala Ser Ser Leu Asn Arg Leu Ser  
 195 200 205

## 18569

```

Asn Ser Tyr Gln His Thr Ile Tyr His Glu Tyr Gly Cys Tyr Asp Ser
210                215                220
Ser Ala Asp Ser Gly Ser Ser Tyr Ser Tyr Tyr Asp Gly Ser Asp Gly
225                230                235                240
Gly Ser Trp Leu Tyr Asp Arg Tyr Tyr Tyr Gly Val Ile Ser Pro Leu
                245                250                255
Gly Ile Leu Leu Ala Cys Ile Leu Gly Trp Phe Gly Val Trp Leu Ile
                260                265                270
Ile Gly Leu Ile Glu Ser Trp Phe Gln Phe Gln Arg Leu Met Arg Gly
                275                280                285
Trp Gln Ala Arg Arg Gly Phe Pro Ile Ser Trp Cys Met Leu Ala Pro
290                295                300
Ile Val Ser Cys Leu Leu Leu Leu Phe Cys Arg Lys Gly Phe Gln Ala
305                310                315                320
Arg Thr Phe Glu Glu Ala Gln Val Leu Gln Glu Lys Trp Gln Gln Met
                325                330                335
Gly Phe Trp Arg Lys Val Gly Leu Trp Leu Arg Trp Gly Phe Gly Phe
340                345                350
Ser Tyr Pro Pro Met Leu Gly Pro Ala Pro Val Lys Val Glu Arg Pro
355                360                365
Ser Lys Arg Pro Val Ala Ala Thr Ala Pro Leu Leu Gly Val Ser Pro
370                375                380
Pro Arg Ser Val Met Ser Asp Val His Ser Asp Ser Gly Ser Asn Arg
385                390                395                400
Gly Asp Ser Ala Ala Ser Gly Pro Ala Met Ala Tyr Ile Pro Thr Pro
                405                410                415
Gly Gln Thr Leu Gln Val Pro Pro Ser Ile Pro Ser Asn Arg Gln Gln
                420                425                430
Gln Ala Pro Asp Gln Pro Ile Pro Glu Val Pro Ser Thr Thr Ser Gly
435                440                445
Ala Leu Pro Ala Asn Thr His Ala Thr Glu Thr Ala Ser Glu Pro Arg
450                455                460
Thr Ser
465

```

&lt;210&gt; 41811

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41811

```

Ile Ser Thr His Ile Pro Phe Leu Leu Pro Ser Ser Phe Phe Phe Phe
1                5                10                15
Phe Phe Phe Phe Leu Phe Leu Phe Leu Phe Phe Ser Phe Phe Phe Phe
20                25                30
Leu Ala Pro Arg Lys Tyr Gln Val Cys Thr Thr Pro Tyr Ile Ala Asp
35                40                45
Leu Pro Gly Leu Ala Asp Leu Asn Gly Ala Tyr Val Asp Ala Glu Ile
50                55                60
Pro Gly Asn Gly Arg Pro His Asn Ser Leu Met Glu Asn Ile Val Val
65                70                75                80
Asp Tyr Phe Arg Gln
85

```

&lt;210&gt; 41812

&lt;211&gt; 60

18570

<212> PRT  
<213> A.fumigatus

<400> 41812

Arg	Pro	Asn	Asp	Arg	Arg	Asp	Leu	Thr	Gly	Asp	Phe	His	Ile	Leu	Asp
1				5					10					15	
Val	Ser	Lys	Glu	Glu	Ala	Arg	Val	Thr	Phe	Ile	Gln	Gly	Ser	Phe	Val
			20					25					30		
Trp	Leu	Ala	Arg	His	Asp	His	Gln	Ile	Ala	Glu	Tyr	Ser	Ser	Pro	Arg
		35					40					45			
Leu	Glu	Ile	Ile	Gln	Tyr	Val	Thr	His	Val	Arg	Leu				
	50					55					60				

<210> 41813  
<211> 348  
<212> PRT  
<213> A.fumigatus

<400> 41813

Leu	Ser	Trp	Met	Lys	Tyr	Gln	Arg	Trp	Leu	Leu	Thr	Arg	Asn	Asn	Leu
1				5					10					15	
Trp	Ala	Pro	Lys	Arg	Pro	Ser	Val	Val	Ala	Ser	Thr	Asn	Gln	Pro	Gly
			20					25					30		
Ser	Ile	Ser	Leu	Ile	Ser	Ser	Arg	Asp	Gly	Arg	Ser	Val	Ser	Thr	Thr
		35					40					45			
Ser	Gln	Ser	Arg	Phe	His	Pro	Leu	Lys	Pro	Leu	Arg	Glu	Val	Lys	Ile
	50					55					60				
Asp	Glu	Phe	Arg	Arg	Ser	Tyr	Phe	His	Pro	Glu	Leu	Pro	Val	Leu	Leu
65					70					75				80	
Pro	Tyr	Arg	His	Phe	Arg	Asp	Leu	Pro	Ala	Cys	Glu	Arg	Trp	Phe	Gln
			85						90					95	
Val	Val	Pro	Ser	Asn	Gly	His	Asp	Arg	Arg	Leu	Asn	Thr	Ala	Tyr	
			100				105					110			
Leu	Gln	Glu	His	Gly	Gly	Asp	Ala	Phe	Val	Pro	Leu	Glu	Leu	Thr	Gln
		115				120						125			
Ser	Pro	Ala	Asp	Thr	Thr	Ala	Pro	Asp	Ala	Thr	Val	Pro	Glu	Ser	Asn
	130					135					140				
Glu	Leu	Ser	Phe	Gln	Gln	Phe	His	Ala	Pro	Leu	Ser	Leu	Phe	Leu	Asp
145					150					155				160	
Trp	Met	Arg	Thr	Ala	Glu	Leu	Gln	Ser	Gln	Ala	Thr	Arg	Leu	Tyr	Leu
				165					170					175	
Ala	Gln	Cys	Gln	Leu	Leu	Asp	Leu	Pro	Pro	Val	Leu	Arg	Asp	Asp	Phe
			180				185						190		
Pro	Thr	Pro	Glu	Leu	Val	Leu	Lys	Ala	Gly	Lys	Gly	Asp	Ile	Tyr	Asp
		195					200					205			
Thr	Asn	Val	Trp	Ile	Gly	His	Pro	Pro	Thr	Tyr	Thr	Pro	Leu	His	Arg
	210					215						220			
Asp	Pro	Asn	Pro	Asn	Leu	Phe	Val	Gln	Ile	Ala	Gly	His	Lys	Val	Val
225					230					235				240	
Arg	Leu	Leu	Ala	Pro	Asp	Ala	Gly	Lys	Arg	Val	Phe	Ala	Ser	Val	Arg
			245							250				255	
Arg	Arg	Leu	Gly	Arg	Ser	Gly	Asp	Arg	Glu	Ala	Ala	Ala	Phe	Arg	Gly
			260					265					270		
Glu	Glu	Met	Met	Gln	Gly	Gln	Glu	Arg	Thr	Leu	Leu	Glu	His	Ala	Val
		275					280					285			
Trp	Asp	Asp	Ala	Asp	Ser	Asp	Gly	Thr	Asn	Asn	Val	Leu	Asp	Phe	Gly

## 18571

290                      295                      300  
 Tyr Glu Ala His Leu Glu Thr Gly Asp Gly Leu Phe Ile Pro Lys Gly  
 305                      310                      315                      320  
 Trp Trp His Ser Ile Lys Gly Val Gly Glu Gly Val Thr Ala Ser Val  
                     325                      330                      335  
 Ser Phe Val Tyr Pro Pro Val Gly Tyr Ala Leu Leu  
                     340                      345

<210> 41814  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

<400> 41814  
 Ser Gly Lys Met Pro Ser Ser Val Ala Arg Ile His Lys Arg His Ser  
 1                      5                      10                      15  
 Tyr Gly Lys Asp Ala His Thr Tyr Ser Pro Val Leu Val Ile Gly Ala  
                     20                      25                      30  
 Gly Val Ser Gly Ile Ala Thr Gly Cys Arg Leu Lys Glu Ala Leu Gly  
                     35                      40                      45  
 Phe Asp Gln Phe Arg Ile Phe Glu Arg Gln Ser Gly Ile Gly Gly Thr  
                     50                      55                      60  
 Trp Trp Ile Asn Arg Tyr Pro Gly Ala Ala Cys Asp Val Tyr Gly His  
 65                      70                      75                      80  
 Leu Lys Ala Phe Met Leu Cys Arg Ser Asp Ser Phe Cys  
                     85                      90

<210> 41815  
 <211> 335  
 <212> PRT  
 <213> A.fumigatus

<400> 41815  
 Val Phe Ile Ser Pro Ala Leu Leu Tyr Ser Phe Ser Phe Ala Pro Lys  
 1                      5                      10                      15  
 Lys Asp Trp Thr Thr Leu His Pro Pro Gly Pro Glu Ile Val Gln Tyr  
                     20                      25                      30  
 Leu Ala Asp Val Cys Glu Lys Tyr Gln Ile Val Asp Lys Ile Gln Leu  
                     35                      40                      45  
 Asn Thr Ala Val Lys Glu Met Arg Trp Leu Glu Asp Ala Glu Glu Trp  
                     50                      55                      60  
 Gln Val Thr Leu Leu His Leu Val Pro Gly Thr Gly Asp Leu Ser Glu  
 65                      70                      75                      80  
 Gly Glu Arg Asn Ala Arg Ile Ser Lys Glu Gly Glu Arg Ser Val Tyr  
                     85                      90                      95  
 Val Lys Thr Glu Ile Val Arg Ala Lys Ile Val Val Ser Gly Val Gly  
                     100                      105                      110  
 Val Leu Val Glu Pro Lys Lys Trp Pro Glu Thr Val Pro Gly Ile Glu  
                     115                      120                      125  
 Thr Phe Glu Gly Glu Val Val His Thr Ala Arg Trp Lys Ser Asp Leu  
                     130                      135                      140  
 Asp Leu Cys Gly Lys Asp Val Val Ile Ile Gly Ser Gly Cys Ser Ala  
 145                      150                      155                      160  
 Thr Gln Val Val Ser Glu Leu Thr Lys Pro Glu Tyr Lys Ile Arg Ser  
                     165                      170                      175  
 Ile Thr Gln Leu Met Arg Ser Pro Ala Trp Phe Met Pro Asp Phe Leu

## 18572

		180					185				190				
Thr	Pro	Lys	Ser	Leu	Lys	Lys	Trp	Glu	Lys	Tyr	Thr	Pro	Pro	Leu	Phe
		195					200					205			
Lys	Asn	Val	Pro	Gly	Leu	Ala	Phe	Ala	Ala	Arg	Ala	Leu	Leu	Phe	Leu
		210				215						220			
Leu	Leu	Glu	Trp	Asp	Phe	Leu	Thr	Ile	Phe	Lys	Asp	Asn	Lys	Tyr	Ser
225					230					235					240
Arg	Arg	Asn	Arg	Ser	Arg	Ile	Glu	Arg	Lys	Phe	Leu	Glu	His	Met	Arg
				245					250					255	
Ala	Thr	Ala	Pro	Glu	Lys	Tyr	His	Asp	Ile	Leu	Ile	Pro	Asn	Tyr	Ser
			260				265						270		
Leu	Gly	Cys	Lys	Arg	Arg	Ile	Val	Glu	Ser	Asn	Tyr	Tyr	Ala	Ser	Ile
		275					280					285			
His	Ala	Pro	Asn	Phe	Glu	Leu	Thr	Thr	Lys	Pro	Leu	Ile	Gly	Val	Gln
	290					295					300				
Ala	Arg	Ser	Val	Leu	Leu	Gly	Pro	Asp	Arg	His	Tyr	Pro	Ala	Gly	Lys
305					310				315						320
Ser	Gly	Val	Asn	Gly	Trp	Gly	Glu	Thr	Asp	Ser	Gly	Gly	Cys	His	
			325						330				335		

&lt;210&gt; 41816

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41816

Phe	Trp	Pro	Asn	Gly	Tyr	Glu	Thr	Asn	Lys	Phe	Leu	His	Pro	Leu	Pro
1				5					10					15	
Val	Phe	Gly	Arg	Arg	Gly	Lys	Thr	Leu	Asp	Glu	Ile	Trp	Glu	Glu	Arg
			20					25					30		
Gly	Gly	Ala	Gln	Ala	Tyr	Leu	Gly	Ile	Ala	Met	Asp	His	Met	Pro	Asn
		35				40						45			
Leu	Phe	Leu	Ser	Phe	Gly	Pro	Asn	Thr	Ala	Thr	Gly	His	Ser	Ser	Val
		50				55					60				
Ile	Phe	Ala	Val	Glu	Asn	Ala	Val	Asn	Tyr	Ser	Leu	Asn	Phe	Ile	Lys
65					70				75						80
Pro	Ile	Leu	Glu	Gly	Arg	Val	Ser	Trp	Phe	Glu	Val	Lys	Glu	Asn	Ala
				85					90					95	
Glu	Arg	Asp	Trp	Thr	Asp	Lys	Val	Gln	Arg	Ser	Leu	Gln	Gly	Thr	Val
			100					105					110		
Phe	Arg	Arg	Gly	Ala	Cys	Thr	Ser	Trp	Tyr	Gln	Thr	Asp	Glu	Gly	Trp
		115					120					125			
Asn	Ser	Ser	Thr	Tyr	Pro										
		130													

&lt;210&gt; 41817

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41817

Gln	Ala	Thr	Tyr	His	Phe	His	Thr	Asp	Asp	Asp	Ala	Met	Ala	Tyr	Arg
1				5					10					15	
Val	Ile	Gly	Phe	Ala	Ala	Arg	Met	Cys	Leu	Glu	Leu	Gly	Leu	His	Arg
		20						25					30		
Arg	Glu	Ala	Leu	Met	Lys	Ser	Phe	Pro	Asn	Glu	Asp	Gln	Trp	Ala	Asp

## 18573

35 40 45  
 Val Thr Lys Val Phe Trp Thr Ile Tyr Ser Leu Asp Arg Arg Trp Ser  
 50 55 60  
 Leu Gly Thr Gly Leu Pro Phe Val Ile Gln Asp Glu Asp Val Asp Pro  
 65 70 75 80  
 Asn Leu Pro Glu Pro Val Ser Gln Lys Pro Gly Thr Thr Arg Val Thr  
 85 90 95  
 His Val

<210> 41818  
 <211> 383  
 <212> PRT  
 <213> A.fumigatus

<400> 41818  
 Arg Arg Phe Cys Tyr Ser Asn Glu Cys Lys Arg Arg Lys Ile Lys Cys  
 1 5 10 15  
 Asn Gly Gln Val Pro Cys Gln Arg Cys Gly His Leu Lys Leu Glu Cys  
 20 25 30  
 Gln Tyr Tyr Val Ser Ser Gly Cys Phe Arg Arg Ser Met Thr Phe Glu  
 35 40 45  
 Phe Leu Trp Arg Glu Asn Asp Cys Ala Ile Gly Arg Tyr Ala Pro Asn  
 50 55 60  
 Cys Cys Asn Asn Asn Phe Lys Asp Ser Glu Tyr Val Leu Ser Pro Leu  
 65 70 75 80  
 Ser Leu Ile Trp Leu Thr Leu Leu Ser Val Arg Gln Leu Thr Ser Val  
 85 90 95  
 Val Arg Asp Arg Glu Phe Arg Ser Met Lys Asp Gln Ile Thr Thr Leu  
 100 105 110  
 Gln Glu Gln Val Asn Ser Leu Phe Thr Ser Leu Asn Asp Leu Arg Asn  
 115 120 125  
 Gln Arg Ser Ser Leu Asp Ser Pro Asn Leu Glu Asp Leu Ser Arg Asp  
 130 135 140  
 Gly Ser Gln Ser Val Phe Thr Ser Met His Ala Ala Thr Val Arg Pro  
 145 150 155 160  
 Arg Val Arg His Leu Arg Phe His Gly Pro Thr Ser Ser Ala Phe Asn  
 165 170 175  
 Phe Asp Val Ala Arg Ser Ser Leu Gln Thr Met Gly Ile Ala Pro Ala  
 180 185 190  
 Glu Glu Val Met Asn Asp Asp Met Thr Thr Ala Gln Ala Thr Pro Ala  
 195 200 205  
 Ala Ser Pro Pro Ala Gln Gln Ala Val Phe Thr Gln Ser Ile His Pro  
 210 215 220  
 Thr Lys Asp Pro Ile Trp Ala Ile Lys Arg Glu Glu Ala Leu Arg Leu  
 225 230 235 240  
 Cys His Val Tyr Glu Glu Glu Val Gly Ile Met Tyr Pro Leu Val Asp  
 245 250 255  
 Ile Glu Lys Val Thr Asn Gln Val Asn Leu Leu Tyr Thr Phe Met Glu  
 260 265 270  
 Ala Ala Leu Arg Thr Gly Phe Ala Gln Arg Ala Phe Pro Gly Pro Asp  
 275 280 285  
 Ser Leu Leu Asp Asp Asn Thr Ile Leu Leu Lys Met Ile Leu Ala Ile  
 290 295 300  
 Thr Leu Ile Val Glu Gly Ser Gly Arg Ser Asp Leu Gly Gln Arg Leu  
 305 310 315 320

## 18574

Phe Leu Ser Val Lys Pro Ile Ile Glu Ala Lys Leu Trp Gly Pro Ile  
                           325                          330                          335  
 Asp Ile Lys Thr Ile Gln Leu Phe Gly Met Val Val Cys Ile Val Ile  
                           340                          345                          350  
 Leu Met Ile Ser Asp Pro Pro Gly Thr Leu Thr Lys Cys Ser Asp Arg  
                           355                          360                          365  
 Gln Leu Thr Ile Ser Thr Arg Met Thr Met Arg Trp Pro Thr Glu  
                           370                          375                          380

&lt;210&gt; 41819

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41819

Leu Xaa Gly Gln Ala Ser Val Phe His Trp Tyr Cys Leu Leu Val Gly  
 1                          5                          10                          15  
 Gln Phe Ala Val Leu Ser Ala Pro Leu Tyr Asn Phe Phe His Ile Pro  
                           20                          25                          30  
 Leu Ile Ile Lys Met Tyr Pro Val Tyr Ser Ile Ser Ser Val Pro Ile  
                           35                          40                          45  
 Thr Ser Phe Ala Asp Ser Ser Ala Pro Asp Leu Gln Ala Ser Asp Lys  
                           50                          55                          60  
 Thr Val Met Phe Ala  
 65

&lt;210&gt; 41820

&lt;211&gt; 563

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41820

Met Leu Leu Pro Tyr Glu Asp Thr Ala Ser Gln Ile Val Glu Ile Ile  
 1                          5                          10                          15  
 Trp Pro Leu Ser Ala Val Ala Ser Arg Ser Asp Ser Thr Thr Gly Cys  
                           20                          25                          30  
 Lys Gly Val Leu Pro Leu Arg Thr Phe Ile Gln Glu Thr Leu Arg Arg  
                           35                          40                          45  
 Ser Arg Thr Ser Tyr Ser Thr Leu Gln Val Ala Leu Tyr Tyr Leu Ile  
                           50                          55                          60  
 Lys Ile Lys Glu His Val Pro Arg Tyr Asn Ala Glu Gln Glu Gln Pro  
 65                          70                          75                          80  
 Pro Arg Ser Lys Pro Val Cys Arg Ala Met Gln Cys Gly Arg Arg Met  
                           85                          90                          95  
 Phe Leu Ala Ala Leu Ile Leu Ala Ser Lys Tyr Leu Gln Asp Arg Asn  
                           100                          105                          110  
 Tyr Ser Ala Arg Ala Trp Ser Lys Ile Ser Gly Leu Asn Thr Ala Glu  
                           115                          120                          125  
 Ile Asn Gln Asn Glu Leu Met Phe Leu Glu Ala Ile Gly Trp Arg Leu  
                           130                          135                          140  
 His Val Thr Glu Ala Thr Phe Gln Arg Trp Thr Asp Ile Val Leu Lys



## 18575

145 150 155 160  
 Tyr Thr Pro Gly Ala Gly Gly Pro Phe Thr Gly Glu Gly Gln Cys Trp  
 165 170 175  
 Arg Thr Val Ile Pro Lys Leu Thr Pro Glu Leu Asp Thr Val Asp Val  
 180 185 190  
 Glu Leu Ser Thr Pro Ser Ser Met Val Gly Phe Glu Ser Gly Leu Val  
 195 200 205  
 Ser Asp Ser Pro Ser Pro Arg Ser Pro Ser Thr Gly Glu His Pro Ser  
 210 215 220  
 Pro Ser Ser Ile Phe Asn Gln Gly Ser Ala Tyr Gln Arg Tyr Ser Pro  
 225 230 235 240  
 Val Ser Ala Gly Ala Ser Ser Leu Pro Ser Met Pro Arg Pro Pro Met  
 245 250 255  
 Leu Pro Thr Pro Gln Leu Thr Pro Gln Thr Val Val Ala Thr Ala Pro  
 260 265 270  
 Ala Ala Ser Gly Ser Thr Phe Cys Ala Arg Arg Ala Ser Ile Cys Ala  
 275 280 285  
 Ala Met Ser Gln Val Gln Asn Val Cys Met Ala Arg Ser Thr Leu Asp  
 290 295 300  
 Leu Arg Pro Ser Leu Ala Phe Cys Gln Lys Ala Asn Thr Phe Asp Gly  
 305 310 315 320  
 Tyr Pro Thr Val Val Arg Arg Ser Ser Leu Ala Arg Ser Thr Ser Ser  
 325 330 335  
 Ala Ser Ser Pro Glu Ser Met Ile Ser Asp Val Ser Thr Leu Ser Ser  
 340 345 350  
 Ser Ser Leu Ser Ser Cys Ser Ser Gly Ser Gly Pro Val Ser Ile Leu  
 355 360 365  
 Gly Thr Ser Ala Ser Thr Lys Pro Arg Leu Ala Met Lys Ala Thr His  
 370 375 380  
 Arg Cys Thr Ser Asn Ser Leu Lys Glu Gly Arg Lys Ala Leu Ala Ile  
 385 390 395 400  
 Ala Ser Pro Ile Asp Glu Gly Pro Leu Gly Glu Ile Tyr Ser Ser Pro  
 405 410 415  
 Glu Thr Tyr Leu Gly Ala Ala Gly Gln Val Pro Asp Leu Ser Asn Ile  
 420 425 430  
 Ser Leu Gly Thr Pro Val Asp His Glu Ala Ala Gln Ser Leu Cys Glu  
 435 440 445  
 Leu Ser Gly Ala Ile Ser Arg Ser Ala Gln Thr Phe Glu Gln Gly Thr  
 450 455 460  
 Thr Thr Gln Arg Gln Cys Arg Lys Arg Gly Arg Thr Gly Ser Glu Asp  
 465 470 475 480  
 Ile Leu Trp Gln Asn His Val Arg His Leu Met Asn Pro Asn Ala Arg  
 485 490 495  
 Asn Glu Gly Lys Ala Ser Asp Cys Ser Met Ser Asp Thr Arg Ser Tyr  
 500 505 510  
 Pro Lys His Ser Gln Ser Leu Ser Ala Ala Gln Leu Ser Leu Leu Ala  
 515 520 525  
 Val Ser Ala Pro Leu Ser Gly Pro Ala Gly Met Lys Arg Ala Cys Cys  
 530 535 540  
 Gly Ser Glu Ala Arg Lys Ile Ala Leu Asn Pro Ser Val Arg Ser Glu  
 545 550 555 560  
 Tyr Leu Gly

&lt;210&gt; 41821

&lt;211&gt; 131

18576

<212> PRT

<213> A.fumigatus

<400> 41821

Ile	Thr	Leu	His	Thr	Val	Pro	Thr	Leu	Pro	Ile	Gly	Gln	Arg	Leu	Glu
1			5						10					15	
Pro	Ser	Val	Lys	Glu	Lys	Lys	Arg	Gly	Gly	Lys	Asn	Phe	Lys	Leu	Ser
		20						25					30		
Arg	Asp	Met	Arg	Ala	Arg	Leu	Leu	Gln	Phe	Phe	Ser	Lys	Ala	Pro	Ala
		35				40						45			
Gly	Pro	Thr	Ile	Thr	Arg	Thr	Phe	Ala	Ser	Arg	Arg	Ala	Ala	Ala	Asn
	50					55					60				
Asn	Ala	Arg	Asp	Thr	Asn	His	Thr	Thr	Ala	Glu	Pro	Asp	Glu	Lys	Asp
65					70					75					80
Leu	Thr	Ala	Ala	Arg	Glu	Trp	Leu	Asn	Lys	Phe	Asn	Ser	Lys	Thr	Val
			85						90					95	
Thr	Ile	Pro	Arg	Asp	Ile	Cys	Glu	Ile	Ser	Phe	Ser	Arg	Ser	Gly	Gly
			100						105					110	
Pro	Gly	Gly	Gln	Asn	Val	Asn	Lys	Ser	Val	Pro	Leu	Pro	Cys	Ser	Phe
		115					120						125		
Ile	Leu	His													
	130														

<210> 41822

<211> 173

<212> PRT

<213> A.fumigatus

<400> 41822

Ala	Val	Ala	Ser	Ile	Ile	Leu	Val	Thr	Trp	Ala	Val	Gly	Phe	Pro	Lys
1				5					10					15	
Ser	Ser	Gln	Met	Met	Met	Arg	Val	Arg	Arg	Gln	Leu	Glu	Ala	Val	Pro
		20						25					30		
Ala	Asn	Val	Ser	Ala	Thr	Thr	Asn	Lys	Pro	Arg	Gly	Ala	Thr	Ser	Ala
		35					40					45			
Glu	Ser	Pro	Val	Glu	Leu	Lys	Thr	Ser	Ile	Ser	Tyr	Leu	Gln	Ile	Thr
	50					55					60				
Phe	Ala	Thr	Ile	Leu	Leu	Leu	Thr	Ile	Leu	Pro	Leu	Tyr	Pro	Tyr	Ser
65					70					75					80
His	Ser	Asn	Leu	Ile	Tyr	Tyr	Thr	Leu	Ile	Lys	Met	Gly	Trp	Leu	Pro
			85						90					95	
Trp	Ser	Ser	Asp	Asp	Ser	Thr	Lys	Ala	Ser	Asp	Gly	Gly	Arg	Ile	Ala
			100					105					110		
Pro	Asp	Arg	Ser	Ser	Arg	Glu	Lys	Cys	Trp	Glu	Gly	Arg	Asp	Leu	Phe
		115					120					125			
Phe	Ser	Cys	Leu	Asp	Lys	Ser	Asn	Ile	Ile	Asp	Ser	Ile	Lys	Glu	Asp
	130						135				140				
Lys	Glu	Ala	Arg	Arg	Gln	Cys	Gly	Lys	Glu	Leu	Ala	Gln	Phe	Glu	Gly
145					150					155					160
Ser	Cys	Ala	Lys	Ala	Trp	Val	Cys	Ile	Ser	Ser	Gln	Ala			
				165					170						

<210> 41823

<211> 60

<212> PRT

<213> A.fumigatus

18577

<400> 41823

```

Glu Ser Asp Thr Val Cys Leu Phe His Met Val Thr Glu Asn Gly Val
1          5          10          15
Ser His Asp Asp Arg Thr Val Gln Glu Phe Tyr Pro Glu Ile Cys Thr
          20          25          30
His Leu Phe Leu Gly Thr Asp Val Glu Met Ala Ile Val Glu Gly Val
          35          40          45
Asp Asn Arg Arg Val Cys Gly Gly Ser Ala His Leu
          50          55          60

```

<210> 41824

<211> 180

<212> PRT

<213> A.fumigatus

<400> 41824

```

Val His Ile Thr Asp Ile Ser Ala Asp Pro Val Leu Lys Asp His Phe
1          5          10          15
Trp Met Asn Pro Phe Ala Lys His Phe Ser Thr Ile Lys Ala Ser Asp
          20          25          30
Leu Val Leu Val Asp Ser Glu Gly Tyr Val Thr Glu Gly Gly Ala Gln
          35          40          45
Leu Pro Ile Asn Glu Ala Gly Phe Met Ile His Ser Glu Ile His Lys
          50          55          60
Ala Arg Pro Asp Val Val Ala Ala Ala His Thr His Ser Ile His Gly
          65          70          75          80
Lys Thr Trp Ser Ala Phe Gly Arg Pro Val Glu Met Leu Thr Gln Gly
          85          90          95
Leu Cys Tyr Arg Tyr Thr Met Lys Gly Cys Gly Trp Arg Thr Leu Thr
          100          105          110
Leu Pro Val Asp Ala Cys Asn Phe Tyr Gly Lys Leu Ser Val Tyr Asp
          115          120          125
Asp His Gly Gly Ile Ala Leu Ala Arg Glu Glu Gly Glu Gln Ile Ala
          130          135          140
Lys Ala Leu Gly Glu Lys Asn Ile Ala Cys Ile Leu Gln Asn His Gly
          145          150          155          160
Tyr Gly Asn Leu Leu Val Thr His Arg Ala Ser Ala Arg Ala Asp Cys
          165          170          175
Leu Leu Val Cys
          180

```

<210> 41825

<211> 292

<212> PRT

<213> A.fumigatus

<400> 41825

```

Ala Phe Pro Ser Ile Lys Ser Ile Arg Ser Ser Arg Arg Gly Ser Ser
1          5          10          15
Thr Ala Pro Ala Ile Ala Ala Asn Ser Ser Leu Thr Val Leu Pro Ser
          20          25          30
Ser Asp Pro Ala Ala Pro Leu Thr His Pro Asn Pro Asp Val Pro Pro
          35          40          45
Ser Ala Ser Ser Gln Ala Ala Gln Ile Leu Pro Val Ala Asn Glu Val
          50          55          60

```

## 18578

```

Asn His Ala Val Ala Ser Trp Ala Ala Gln Ser Ala Pro His Asp Arg
65                               70                               75                               80
Leu Asp Tyr Gln Ala Lys Pro Glu Asp Asn Thr Gly Glu Gly Gly Val
                               85                               90                               95
Asp Phe Gln Asn Leu Leu Asp Asn Leu Pro Pro Pro Ser Thr Ala Ala
                               100                              105                              110
Pro Ser Pro Pro Leu Pro Ser Glu Thr Ala Pro Ser Ser Ala Asp Asp
                               115                              120                              125
Val Ser Glu Ala Pro Gln Gly Leu Pro Pro Arg Pro Pro Pro Gln Glu
                               130                              135                              140
Lys Pro Ser Ile His Pro Asn Tyr His Pro Thr Asp Asp Ile Arg Ser
145                               150                               155                               160
Tyr His Gln Leu His Pro His Pro Ala Ser Thr Ser Thr Thr Tyr Pro
                               165                              170                              175
Ser Gln Gln Ser Asn Tyr Gln Ser Asn Leu Gly Leu Pro Ser Leu Ala
                               180                              185                              190
Ala Ser Gly Ala Pro Gly Thr Ala Ser Gly Ala Ser Ser Leu Pro Pro
                               195                              200                              205
Pro Pro Gly Pro Ser Phe Gln Gln Pro Ala Pro Ser Thr Ala Glu Ser
                               210                              215                              220
Ser Gln Glu Pro Pro Ala Thr Ala Ala Ser Pro Asn Gly Arg Ile Glu
225                               230                               235                               240
Lys Pro Val Gly Arg Val Val Lys Pro Gly Asp Glu Asp Val Pro Trp
                               245                              250                              255
Gly Pro Asp Val Gln Lys Lys Tyr Asp Gln Phe Leu His Asp Glu Arg
                               260                              265                              270
Val Tyr Val Thr Glu Gly Leu Trp Asp Arg Phe Pro Ala Gly Ser Arg
                               275                              280                              285
Leu Phe Val Gly
                               290

```

&lt;210&gt; 41826

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41826

```

Ser Tyr Leu Ile Leu Ala Gly Asn Pro Gly Asn Leu Pro Thr Glu Arg
1                               5                               10                               15
Val Thr Lys Arg Asp Leu Phe His Ile Phe His Gln Tyr Gly Lys Leu
                               20                               25                               30
Ala Gln Ile Ser Ile Lys Gln Ala Tyr Gly Phe Ile Gln Phe Val Asp
                               35                               40                               45
Ala Ser Ala Cys Lys His Ala Leu Asp Cys Glu Gln Gly Ala Val Val
                               50                               55                               60
Arg Gly Arg Lys Ile Arg Lys Leu Ala Leu Arg Ser Leu Arg Ile Phe
65                               70                               75                               80
Gly Pro Gly Leu Thr Leu Pro Tyr Ala Asp Leu Glu Ile Ser Lys Pro
                               85                               90                               95
Gln Arg Asn Thr Arg Ala Gly Pro Pro Pro Pro Glu Pro Ser Arg Gly
                               100                              105                              110
Ala Pro Pro Arg Arg Ser Arg Ser Pro Glu Tyr Ser Arg Gly Gly Pro
                               115                              120                              125
Pro Ser Ser Arg Asn Thr Arg Ala Ser Gly Asp Arg Tyr Asp Arg Pro
130                               135                               140
Tyr Glu Ser Gly Arg Val Pro Phe Ser Asp Phe Arg Asp Glu Pro Asn

```

## 18579

```

145              150              155              160
His Arg Arg Arg Asp Asp Tyr Arg Pro Pro Pro Arg Ser Pro Ser Pro
              165              170              175
Arg Pro Phe Arg Gly Arg Asp Gly Tyr Arg Ser Arg Asp Arg Thr Pro
              180              185              190
Glu Arg Tyr Asp Arg Arg Glu Arg Arg Arg Ser Arg Ser Pro Tyr Gly
              195              200              205
Arg Asp Arg Arg Tyr Arg Thr Pro Ser Pro Arg Gly Arg Ser Ala Tyr
              210              215              220
Asp Ser Asp Ser Asp Leu Pro Val Pro Arg Arg Ala Pro Arg Asp Val
225              230              235              240
Pro Glu Val Gln Ile Leu Val Leu Glu Glu Val Asp Arg
              245              250

```

<210> 41827  
 <211> 101  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41827
Phe Met Pro Pro Arg Arg Arg Ala Pro Ala Gly Ser Arg Thr Asp Leu
1              5              10              15
Pro Pro Leu Lys Ile Val Arg Lys Ile Ile Leu Leu Gln Thr Ala Tyr
              20              25              30
Tyr Val Ser Ala Thr Ala Leu Ile Leu Phe Thr Thr Leu Val Tyr Gly
              35              40              45
Thr Gly Phe Ser Leu Asp Phe Val Phe Ser Trp Asp Ala Leu Arg Gly
              50              55              60
Asp Thr Thr Ile Gly Trp Met Leu Gly Leu Val Trp Met Leu Asn Ser
65              70              75              80
Leu Leu Gly Tyr Cys Ile Arg Leu Ser Leu Leu Gln Met Leu Gly Ser
              85              90              95
Leu Thr Lys Tyr Asp
              100

```

<210> 41828  
 <211> 135  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41828
Pro Asn Met Ile Asp Ser Val Ile Phe Leu Leu Leu Leu Val Ser Arg
1              5              10              15
Ser Lys Leu Ile Pro Asp Phe Ala Ile Thr Ile His Phe Leu His Leu
              20              25              30
Ile Ala Thr Ser Phe Tyr Thr Arg Ser Ile Pro Arg Asn Leu Leu Trp
              35              40              45
Trp Cys Leu Gln Cys Ala Ser Ala Ala Leu Met Thr Phe Leu Gly Ile
              50              55              60
Trp Ala Cys Gln Trp Arg Glu Leu Arg Pro Ile Thr Phe Gly Ile Ala
65              70              75              80
Gly Gly Arg Gly Thr Ala Gln Ser Ser Ser Ser Ala Ser Gln Pro Gln
              85              90              95
Thr Asp Asp Val Glu Asn Glu Pro Phe Leu Pro Ser Arg Gly Arg Gly
              100              105              110
Arg Gly Arg His Leu Gly Glu Gly Ser Gly Glu Tyr Glu Leu Thr Glu

```

## 18580

115 120 125  
Met Lys Gly Glu Gln Ala Val  
130 135

<210> 41829

<211> 118

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (38)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41829

Pro Cys Ser Leu Leu Lys Ser Asp Leu Cys Leu Leu Phe Tyr Val Ser  
1 5 10 15  
Ser Lys Met Ser Thr Thr Thr Ile Thr Glu Ser Ala Lys Gln Thr Leu  
20 25 30  
Val Val Thr Pro Asp Xaa Ile Thr Pro Ala Ala Ala Asp Glu Lys Phe  
35 40 45  
Gln Ala Ile Ala Arg Gly Asn Arg Glu Gly Thr Leu Lys Leu Gln Gly  
50 55 60  
Ile Pro Thr Phe Ser Asp Pro Tyr Glu Gln Arg Lys Trp Met Lys Glu  
65 70 75 80  
His Met Ala Ala Ala Phe Arg Phe Phe Gly Lys Gln Gly Tyr Gly Glu  
85 90 95  
Gly Val Ser Gly His Ile Ser Met Arg Gly Lys Glu Ser Leu Tyr Thr  
100 105 110  
Asp Met Ser Pro His Tyr  
115

<210> 41830

<211> 65

<212> PRT

<213> A.fumigatus

<400> 41830

Leu Ser Phe Ser Leu Leu Thr Val Gly His Thr Val Asp Glu Ala Ala  
1 5 10 15  
Phe Leu Phe Phe Ser Leu Asp Asn Ala Cys Arg Ser Gln Leu Met Ala  
20 25 30  
Asp Ala Ala Ala Ala Asn Gly Val Pro Lys Lys Ile Ile Asn His Glu  
35 40 45  
Val Ala Gln Tyr Thr Ala Asp Ala Val Gln Asn Pro Val Cys Phe Pro  
50 55 60  
Cys  
65

<210> 41831

<211> 134

<212> PRT

<213> A.fumigatus

<400> 41831

Tyr Ser Cys Ile Pro Asn Cys Ala Gln Pro Tyr Leu Lys Val Ser Ile

## 18581

```

1           5           10           15
Asp Ile Glu Lys Cys Leu Pro Asp Ser His Ala Ser His Pro Leu Ser
           20           25           30
Pro Ala Pro Leu Ala Ser Ser Arg Ser Ala Ser Pro Ser Pro Ala Thr
           35           40           45
Ala Pro Ala Pro Thr Pro Thr Thr Pro Ser Ser Lys Pro Asn Lys Ser
           50           55           60
Pro Pro Gln Ala Pro Ala Ala Ser Ala Ser Ser Ser Ser Thr Ala Pro
65           70           75           80
Lys Leu Val Thr Pro Ser Arg Asp Thr Ser Ser Thr Pro Phe Pro Ser
           85           90           95
Lys Ser Thr Pro Ser Pro Pro Arg Ala Ala Pro Ala Gln Pro Ala Pro
           100          105          110
Trp Ser Ser Pro Ala Thr Ser Thr Pro Pro Phe Ala Pro Ala Gln Thr
           115          120          125
Ser Lys Ser Ala Pro Arg
           130

```

&lt;210&gt; 41832

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41832

```

Gln Arg Arg Ser Lys Lys Pro Pro Thr Pro Cys Gly Asp Arg Gln Arg
1           5           10           15
Thr Ala Ser Phe Val Asp Gln Gly Arg Thr Asn Glu Phe Leu Thr Lys
           20           25           30
Leu Arg Gly Thr Phe His Asp Leu Ala Ala Leu Gln Ile Pro Thr Ile
           35           40           45
Ser Ala Ile Ser Ser Thr Ala Leu Gly Gly Gly Leu Glu Leu Ala Leu
50           55           60
Cys Thr His Leu Arg Val Phe Gly Ser Ser Ala Ile Val Gly Leu Pro
65           70           75           80
Glu Thr Arg Leu Ala Ile Ile Pro Gly Ala Gly Gly Thr Tyr Arg Leu
           85           90           95
Pro Ala Leu Ile Gly Val Asn Arg Ala Arg Asp Leu Ile Leu Thr Gly
           100          105          110
Arg Arg Val Ser Gly Pro Glu Ala Tyr Phe Leu Gly Leu Cys Asp Arg
           115          120          125
Leu Val Glu Ile Leu Pro Glu Glu Glu Gly Lys Glu Gly Val Ala Arg
           130          135          140
Glu Lys Val Leu Arg Glu Ser Ile Lys Leu Ala Leu Asp Ile Cys Glu
145          150          155          160
Gly Gly Pro Ile Ala Leu Lys Gln Ala Ile Gln Ala Val Ala Gly Phe
           165          170          175
His Arg Gly Glu Ala Ala Glu Asn Glu Ala Tyr Asn Gly Val Ile Glu
           180          185          190
Thr Glu Asp Arg Tyr Glu Ala Leu Arg Ala Phe Ala Glu Lys Arg Lys
           195          200          205
Pro Ala Phe Arg Gly Arg
           210

```

&lt;210&gt; 41833

&lt;211&gt; 1091

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41833

Asp	Arg	Phe	Ser	Arg	Asn	Phe	Ser	Arg	Pro	Thr	His	His	Val	Lys	Trp
1				5					10					15	
His	Leu	Asn	Gly	Phe	Leu	Cys	Ser	Ala	Gly	Val	Phe	Arg	Glu	Tyr	Arg
		20						25					30		
Tyr	Ile	Ser	Thr	Ala	Ser	Pro	Thr	Glu	Thr	Asp	Ser	Pro	Ile	Asp	Thr
		35					40					45			
Asn	Gly	Glu	Glu	Asp	Arg	Trp	His	Asp	Phe	Trp	Cys	Arg	Val	Arg	Asn
	50					55					60				
Gln	Ser	Arg	Leu	Ser	Arg	Ser	Leu	Ser	Pro	Ser	Gly	Ser	Asn	His	Leu
65					70					75				80	
Cys	Gly	His	Asn	Gln	Ser	Ser	Gly	Glu	Ser	Asp	Asn	Ser	Pro	Ser	Ile
			85					90						95	
Val	Asp	Val	Tyr	Ser	Ser	Glu	His	Asp	Ala	Thr	Leu	Thr	Ala	Tyr	Ser
			100					105						110	
Glu	Thr	Lys	Ala	Met	Ser	Ser	Arg	Lys	Ala	Thr	Lys	Val	Lys	Gly	Lys
		115					120					125			
Gln	Ser	Ser	Ile	Val	Thr	Pro	Thr	Gln	Tyr	Leu	Leu	Asp	Val	Leu	Arg
	130					135					140				
Asp	Ser	Ala	Arg	Ser	Thr	Gly	Asp	Gly	Leu	Gly	Gln	Thr	Gln	Pro	Val
145					150					155				160	
Asn	Ser	Ile	Val	Asn	Asp	Phe	Gly	Lys	Arg	Gln	Lys	Lys	Ala	Pro	Arg
			165					170						175	
Lys	Gln	Pro	Arg	Leu	Ser	Leu	Gln	Thr	Ile	Leu	Ala	His	Trp	Ile	Gln
			180					185					190		
Cys	Val	Asp	Pro	Val	Leu	Gly	Arg	Ala	Gln	Arg	Ala	His	His	Asp	Thr
		195					200					205			
Glu	Ala	Thr	Ala	Glu	Leu	Glu	Ile	Val	Leu	Gln	Gln	Ala	Phe	Pro	Pro
	210					215					220				
Lys	Ile	Ile	Glu	Tyr	Leu	Thr	Ala	Arg	His	Tyr	Ser	Pro	Ser	Asp	Val
225					230					235				240	
Leu	Leu	Trp	Ser	Trp	Ile	Leu	Lys	Gly	Asn	Thr	His	Glu	Ala	Ala	Leu
			245					250						255	
Arg	Ile	Leu	Met	Ala	Glu	Ser	Ala	Glu	Gly	Ala	Arg	Pro	Gly	Ser	Gln
		260					265						270		
Arg	Arg	Leu	Ile	Pro	Pro	Phe	Ile	Pro	Leu	Leu	Leu	Leu	Arg	Arg	Pro
		275					280					285			
Ser	Leu	Asp	Ala	Lys	Ser	Phe	Arg	Leu	Leu	Leu	Ile	Tyr	Ser	Leu	His
	290					295					300				
Leu	Ile	Thr	Gly	Arg	Lys	Ile	Pro	Pro	Leu	Asp	Ala	Phe	Lys	Arg	Val
305					310					315				320	
Gln	Arg	Thr	Ala	Gln	Glu	Leu	Glu	Asp	Ser	Leu	Gly	Ser	Arg	Gln	Thr
			325					330						335	
Glu	Ala	Leu	Ile	Asp	Thr	Thr	Thr	Cys	Phe	Val	Leu	Val	Thr	Arg	Leu
		340						345					350		
Leu	Arg	His	Ala	Arg	Glu	Val	Trp	Pro	Gln	Ala	Gln	Leu	Thr	Ile	Ala
		355					360					365			
Arg	Ala	Phe	Ala	Ser	Tyr	Leu	Thr	Leu	Leu	Arg	Asn	Asp	Gln	Glu	Ile
	370					375					380				
Ser	Gln	Ile	Ala	Arg	His	Arg	Arg	Asn	Gln	Phe	Met	Ala	Asp	Lys	Phe
385					390					395				400	
Asn	Ala	Cys	Leu	Trp	Leu	Leu	Ser	Leu	Pro	Cys	Lys	Ala	Gly	Pro	Phe
			405					410					415		
Lys	Phe	Val	Ser	Val	Gln	Gln	Gln	Ala	Gln	Phe	Glu	Leu	Leu	Lys	Ala



420 425 430  
 Met Ala Gly His Ser Pro Val Leu Pro Val Thr Arg Gln Gly Tyr Gln  
 435 440 445  
 Gly Ile Ile Ala Val Gln Leu Ala His Lys Lys Thr Ser Ala Glu Arg  
 450 455 460  
 Gln Ser Ala Glu Leu Lys Ala Pro Ser Trp Pro Pro Trp Lys Glu Glu  
 465 470 475 480  
 Lys Leu Gly Ile Asp Ser Gln Arg Gly Asn Glu Gly Met Lys Ser Arg  
 485 490 495  
 Ala Met Arg Val Met Ala Gln Met Arg Glu Ala Gly Tyr Ser His Thr  
 500 505 510  
 Arg Trp Glu Glu Val Ser Ala Ile Leu Ala Gly Trp Asp Thr Asp Lys  
 515 520 525  
 Ser Pro Thr Val Gln Thr Arg Ala Leu Met Arg Arg Pro Gln Leu Leu  
 530 535 540  
 Arg Gly Pro Ala Gly Ser Lys Pro Asp His His Ala Val Trp Val Ala  
 545 550 555 560  
 Arg Ile Arg Ala Thr Arg Thr Val Arg Glu Ala Trp Ala Cys Phe Leu  
 565 570 575  
 Ser Tyr Gln Asp Gln Gly Leu Pro Pro Arg Ala Ser Ile Tyr Val Ala  
 580 585 590  
 Met Ala Glu Lys Leu Ile Phe Arg Arg Lys Ala Leu Glu Asn Asp Phe  
 595 600 605  
 Asp His Ile Ser His Ser Leu Pro Gly Asp Gly Leu Glu Val Phe Pro  
 610 615 620  
 Glu Pro Ala Ser Ala Arg Asp Leu Ile Tyr Val His Thr Glu Pro Pro  
 625 630 635 640  
 Thr Leu Glu Glu Leu Leu Lys Gln Met Leu Ala Gln Gly Ile Arg Pro  
 645 650 655  
 Ser Gly Arg Phe Leu Ala Leu Leu Leu Arg Ser Ala Pro Thr Phe Asn  
 660 665 670  
 Cys Gly Leu Asp Tyr Leu Ser Cys Ser Asp Leu Ser Asn Glu Gln Ile  
 675 680 685  
 Gln Ala Leu Cys Thr Val Arg Glu Ser Thr Ser Asp Tyr Asp Val Leu  
 690 695 700  
 Asp Ser Thr Val Leu Asp Glu Leu Pro Asp Tyr Leu Phe Ser Ser Phe  
 705 710 715 720  
 Val Gly Phe Leu Cys Asn Tyr Ser Ser Leu Asp Ser Leu His Leu Glu  
 725 730 735  
 Arg His Asp Ile Arg Thr Ala Asp Leu Phe Pro Ile Ile Met Ser Ser  
 740 745 750  
 Met Ser Arg Thr His Pro Asn Glu Pro Lys Thr Ser Thr Leu Phe Ser  
 755 760 765  
 Asn Ile Gln Thr Ser Gly Glu Ser Gly Thr Leu Gln His Pro Lys Thr  
 770 775 780  
 Leu Ser His Ala Ile Gln Leu Leu Lys Leu Arg Lys Ser Arg Phe Thr  
 785 790 795 800  
 Pro Pro Trp Ile His Leu Leu Thr Ala Leu Ser Lys Asp Arg Ile Arg  
 805 810 815  
 Thr Pro Tyr Arg Arg Met Ser Arg Ser Ala Gln Arg Val Leu Ala Trp  
 820 825 830  
 Tyr Glu Met Val Glu Val Ile Gly Trp Met Lys Glu Arg Ala Ile Asp  
 835 840 845  
 Pro Gly Leu Gln Gly His Gln Val Leu Cys Ala Ser Phe Ser Lys Ala  
 850 855 860  
 Val Met Ala Gly Leu Lys His Pro Asn Ala Ala Glu Glu Gly Leu Ala

## 18584

```

865          870          875          880
Leu Val His Glu Ala Arg Arg Gly Asn Ile Lys His Ser Lys Val
          885          890          895
Leu Arg Pro His Phe Glu Asp Met Val Arg Gly Gly Leu Ala Ile Leu
          900          905          910
Lys Glu Leu Phe Ser Gln Leu Val Leu Ser Asp Pro Lys Asn Ala Pro
          915          920          925
Phe Gly Glu Arg Ser Glu Gly Pro Phe Glu Ser Ala Thr Ser Ser Pro
          930          935          940
Val Ala Ile Pro Ser Met Leu His Val Pro Ser Pro Ala Ala Leu His
945          950          955          960
Ala Phe Val Arg Ala Leu Gly Leu Ala Ala Glu His Asp Gly Leu Leu
          965          970          975
Asn Leu Leu Arg Trp Met Ser Gln Asn Ala Thr Thr Leu Lys Glu Thr
          980          985          990
Ala Asp Glu His Leu Asn Gly Asp Arg Met Met Arg Arg Thr Leu Val
          995          1000          1005
Ala Leu Arg Val Phe Leu Glu Gly Tyr Arg Gly Lys Arg Pro Arg Gly
1010          1015          1020
Glu Ser Asp Asn Leu Pro Ser Glu Ser Met Ala Ala Gly Glu Pro Leu
1025          1030          1035          1040
Pro Ser Asp Val Ser Ala Pro Ala Ala Asn Gly Ser Asn Ser Lys Leu
          1045          1050          1055
Gln Glu Ala Tyr Glu Ile Val Ala Ala Thr Pro Leu Trp Gly Ser Trp
          1060          1065          1070
Pro Ser Asp Asp Glu Val Trp Glu Tyr Leu Gln Trp Glu Pro Gln Gln
          1075          1080          1085
Ser Val His
1090

```

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<210> 41834
<211> 122
<212> PRT
<213> A.fumigatus

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```

<400> 41834
Tyr Arg Lys Met Pro Pro Arg Leu Pro Arg Leu Ala Pro Ala Leu Ser
1          5          10          15
Ser Pro Pro Arg Ile Val Ser Leu Arg Val Thr Ile Ser Arg Tyr Ser
          20          25          30
Thr Ser Thr Asn Thr Asp Asp Ala Val Ile Gln Thr Gln Gln Val Pro
          35          40          45
Ala Pro Gly Ser Gly Ser Ile Arg Val Leu Leu Leu Asn Arg Pro Lys
          50          55          60
Ala Arg Asn Ala Leu Ser Arg His Leu Leu Asp Thr Leu Ser Lys Gln
65          70          75          80
Ile His Ser Ile Ala Ala Glu Gly Gly Thr Gly Pro Thr Arg Ala Leu
          85          90          95
Val Ile Ala Ser Asn Ile Asp Ala Ala Phe Cys Ala Gly Ala Asp Leu
          100          105          110
Lys Glu Arg Ala Lys Met Thr Lys Glu Glu
          115          120

```

```

<210> 41835
<211> 238
<212> PRT

```

&lt;213&gt; A.fumigatus

&lt;400&gt; 41835

```

Leu Ser Leu Gln Gln Arg Lys Met Pro Pro Pro Arg Arg His Ile Ser
1          5          10          15
Tyr Leu Pro Pro Pro Lys Arg Arg Leu Pro Leu Leu Arg Lys Ser Pro
          20          25          30
Lys Arg Leu Ile Pro Val Leu Arg Leu Asn His Pro Ile Val Arg Leu
          35          40          45
Ile Leu Arg Arg Phe Ala Pro Val Glu Pro Arg Asn Gly Leu Asn Arg
          50          55          60
Leu Leu Glu Gly Asn Gly Thr Pro Leu Thr Asp Ile Gln Arg Lys Leu
65          70          75          80
Asp Thr Leu Pro Gln His Leu Leu Pro Arg His Pro Phe Leu Pro Leu
          85          90          95
Leu Leu Gly Gln Asp Leu His Gln Pro Ile Thr Lys Thr Gln Glu Val
          100          105          110
Arg Leu Gly Thr Arg His Pro Ser Pro Gly Gln Asp Gln Val Pro Arg
          115          120          125
Ala Val His Pro Asn Gln Arg Arg Glu Thr Ile Arg Ala Ala Arg Ala
          130          135          140
Gly Asp Asn Arg Gln Pro Gly Leu Trp Glu Thr Asp Asp Ser Arg Arg
145          150          155          160
Pro Lys His Ala Gln Val Arg Ala Gln Arg Gln Leu Glu Ala Ala Ala
          165          170          175
Gln Arg Cys Gly Gly Asp Arg Gly Asp Gly Gly Asp Leu Gln Arg Gly
          180          185          190
Glu Val Val Glu Cys Ala Ala Glu Phe Gly Glu Glu Phe Val Arg Pro
          195          200          205
Thr Leu Val Asn Lys Arg Cys Gly Thr Leu Ala Val Ala Thr Gly Gly
          210          215          220
Arg Gly Phe Leu Thr Pro Pro Leu Ser Ser Trp Arg Ala Leu
225          230          235

```

&lt;210&gt; 41836

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41836

```

Ile Ala Cys Leu Arg Ala Met Gly Pro Pro Ser Gln Ile Ser Ser Ala
1          5          10          15
Ser Leu Ile Leu Ser Arg Ser Thr Phe Ser Leu Ala Thr Pro Ser Phe
          20          25          30
Pro Ser Ser Ser Gly Lys Ile Ser Thr Asn Arg Ser Gln Arg Pro Arg
          35          40          45
Lys Tyr Ala Ser Gly Pro Asp Thr Arg Arg Pro Val Lys Ile Lys Ser
          50          55          60
Arg Ala Arg Phe Thr Pro Ile Ser Ala Gly Arg Arg Tyr Val Pro Pro
65          70          75          80
Ala Pro Gly Ile Ile Ala Ser Arg Val Ser Gly Arg Pro Thr Ile Ala
          85          90          95
Asp Asp Pro Asn Thr Arg Arg Cys Val His Ser Ala Ser Ser Arg Pro
          100          105          110
Pro Pro Ser Ala Val Glu Glu Ile Ala Glu Met Val Gly Ile Cys Ser
          115          120          125

```

## 18586

Ala Ala Arg Ser Trp Asn Val Pro Arg Ser Leu Val Arg Asn Ser Phe  
 130 135 140  
 Val Leu Pro Trp Ser Thr Lys Asp Ala Val Arg Trp Arg Ser Pro Gln  
 145 150 155 160  
 Gly Val Gly Gly Phe Leu Leu Leu Leu Cys His Leu Gly Ala Leu Phe  
 165 170 175  
 Glu Val Cys Ala Gly Ala Lys Gly Gly Val Asp Val Ala Gly Asp Asp  
 180 185 190  
 Gln Gly Ala Gly Trp Ala Gly Ala Ala Leu Gly Gly Asp Gly Val Asp  
 195 200 205  
 Leu Leu Gly Lys Gly Val Glu Glu Val Ser Arg Glu Gly Val Thr Ser  
 210 215 220  
 Phe Gly Ala Val Glu Glu Glu Asp Ala Asp Ala Ala Gly Ala Trp Gly  
 225 230 235 240  
 Gly Asp Leu Leu Gly Leu Asp Asp Gly Val Val Gly Val Gly Ala Gly  
 245 250 255  
 Ala Val Ala Gly Asp Gly Asp Ala Glu Arg Asp Asp Ala Arg Gly Ala  
 260 265 270  
 Gly Glu Ser Gly Cys Glu Ala Trp Glu Ser Gly Arg His Phe Ser Ile  
 275 280 285  
 Ser Ile Glu Thr Phe Arg  
 290

&lt;210&gt; 41837

&lt;211&gt; 804

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41837

Val Val Leu Thr Cys Ser Arg Asn Asp Thr Glu Leu Gln Leu Leu Ser  
 1 5 10 15  
 Cys Pro Leu Pro Ser Ser Pro Ala Lys Pro Arg Ser Lys Arg Ala Lys  
 20 25 30  
 Val Ser Gly Glu Lys Asp Glu Ser Thr Ser Ile Gln Ala Arg Val Ala  
 35 40 45  
 Ser Asp Arg Tyr Asn Thr Leu Ser Glu Phe Leu Ser Asp Ile Asp Arg  
 50 55 60  
 Ala Ser Thr Ala Val Ile Glu Arg Ser Lys Ala Gln Ser Gly Glu Gly  
 65 70 75 80  
 Glu Ala Thr Asp Gly Asn Arg Leu Thr Glu Thr Val Asn Arg Ile Ala  
 85 90 95  
 Ala Phe Lys Lys Leu Leu Asn Ser Leu Val Arg Gln Ala Ser Val Gly  
 100 105 110  
 Gln Ala Ser Phe Lys Lys Glu Ser Thr Glu Asp Ser Ser Glu Ala Pro  
 115 120 125  
 Glu Lys Ser Thr Pro Ser Thr Asn Glu Ala Arg Ser Asp Asn Val Val  
 130 135 140  
 Leu Thr Ile Leu Gly Asn Pro Ser Asn Pro Lys Gln Leu Tyr Ser Ser  
 145 150 155 160  
 Leu Gln Lys Ser Val Lys Val Ser Leu Pro Ser Gly Glu Ser Ala Val  
 165 170 175  
 Glu Lys Tyr Val Glu Val Gln Thr Pro Leu Arg Glu Ile Gly Leu Pro  
 180 185 190  
 Asn Gly Ile Thr Thr Thr Lys Val Ala Ala Tyr His Thr Asp Asn Lys  
 195 200 205  
 Pro Lys Glu Ser Lys Arg Thr Phe Gly Glu Val Phe Thr Pro Arg Pro

210		215		220	
Thr Leu Pro Gln Leu Glu	Pro Pro Arg Arg	Ala Arg Ser Ser Ser Arg			
225	230	235	240		
Thr Ala Pro Gly Gly Trp	Ile Asp Pro Phe Glu Ala Val Thr Asn Tyr				
245	250	255			
Lys Thr Phe Pro Gly Glu Arg Asn Asn Tyr Cys Leu Ala Pro Leu Pro					
260	265	270			
Ser Gly Gln Trp Leu Gln Tyr Gly Gly Ile Thr Ser Ser Pro Ser Phe					
275	280	285			
Trp Asp Arg Arg Gln Lys Gln Gln Ser Ala Gln Pro His Gly Asp Glu					
290	295	300			
Arg Tyr Asn Glu Asp Pro Ala Leu Trp Thr Asp Asp Ala Ser Leu					
305	310	315	320		
Leu Gln Gly Val Tyr Tyr Ser Phe Ala Pro Ser Phe Asp Ser Ser Gly					
325	330	335			
Ala Ile Val Gln Ala Asp Ser Lys Asp Met Val Trp Trp Gly Lys Arg					
340	345	350			
Gly Thr Lys Arg Leu Tyr Thr Leu Thr Lys Thr Tyr Ser Glu Glu					
355	360	365			
His Gln Glu Val Ser Asp Val Ser Ala Thr Glu Gln Pro Gly Asn Ile					
370	375	380			
Gly Glu Leu Asp Glu Ser Thr Leu Glu Glu Met Val Lys Ser Phe Asn					
385	390	395	400		
Pro Glu Asp Phe Ala Asp His Val Ser Leu Thr Asn Thr Leu Glu Lys					
405	410	415			
Asp Lys Glu Glu Ala Glu Ser Lys Ser Met Asp Asp Leu Leu Arg Asp					
420	425	430			
Val Ser Glu Leu Leu Glu Thr Leu Ser Ser Tyr Gln Lys Ile Arg Asn					
435	440	445			
Leu Glu Leu Pro Ala Pro Gly Ala Glu Pro Lys Glu Thr Ala Ala Asp					
450	455	460			
Gln Gly Thr Pro Ser Arg Ala Ser Ala Ala Glu Gln Gly Ile Tyr Glu					
465	470	475	480		
Thr Leu Lys Ser Ser Leu Ala Val Leu Val Ser Asn Leu Pro Pro Tyr					
485	490	495			
Ala Val Ala Lys Leu Asp Gly Asp Gln Leu Ala Glu Leu Asn Ile Ser					
500	505	510			
Thr Lys Ile Val Val Asp Asn Pro Asp Tyr His Gly Val Met Glu Lys					
515	520	525			
Asp Asp Phe Thr Leu Gln Gln Glu Arg Ala Ala Ala Leu Ala Pro Met					
530	535	540			
Ala Thr Gly Thr Asn Arg Thr Ser Thr Pro Ser Arg Ser Gly Ser Tyr					
545	550	555	560		
Gln Ala Gly Tyr Asn Gln Arg Ala Tyr Thr Ala Asn Ala Arg Val Gln					
565	570	575			
Gln Pro Gln Ala Gly Phe Gln Ala Pro Gln Pro Tyr Tyr Gly Gly Arg					
580	585	590			
Gln Pro Ser Thr Ser Gly Pro Tyr Thr Pro Gly Pro Pro Gln His Tyr					
595	600	605			
Ala Asn Val Arg Pro Pro Ala Thr Pro Ser Gln Arg Pro Ala Phe Val					
610	615	620			
Pro Gly Tyr Gln Gln Pro Thr Pro Gln Tyr Asn Gln Ala Asn Leu Gln					
625	630	635	640		
Gln Phe Gln Arg Pro Gly Gln Asn Gly Tyr Ser Pro Tyr Ala Ala Pro					
645	650	655			
Gln Ala Leu Pro Pro Ala Gln Ala Ser Pro Gln Ala Tyr Ala Pro Arg					

## 18588

660	665	670
Pro Ala Gln Pro Gly Ala Tyr Ala Pro Gln Tyr Ala Ala Gly Arg Ser		
675	680	685
Gly Ser Pro Gln Lys Gln Pro Ala Tyr Ala Ser Pro Arg Thr Arg Ala		
690	695	700
Pro Tyr Met Ala Pro Ser Ser Ala Thr Pro Gln Gln Arg Tyr Val Pro		
705	710	715
Gln Gln Gln Pro Ser Asn Tyr Asn Tyr Pro Ser Asn Gln Ala Pro Leu		
725	730	735
Ala Pro Asn Thr Tyr Ser Asn Ser Ala Ala Ala Met Thr Tyr Ala Arg		
740	745	750
Ser Ala Ala Glu Gln Ala Ala Leu Met Asp Arg Asn Lys Ala Gln Leu		
755	760	765
Ala Gln Gln Thr Arg Gln Ser Ser Thr Pro Gln Pro Ala Thr Asp Ala		
770	775	780
Ser Ser Gln Asp Arg Ser Ile Thr Pro Ala Ile Lys Gln Asn Gly Thr		
785	790	795
Pro Val Pro Ser		800

<210> 41838  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 41838

Asp Glu Val Asn Ser Arg Pro Arg Val Gln Gly Ala Lys Asn Gln Leu		
1	5	10
Gln Gln Arg Arg Ile Ser Glu Leu Glu Ala Met Ser Ala Asp Glu Gly		
20	25	30
Gly Glu Thr Leu Ser Ile Pro Ala Thr Asn Gly Glu Pro Gln Ser Ala		
35	40	45
Thr Pro Asp Pro Pro Val Leu Ser Thr Pro Gly Lys Arg Lys Arg Gly		
50	55	60
Ser Ser His Asp Val His Ala Ala Gln Asp Ala Gly Ala Ser Glu Ser		
65	70	75
Gln Val Gln Glu Arg Val Lys Leu His Glu Thr Leu Ser Asn Leu Val		
85	90	95
Asp Ile Leu Ser Lys Cys Ala Ser Pro Met Phe Cys		
100	105	

<210> 41839  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 41839

Gly Glu Ile Arg Gly Phe Lys Gly Ala Val Ser Cys Pro Pro Glu Val		
1	5	10
Trp Lys Pro Thr Asn Leu Met Thr Pro Arg Ile Glu Gln Pro Asp Gln		
20	25	30
Ser Ile Glu Ala Glu Val Leu Lys Ala Glu Thr Gln Ala Ala Met Asp		
35	40	45
Thr Leu Gln Glu Leu Gln Ala Gln Phe Glu Val Val Ser Ala Glu Ala		
50	55	60
Arg Ser Arg		

65

&lt;210&gt; 41840

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41840

```

Pro Ala Leu Pro Arg Ser Val Thr Leu Gly Gly Gly Val Val Phe Pro
1          5          10          15
Val Pro Ala Gly Cys Thr Ala Asp Thr Glu Arg Asp Arg Thr Gly Asn
          20          25          30
Ala His Gly Arg Ser Gly Arg Asp His Gly Ala Glu Trp Phe Trp Gln
          35          40          45
Ile Tyr Ala His Pro Pro Ile Asp Gly Gln Ser Thr Ala Asn Ala Gly
          50          55          60
Glu Gly Ile His Pro Leu Gln Ala Glu Thr Arg Ile Leu Arg Ala Ala
65          70          75          80
Phe Asp Arg Gly Ala Pro Arg Thr Arg Ser His Arg Ser Tyr Thr Asp
          85          90          95
Arg Ile Arg Phe His Gly Gln Gly Asp Gln Tyr Phe Thr Arg Arg Gly
          100          105          110
Arg Asp Pro Trp Phe Ala Val Val Thr Gly Ser Ala Gly Gln Asp Ser
          115          120          125
Leu Arg Arg Ala His Cys Thr Ile Ile Gly Arg Pro Thr Gly Thr Phe
          130          135          140
Cys Lys Ser Glu Lys Arg Ser Ala Ala Val Asp Asn Val Gln Val Arg
145          150          155          160
Leu Ala Ile Ala Lys Val Ile Trp Asn Ala Pro His Leu Leu Val Leu
          165          170          175
Asp Glu Ile Thr Thr His Leu Asp Phe His Thr Val Thr Ala Leu Ala
          180          185          190
Thr Ala Leu Ser Ser Phe Asn Gly Ala Ile Leu Leu Val Ser His Asp
          195          200          205
Arg Phe Leu Val Arg Ser Val Ile Glu Gly Lys Arg Asp Asp Asp His
210          215          220
Ser Leu Asp Glu Glu Phe Glu Gly Val Asp Gln Glu Val Glu Glu Gln
225          230          235          240
Ser Arg Arg Arg Ser Val Tyr Val Met Lys Gly Gly Lys Leu Ile Glu
          245          250          255
Gln Pro Asn Gly Val Glu Gln Phe Glu Gln Ser Leu Val Lys Arg Val
          260          265          270
Lys Lys Met Leu Ser Gln
          275

```

&lt;210&gt; 41841

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41841

```

Gln Val Lys Thr Pro Lys Ser Cys Gly Glu Ser Pro Ala Thr Leu Ala
1          5          10          15
Leu Ser Ser Gly Pro Tyr Asp Asn Tyr Phe Tyr Ser Asp Cys Asn Val
          20          25          30
Ala Ala Gln Val Val Val Thr Ser Pro Leu Pro Asp Ser Asn Leu Ser

```

## 18590

```

      35              40              45
Leu Ile Gly Pro Arg Leu Ile Val Ala Trp Pro Ala Gly Asn Ser Gly
  50              55              60
Ile Cys Thr Tyr Phe Ala Pro Glu Asn Gly Val Asn Gly Thr Leu Gly
  65              70              75              80
Ile Ser Val Val Asn Ser Thr Val Gly Ser Pro Leu Ser Leu Asn Tyr
      85              90              95
Thr Ala Lys Glu Pro Asn Pro Gly Val Gly Val Gln Gly Thr Leu Arg
      100              105              110
Phe Asn Ser Ser Ala Val Leu Thr Val Pro Ile Leu Gly Ser Ile Arg
      115              120              125
Thr Ile Arg Asp Phe Val Glu Gly Pro Ser Leu Leu Gln Pro Lys Ile
      130              135              140
Gln Asp Ala Ile Gln Leu Ile Ser Ser Pro Asp Gly Ser Val Met Leu
      145              150              155              160
Gln Arg Leu Trp Leu Asp Asn Val Thr Thr Ser Ala Ile Lys Phe Thr
      165              170              175
Pro Val Asn Ser Thr Ser Lys Ala Ala Val Ser Gly Lys Thr Val Arg
      180              185              190
Phe Asp Ala Gly Asp Tyr Val Phe Ser Ala Glu Ile Asp Tyr Pro Gln
      195              200              205
Leu Thr Gln Leu Pro Pro Ala Lys Val Leu Asn Asn Ala Ser Ala Asp
      210              215              220
Leu Val Thr Lys Met Pro Val Gln Ala Thr Ala Leu Ser Phe Leu Ser
      225              230              235              240
Tyr Ser Glu Lys Leu Leu Ala Gly Ala Trp Arg Phe Leu Thr Tyr Phe
      245              250              255
Gly Arg Asp Leu Met Ile Ser Ala Leu Leu Met Asp Pro Val Met Ser
      260              265              270
Tyr Gly Asn Ala Ser Ala Ile Glu Ala Val Leu Gly Ser Val Cys Glu
      275              280              285
Arg Ile Asn Ala Thr Asp Gly Ser Thr Cys His Glu Glu Thr Ile Gly
      290              295              300

```

&lt;210&gt; 41842

&lt;211&gt; 392

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41842

```

Ala Trp Gln Met Lys Leu Val Glu Ile Glu Lys Gln Ala Arg Gln Ile
  1              5              10              15
Leu Ile Gly Leu Gly Phe Asp Glu Ala Met Leu Ser Lys Pro Phe Leu
      20              25              30
Thr Leu Ser Gly Gly Trp Arg Met Arg Cys Leu Leu Ala Ser Val Leu
      35              40              45
Ile Gln Asn Pro Asp Ile Met Ile Leu Asp Glu Pro Thr Asn Phe Leu
      50              55              60
Asp Leu Leu Gly Val Val Trp Leu Glu Asn Tyr Leu Gln Arg Leu Arg
      65              70              75              80
Asp Ser Ser Gln Thr Thr Ile Leu Leu Val Ser His Asp Arg Asp Phe
      85              90              95
Val Asn Ala Val Cys Glu Glu Ile Val Ile Leu Arg Asp Gln Lys Leu
      100              105              110
Thr Tyr Phe Arg Gly Asn Leu Ser Ala Tyr Glu Lys Asp Phe Glu Ala
      115              120              125

```



## 18591

Gln Lys Leu Tyr Trp Gly Arg Met Lys Glu Ala Gln Glu Arg Gln Ile  
 130 135 140  
 Ala His Met Lys Ala Thr Ile Arg Glu Asn Ile Lys Leu Gly Lys Lys  
 145 150 155 160  
 Thr Asn Asp Asp Asn Lys Leu Arg Met Ala Lys Ser Arg Gln Lys Lys  
 165 170 175  
 Val Asp Asp Arg Met Gly Val Gln Val Asn Ala Asn Gly Gly Arg Phe  
 180 185 190  
 Lys Leu Asn Arg Asp Leu Ala Gly Tyr His Leu Thr Ala Arg Ala Glu  
 195 200 205  
 Ile Glu Val Pro Thr Asp Glu Arg Cys Ile Ser Ile Ile Leu Pro Asp  
 210 215 220  
 Ala Ser Asp Leu Arg Phe Pro Gly Pro Leu Leu Ser Ala Glu Gly Leu  
 225 230 235 240  
 Cys Phe Arg Tyr Gln Arg Asp Ala Pro Pro Ile Leu Asn Gly Ile Glu  
 245 250 255  
 Leu Val Met His Met Gly Asp Arg Val Gly Ile Met Gly Leu Asn Gly  
 260 265 270  
 Ser Gly Lys Ser Thr Leu Ile Arg Leu Leu Thr Gly Asn Leu Gln Pro  
 275 280 285  
 Thr Gln Gly Lys Val Ser Thr His Ser Arg Leu Lys Leu Gly Tyr Tyr  
 290 295 300  
 Ala Gln His Ser Ile Glu Glu Leu His Glu Gln Gly Arg Thr Asp Pro  
 305 310 315 320  
 Thr Leu Thr Ala Leu Gly Phe Met Ala Lys Glu Ile Asn Thr Ser Leu  
 325 330 335  
 Gly Glu Gly Glu Ile Arg Gly Leu Leu Ser Ser Leu Gly Leu Gln Gly  
 340 345 350  
 Arg Ile Val Ser Asp Val Pro Ile Ala Arg Leu Ser Gly Gly Gln Leu  
 355 360 365  
 Val Arg Phe Ala Ser Leu Arg Ser Asp Leu Gln Leu Leu Thr Met Ser  
 370 375 380  
 Arg Ser Val Leu Gln Leu Pro Arg  
 385 390

&lt;210&gt; 41843

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41843

Leu Met Ile Ala Ser Trp Trp Arg Asn Arg Tyr Glu Arg Asn Ala Ser  
 1 5 10 15  
 Met Ala Gly Ile Thr Ser Ile Ile Lys Glu Lys Arg Ser Leu Tyr Leu  
 20 25 30  
 Phe Val Leu Thr Gly Leu Ser Thr Leu Asp Ile Ile Met Ile Val Lys  
 35 40 45  
 Glu Ala Gln Tyr Gly Arg Arg Lys Ser Ala Met Pro Ser Val Glu Val  
 50 55 60  
 Ala Pro Val Gln Glu Ile  
 65 70

&lt;210&gt; 41844

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41844

Phe Leu Ser Gln Gly Tyr Val Asn Thr Ser Leu Arg Tyr Ile Gln Asp  
 1 5 10 15  
 Ser Trp Leu Lys His Arg Leu Phe Ser Leu Lys Phe His Val Ser Ala  
 20 25 30  
 Thr Tyr His Ser Asn Met Leu Thr Ser Gly Ile Tyr Pro Phe Asn Phe  
 35 40 45  
 Gln Gly Lys Gln Phe Phe Phe Thr Phe Lys Gln Asn Ser Cys Ile Ile  
 50 55 60  
 Gly Ser Glu Phe  
 65

&lt;210&gt; 41845

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41845

Ser Leu Val Lys Leu Asn Asn Val Glu Tyr Ala Leu Ser Gln Leu Asp  
 1 5 10 15  
 Arg Leu Glu Arg Glu Ile Asn Val Asp Gly Cys Ala Glu Val Ile Ala  
 20 25 30  
 Gln His Ala Gly Pro Gln Leu Gln Lys Ile Arg Arg Ser Thr Thr Tyr  
 35 40 45  
 Val Phe Thr Ile Lys Ile Val Glu Ala Glu Asp Leu Lys Ala Cys Asp  
 50 55 60  
 Met Asn Gly Ser Ser Asp Pro Tyr Val Val Leu Thr Asp Glu Tyr Gln  
 65 70 75 80  
 Lys Arg Ile Ala Lys Thr Arg Ile Ile Tyr Asn Asn Leu Asn Pro Arg  
 85 90 95  
 Trp Asp Asp Ala Val Asp Ile Thr Thr Gln Gly Pro Leu Asn Ile Ile  
 100 105 110  
 Ala Thr Ile Trp Asp Trp Asp Ala Val Gly Asp His Asp Tyr Val Gly  
 115 120 125  
 Arg Thr Ser Ile Lys Leu Asp Pro Leu His Phe Ser Asp Phe Leu Pro  
 130 135 140  
 Arg Glu Tyr Trp Leu Asp Leu Asp Thr Gln Gly Arg Leu Leu Leu Arg  
 145 150 155 160  
 Val Ser Met Glu Gly Glu Arg Asp Asp Ile Gln Phe Tyr Phe Gly Lys  
 165 170 175  
 Ala Phe Arg Thr Leu Lys Arg Thr Glu Arg Asp Met Thr Arg Lys Ile  
 180 185 190  
 Thr Glu Lys Val Ser His Pro Ser Ile Ala Asp Arg Gln Val Arg Ser  
 195 200 205  
 Ser Gly His  
 210

&lt;210&gt; 41846

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41846

Asn Gly Gly Tyr Gln Asn Pro Pro Arg Val Lys Arg Ala Phe Arg Asp  
 1 5 10 15

## 18593

Pro Tyr Gly Asp Trp Trp Asp Lys Gln Glu Arg Arg Asn Phe Gly Glu  
 20 25 30  
 Pro Val His Glu Glu Asn Glu Ile Leu Gly Val Phe Ser Pro Glu Gln  
 35 40 45  
 Tyr Thr His Val Thr Pro Arg Lys Gly Leu Phe Gln Ile Gly Ala Phe  
 50 55 60  
 Ile Ala Thr Phe Leu Thr Leu Cys Gly Val Val Ser Leu Tyr Tyr Pro  
 65 70 75 80  
 Asp Lys Pro Ser Val Pro Gln Thr Tyr Pro Gly Gly Leu Glu Lys Glu  
 85 90 95  
 Leu Gly Gly Ala Arg Ala Val Pro Val Arg Leu  
 100 105

&lt;210&gt; 41847

&lt;211&gt; 664

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41847

Ile Val Arg Arg Gly Arg Glu Lys Glu Asn Leu Pro Met Ser Thr Ser  
 1 5 10 15  
 Ser Thr Gln Ser Arg Gly Ile Asn Arg Arg Ile Asn Ser Leu Gln Asn  
 20 25 30  
 Glu Val Arg His Ser Arg Asn Leu Ser Ala Ser Arg Arg Arg Pro Val  
 35 40 45  
 Asn Ser Ser Ala Ala Tyr Ser Tyr Ala Leu Arg Val Ala Tyr Leu Thr  
 50 55 60  
 Tyr Leu Leu Asn Pro Arg Ser Arg Arg Ile Gln Asn Val Ser Ala Ala  
 65 70 75 80  
 Pro Gln Pro Arg Pro Lys Arg Ala Ser Thr Ser Phe His Asp Leu Met  
 85 90 95  
 Ser Asp Phe Ser Leu Val Arg Asp Ser Lys Ser Thr Arg Phe Pro Ser  
 100 105 110  
 Gly Phe Val Ser Glu Leu Glu Lys Arg Leu Thr Gly Val Leu Met Gly  
 115 120 125  
 Lys Glu Arg Arg Lys Glu Tyr Gln Asp His Leu Val Val Arg Thr Phe  
 130 135 140  
 Ala Ala Phe Leu Asn Thr Leu Lys Asp Gln Ser Phe Lys Lys Arg Met  
 145 150 155 160  
 Glu Lys Asp Arg Arg Ala Glu Asp Leu Val Leu Ile Phe Tyr Ser Asn  
 165 170 175  
 Ala Thr Lys Glu Leu Ser Lys Gly Lys Asp Ser Asp Asp Asp Ser Trp  
 180 185 190  
 Lys Phe Met Val Asp Arg His Val Ala Leu Phe Val Arg Leu Phe Ala  
 195 200 205  
 Leu Ile Leu Lys Asp His Asp Trp Asp Lys Asp Arg Pro Glu Leu Ala  
 210 215 220  
 Asn Arg Leu Ser Val Leu Glu Asn Lys Leu Leu Ser Gln Asp His Asp  
 225 230 235 240  
 Leu Met Gln Ala Ser Gly Pro Thr Ala Thr Val Glu Thr Thr Thr Ser  
 245 250 255  
 Leu Thr Tyr Asp Val Arg Asp Met Pro Leu Val Gln His Val Ala Lys  
 260 265 270  
 Ile Phe Gly Ile Ser Ile His Gln Val Gln Ser Asp Ile Asp Lys Asn  
 275 280 285  
 Arg Gly Val Trp Thr Gly Lys Ala Ala Leu Gln Asp Leu Lys Thr Tyr

## 18594

290		295		300
Gln Ala His Leu Asn Leu Gln Thr Arg Lys Thr Leu Ser Arg Glu Asp				
305		310		320
Phe Asp Asn Glu Glu Ala Tyr Glu His Trp Lys Lys Ser Glu Gly Pro				
	325		330	335
Asp Leu Ser Gln Met Met Leu Ala Ile Val Gln Ser Asn Pro Glu Leu				
	340		345	350
Ala Lys Ser Thr Pro Gly Gly Ala Leu Pro Gln Phe Asn Val Asn Ala				
	355		360	365
Ala Asp Gln Ser Asn Asp Pro Ser Ala Ala Pro Leu Ser Arg Thr Met				
	370		375	380
Ser Asp Arg Pro Val Ser Tyr Val Ile Asp Gln Pro Ile Asp Leu Ser				
385		390		395
Ser Leu Ser Leu Ser Asp Asp Pro Asn Asn Asn Ser Glu Glu Ser Asp				
	405		410	415
Thr Tyr Thr Phe Ile Pro Ser Asp Pro Arg Ser Met Tyr Lys Phe Ile				
	420		425	430
Leu Gly Leu Thr Leu Ser His Asp Leu Lys Asp Arg Glu Ile Glu Ala				
	435		440	445
Thr Ala Ala Thr Ser Glu Thr Thr Ser Met Lys Leu Leu Ser Lys Gln				
	450		455	460
Ser Thr Glu Leu Leu Asn Glu Leu Cys Leu Arg Trp Arg Ile Pro Asn				
465		470		475
Phe Ser Arg Val Val Leu Phe Leu Asp Ile Ile Arg Thr Lys Phe Val				
	485		490	495
Asp Asn Glu Ile Asp Leu Asp Thr Leu Asp Ser Ala Phe Thr Phe Val				
	500		505	510
Lys Glu Thr Pro Pro Ser Asp Gly Lys Lys Arg Gln Ser Tyr Met Ala				
	515		520	525
Ser Val Val Phe Asp Arg Ser Lys Trp Thr Ile Gln Asp Leu Leu Leu				
	530		535	540
Ile Gln Glu Leu Leu Ser Ser Leu His Glu Ala Leu Leu Arg Glu Leu				
545		550		555
Tyr Asp Val Met Met Asp Cys Phe Glu Ala Lys Pro Arg Pro Ile Gly				
	565		570	575
Pro Val Met Tyr Val Leu Glu Asn His Ile Gln Leu Asp Pro Asn Tyr				
	580		585	590
Thr Glu Asp Leu Glu Asp Ile Asp Arg Phe Arg Ser Tyr Val Gln Asp				
	595		600	605
Gly Leu Ala Gln Lys Ala Thr Glu Lys Tyr Gln Glu Leu Leu Gly Gln				
	610		615	620
Ile Val Pro Val Gln Ala Glu Thr Trp Glu Pro His His Val Ile Gln				
625		630		635
Leu Gly Asp Ala Ile Met Lys Leu Ala Gln Lys Ile Arg Lys Arg Tyr				
	645		650	655
Arg Asn Asn Pro Glu Ile Met Gly				
	660			

&lt;210&gt; 41848

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41848

Arg Trp Asp Ser Val Thr Phe Pro Phe His Val Glu Ser Leu Leu Glu
1 5 10 15

## 18595

Asp Phe Val Trp Arg Trp Ile Arg Leu Thr Asp Gln Lys Val Met Asp  
 20 25 30  
 Trp Val Glu Gln Ala Val Arg Gln Asp Pro Phe Thr Val Arg Ala Gly  
 35 40 45  
 Asp Trp Thr Asp Val Val Pro Glu Asp His Arg His Ser Val Ser Val  
 50 55 60  
 Ile Asp Ile Phe Arg Ser Phe Asn Gln Val Val Glu Gln Met Val Gln  
 65 70 75 80  
 Leu Gly Trp Asp Asp Asp Leu Gln Tyr Ala Lys Phe Met Thr Ala Leu  
 85 90 95  
 Ser Lys Ser Ile Gly Lys Gly Val Ala Arg Tyr Cys Glu Leu Leu Glu  
 100 105 110  
 Gln Met Phe Ser Arg Glu Met Asp Arg Leu Ser Pro Asp Gln Glu Ala  
 115 120 125  
 Ala Met Asn Gln Thr Thr Gln Glu Lys Ile Met Gln Met Ala Lys Glu  
 130 135 140  
 Ala Trp Thr Ser Lys Glu Lys Ile Glu Pro Phe Gln Phe Phe Pro Glu  
 145 150 155 160  
 Val Ser Leu Arg Phe Gln Ser Ser Ala Pro Pro Gly Pro Glu Tyr Leu  
 165 170 175  
 Thr Lys Gly Tyr Ser Leu Ser Ser Asn  
 180 185

<210> 41849  
 <211> 92  
 <212> PRT  
 <213> A.fumigatus

<400> 41849  
 Arg Val Asp Leu Gly Pro Ser Ala Gly Ile Thr Met Ala Thr Ser Leu  
 1 5 10 15  
 Leu Ser Leu Ala Leu Asp His Pro Leu Asp Pro Thr Ile Ala Met Thr  
 20 25 30  
 Gly Glu Leu Thr Val Thr Gly Lys Val Leu Arg Ile Gly Gly Leu Arg  
 35 40 45  
 Glu Lys Thr Val Ala Ala Arg Arg Ala Gly Ala Lys Lys Ile Ile Phe  
 50 55 60  
 Pro Ala Asp Asn Met Ser Asp Trp Leu Glu Leu Pro Glu Val Ser Arg  
 65 70 75 80  
 Ile Gln Asn Thr Ser Ser Leu Val His Ser Ser Ser  
 85 90

<210> 41850  
 <211> 757  
 <212> PRT  
 <213> A.fumigatus

<400> 41850  
 Ile Ile Gly Cys Ser Thr Ser Glu Phe Asp Tyr Tyr Arg Pro Phe Ser  
 1 5 10 15  
 Gln Cys Arg Pro Gln Phe Leu Trp Thr Trp Gly Ile Gln Leu Ala Gly  
 20 25 30  
 Cys Ser Ser Arg Ser Leu His Asp Ser Gly Ala Thr Glu Ser Ile Cys  
 35 40 45  
 Met Ala Ile Ser Ile Ala Asp Ser Ser Tyr Ser Pro Thr Arg His Leu  
 50 55 60

Gly Phe Leu Leu Asp Pro Glu Lys Val Asn Pro Arg Pro Lys Gln Ser  
 65 70 75 80  
 Met Trp His Arg Leu Gly Leu Arg Arg Leu Leu Gly Arg Asp Asp Arg  
 85 90 95  
 Asp Leu Ser Ser Arg Ser Pro Ser Gly Asp Ser Ser Pro Pro Ala Asn  
 100 105 110  
 Pro Ala Pro Thr Ala Asn Asn Ser Gly Asn Ala His His Ser Ser Lys  
 115 120 125  
 Leu His Asp Asn Leu Thr Arg Arg Leu Ser Arg Arg Val Gly Val Gly  
 130 135 140  
 Leu Pro Arg Ser Thr Thr Phe Lys Arg Gln Asp Ser Glu Arg Arg Asp  
 145 150 155 160  
 Arg Leu Ala Pro Val Glu Pro Glu Pro Arg Arg Ala Val Ser Ala Asp  
 165 170 175  
 Arg Arg Arg Pro Leu Ser Ala Gln Arg Thr Arg Ser Pro Gln Pro Thr  
 180 185 190  
 Val Asp Pro Arg Leu Ser Ala Pro Glu Val Pro Trp His Asp His Ala  
 195 200 205  
 Glu Glu Pro Met Val Glu Glu Val Glu Pro Pro Ala Thr Thr Asn Asp  
 210 215 220  
 Asp Asn Glu Val Met Ser Asp Trp Asn Pro Cys Pro Asp Val Ala Asp  
 225 230 235 240  
 Val Pro Glu Gln Pro Pro Glu Asp Leu Ile Glu Met Glu Leu Glu Lys  
 245 250 255  
 Arg Trp Ile Leu Asn Leu Ser Met His Phe Arg Asp Arg Ser Glu Arg  
 260 265 270  
 Glu Lys Phe Phe Val Thr Tyr Ala Glu Ala Pro Asn Arg Trp Arg Arg  
 275 280 285  
 Val Thr Ile Ser Cys Asp Tyr Arg Gly Ala Pro Pro Asp Ser Leu Glu  
 290 295 300  
 Gln Asp Leu Lys Glu Leu Arg Tyr Gln Arg Asp Lys Cys Ala Arg Ile  
 305 310 315 320  
 Tyr Glu Ser Ile Arg Glu Ser Leu Pro Glu Ile Gln Phe Tyr Asp Thr  
 325 330 335  
 Val Thr Asn Leu Lys Leu Glu Thr Arg Asp Gly Arg Leu His Val His  
 340 345 350  
 Val Thr Glu Asp Val Asn Glu Ile Ile Pro Tyr Pro Pro Thr Ser Cys  
 355 360 365  
 Ile Gly His Leu Pro Glu Ala Arg Leu Val Pro Glu Tyr Gln Leu His  
 370 375 380  
 Phe Glu Ala His Leu Ser Gly Phe Val Tyr Asn Val Arg Leu Asp Gly  
 385 390 395 400  
 Lys Asn Tyr Ile Lys Lys Glu Ile Pro Gly Pro Asp Thr Val Asp Glu  
 405 410 415  
 Phe Leu Tyr Glu Ile Asn Ala Leu His Ala Leu Asn Gly Ser Pro Asn  
 420 425 430  
 Val Ile Gln Val Glu Gly Ile Val Val Asn Asp Ser Arg Asp Val Val  
 435 440 445  
 Lys Gly Leu Leu Ile Ser Tyr Ala Glu Gln Gly Ala Leu Val Asp Ile  
 450 455 460  
 Leu Tyr Glu Gln Arg Gly Thr Ile Ser Trp Glu Arg Arg Ala Arg Trp  
 465 470 475 480  
 Ala Arg Gln Ile Ile Gln Gly Leu Gly Glu Ile His Glu Ser Gly Tyr  
 485 490 495  
 Val Gln Gly Asp Phe Thr Leu Ser Asn Ile Val Val Asp Ala Asp Asp  
 500 505 510

## 18597

Asn Ala Lys Ile Ile Asp Ile Asn Arg Arg Gly Cys Pro Val Gly Trp  
 515 520 525  
 Glu Pro Pro Glu Ile Ala Ala Lys Ile Glu Ser Asn Gln Arg Ile Ser  
 530 535 540  
 Met Tyr Ile Gly Val Lys Thr Asp Leu Tyr Gln Leu Gly Met Thr Leu  
 545 550 555 560  
 Trp Ala Leu Ala Thr Glu Glu Asp Glu Pro Glu Arg Gln Pro Arg Pro  
 565 570 575  
 Leu Leu Leu Gly Gln Glu Val Asp Val Pro Asp Trp Tyr Arg Arg Ile  
 580 585 590  
 Val Ser Ile Cys Leu Ser Pro Ser Pro Arg Gln Arg Leu Ser Ala Lys  
 595 600 605  
 Glu Leu Leu Val Phe Phe Pro Gln Glu Leu Ser Thr Thr Thr Thr  
 610 615 620  
 Thr Thr Thr Thr Pro Gln Phe His Ser Thr His Leu Pro His Gly Gly  
 625 630 635 640  
 Leu Gly Val Gly Leu Tyr Asn Ser Pro Leu Pro Leu Tyr Asn Ala Arg  
 645 650 655  
 Ala Ile Thr Thr Ala Ala Thr Phe Ala Gly Pro Asn Asn Arg Pro Val  
 660 665 670  
 Tyr Gln Pro Gly His Phe His Gly Arg Ser Val Ser Leu Asp Glu Thr  
 675 680 685  
 Gly Ser Arg Leu Tyr Ala Asn Ser Val Asp Ser Phe Pro Ala Tyr Pro  
 690 695 700  
 Glu Asp Cys Tyr Ser Val Ser Leu Asp Asp Glu Lys Val Pro Thr Thr  
 705 710 715 720  
 Asn Glu His Ser Asn Ser Met Arg Glu Tyr Ala Ala Asp Asn Gln Thr  
 725 730 735  
 Cys Glu Val Ile Phe Asp Pro Arg Asn Ser Glu Thr Asn Gly Gln Arg  
 740 745 750  
 Pro Gln Phe Phe Phe  
 755

&lt;210&gt; 41851

&lt;211&gt; 587

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41851

Arg Leu Pro Lys Ala Leu Val Val Leu Lys Lys Glu Leu Met Asn Ala  
 1 5 10 15  
 Gln Leu Gln Ser Lys Ile Ser Lys Asp Val Glu Ala Lys Ile Gln Lys  
 20 25 30  
 Arg Gln Arg Glu Tyr Trp Leu Met Glu Gln Met Lys Gly Ile Lys Arg  
 35 40 45  
 Glu Leu Gly Ile Glu Ser Asp Gly Lys Asp Lys Leu Val Glu Lys Phe  
 50 55 60  
 Lys Glu Lys Ala Ser Lys Leu Ala Met Pro Asp Ala Val Lys Lys Val  
 65 70 75 80  
 Phe Asp Glu Glu Ile Asn Lys Leu Ala His Leu Glu Pro Ala Ala Ser  
 85 90 95  
 Glu Phe Asn Val Thr Arg Asn Tyr Leu Asp Trp Leu Thr Gln Ile Pro  
 100 105 110  
 Trp Gly Gln Lys Ser Val Glu Asn Phe Gly Ile Lys His Ala Met Thr  
 115 120 125  
 Val Leu Asp Glu Asp His Tyr Gly Leu Lys Asp Val Lys Asp Arg Ile

## 18598

130 135 140  
 Leu Glu Phe Ile Ala Val Gly Lys Leu Arg Gly Thr Val Glu Gly Lys  
 145 150 155 160  
 Ile Leu Cys Leu Val Gly Pro Pro Gly Val Gly Lys Thr Ser Ile Gly  
 165 170 175  
 Lys Ser Ile Ala Arg Ala Leu Asn Arg Gln Tyr Tyr Arg Phe Ser Val  
 180 185 190  
 Gly Gly Leu Thr Asp Val Ala Glu Ile Lys Gly His Arg Arg Thr Tyr  
 195 200 205  
 Val Gly Ala Leu Pro Gly Arg Ile Ile Gln Ala Leu Lys Lys Cys Gln  
 210 215 220  
 Thr Glu Asn Pro Leu Ile Leu Ile Asp Glu Val Asp Lys Ile Gly Arg  
 225 230 235 240  
 Gly His Gln Gly Asp Pro Ser Ser Ala Leu Leu Glu Leu Leu Asp Pro  
 245 250 255  
 Glu Gln Asn Ser Ser Phe Leu Asp His Tyr Met Asp Val Pro Val Asp  
 260 265 270  
 Leu Ser Lys Val Leu Phe Val Cys Thr Ala Asn Val Thr Asp Thr Ile  
 275 280 285  
 Pro Arg Pro Leu Leu Asp Arg Met Glu Leu Ile Glu Leu Ser Gly Tyr  
 290 295 300  
 Val Ala Asp Glu Lys Met Ala Ile Ala Glu Arg Tyr Leu Ala Pro Ala  
 305 310 315 320  
 Ala Arg Glu Leu Thr Gly Leu Lys Asp Val Asp Val Asn Leu Gln Lys  
 325 330 335  
 Asp Ala Ile Glu Glu Leu Ile Lys Ser Tyr Ala Arg Glu Ser Gly Val  
 340 345 350  
 Arg Asn Leu Lys Lys Gln Ile Glu Lys Val Tyr Arg Lys Ala Ala Phe  
 355 360 365  
 Lys Ile Val Gln Asp Leu Gly Glu Glu Val Leu Gly Glu Asp Lys Ala  
 370 375 380  
 Leu Thr Asp Glu Gly Lys Ala Ala Gln Glu Glu Ser Lys Lys Glu Thr  
 385 390 395 400  
 Glu Glu Gly Asp Pro Lys Asp Pro Pro Ala Asp Pro Glu Lys Ser Thr  
 405 410 415  
 Thr Glu Thr Pro Arg Leu Ala Leu Lys Val Pro Glu Ser Val His Leu  
 420 425 430  
 Ser Ile Gly Lys Asp Ser Leu Thr Asp Tyr Leu Gly Pro Pro Val Phe  
 435 440 445  
 Thr Ala Asp Arg Leu Tyr Asp Thr Phe Pro Pro Gly Val Thr Met Gly  
 450 455 460  
 Leu Ala Trp Thr Ser Met Gly Gly Ala Ala Leu Tyr Val Glu Ser Ile  
 465 470 475 480  
 Leu Glu Asn Ala Leu Thr Pro Glu Ser Arg Pro Gly Ile Asp Ile Thr  
 485 490 495  
 Gly Asn Leu Gln Pro Val Met Lys Glu Ser Thr Gln Ile Ala Tyr Ser  
 500 505 510  
 Phe Ala Lys Ser Val Leu Ala Lys Gln Phe Pro Glu Asn Lys Phe Phe  
 515 520 525  
 Glu Lys Ala Lys Leu His Met His Cys Pro Glu Gly Ala Val Pro Lys  
 530 535 540  
 Asp Gly Lys Leu Lys Lys Phe Leu Ser Ile Leu Leu Phe Leu His Gly  
 545 550 555 560  
 Gly Leu Thr Ser Gly Phe Arg Ser Ile Cys Arg His His Tyr Gly His  
 565 570 575  
 Phe Ser Pro Phe Ala Gly Pro Gly Pro Pro Ser



## 18599

580

585

<210> 41852  
 <211> 257  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41852

Val Thr Lys Asn Phe Ser Arg Ser Asp Arg Ser Arg Lys Cys Ile Leu  
 1 5 10 15  
 Arg Phe Ser Ile His Arg Phe Ser Asn Ser Ile Ser Ile Arg Ser Ser  
 20 25 30  
 Gly Gly Cys Ser Gly Thr Ser Ala Thr Ser Gly His Gly Phe Gln Ser  
 35 40 45  
 Asp Ile Thr Ser Leu Ser Ser Phe Val Val Ala Gly Gly Ser Thr Ser  
 50 55 60  
 Ser Thr Met Gly Ser Ser Ala Trp Ser Cys His Gly Thr Ser Gly Ala  
 65 70 75 80  
 Asp Asn Leu Gly Ser Thr Val Gly Cys Gly Asp Leu Val Arg Trp Ala  
 85 90 95  
 Leu Asn Gly Arg Arg Arg Ser Ala Glu Thr Ala Arg Arg Gly Ser Gly  
 100 105 110  
 Ser Thr Gly Ala Arg Arg Ser Leu Arg Ser Glu Ser Cys Leu Leu Asn  
 115 120 125  
 Val Val Glu Arg Gly Arg Pro Thr Pro Thr Leu Arg Glu Ser Leu Arg  
 130 135 140  
 Val Arg Leu Ser Trp Ser Leu Glu Glu Trp Trp Ala Leu Pro Leu Leu  
 145 150 155 160  
 Phe Ala Val Gly Ala Gly Phe Ala Gly Gly Glu Glu Ser Pro Glu Gly  
 165 170 175  
 Asp Arg Glu Asp Lys Ser Arg Ser Ser Arg Pro Ser Ser Leu Arg Arg  
 180 185 190  
 Pro Ser Arg Cys His Met Leu Cys Leu Gly Arg Gly Leu Thr Phe Ser  
 195 200 205  
 Gly Ser Ser Arg Asn Pro Arg Cys Leu Val Gly Leu Tyr Glu Leu Ser  
 210 215 220  
 Ala Met Glu Met Ala Ile Gln Ile Asp Ser Val Ala Pro Leu Ser Cys  
 225 230 235 240  
 Lys Glu Arg Leu Glu His Pro Ala Asn Trp Ile Pro His Val His Lys  
 245 250 255  
 Asn

<210> 41853  
 <211> 156  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41853

Asn Leu Leu Asn Asp Leu Phe Gln Ser Ser Ser Ser Arg Gly Pro Phe  
 1 5 10 15  
 Phe Gly Phe Pro Ala Ser Cys Phe Cys Gln Ser Leu Leu Ala Ala Ser  
 20 25 30  
 Leu Ser Ser Ser Ala Lys Arg Met Leu Asn Thr Ser Glu Tyr Gln Leu  
 35 40 45  
 Thr Ala Trp Pro Ser Ile Pro Ser Leu Met Phe Cys Ile His Cys Gln

## 18600

50                      55                      60  
 Leu Glu Glu Trp Thr Lys Asp Asp Val Phe Trp Ile Leu Leu Thr Ser  
 65                      70                      75                      80  
 Gly Ser Ser Asn Gln Ser Asp Ile Leu Ser Ala Gly Lys Ile Ile Phe  
                     85                      90                      95  
 Phe Ala Pro Ala Arg Arg Ala Ala Thr Val Phe Ser Arg Lys Pro Pro  
                     100                      105                      110  
 Ile Arg Arg Thr Leu Pro Val Thr Val Ser Ser Pro Val Ile Ala Ile  
                     115                      120                      125  
 Val Gly Ser Arg Gly Trp Ser Arg Ala Ser Glu Arg Arg Glu Val Ala  
                     130                      135                      140  
 Ile Val Met Pro Ala Asp Gly Pro Lys Ser Thr Arg  
 145                      150                      155

&lt;210&gt; 41854

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41854

Trp Ile Ala Leu Met Thr Ser Ser Asp Phe Ile His Leu Ile Asn Gln  
 1                      5                      10                      15  
 Asn Gln Arg Ile Leu Gly Leu Ala Leu Leu Glu Gly Leu Asn Asp Thr  
                     20                      25                      30  
 Thr Gly Lys Cys Thr His Ile Gly Pro Thr Met Ser Leu Asp Leu Ser  
                     35                      40                      45  
 Asn Ile Cys Glu Ala Thr Asn Gly Glu Pro Val Ile Leu Pro Val Gln  
                     50                      55                      60  
 Ser Ser Gly Asp Arg Leu Ala Asp Thr Gly Leu Ser Asp Thr Trp Gly  
 65                      70                      75                      80  
 Ser Tyr Lys Ala Glu Asn Leu Ala Phe His Gly Ser Pro Lys Leu Ser  
                     85                      90                      95  
 Asn Arg Asn Glu Leu Lys Asp Thr Ile Leu Asn Ile Leu Gln Ala Val  
                     100                      105                      110  
 Val Ile Phe Val Gln Asp Ser His Gly Met Leu Asn Thr Glu Val Leu  
                     115                      120                      125  
 His Ala Leu Leu Thr Pro Arg Asn Leu Ser Gln Pro Val Lys Val Ile  
                     130                      135                      140  
 Pro Ser Asn Val Glu Phe Arg Arg Gly Trp Leu Lys Val Gly Gln Leu  
 145                      150                      155                      160  
 Val Asp Phe Leu Val Glu His Leu Phe Asp Ser Ile Trp His Gly Gln  
                     165                      170                      175  
 Leu Arg Cys Leu Leu Phe Glu Leu Leu His  
                     180                      185

&lt;210&gt; 41855

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41855

Ala Arg Arg Ile Leu Pro Ser Leu Ala Leu Thr Leu Val Val Leu Gly  
 1                      5                      10                      15  
 Leu Ser Tyr Ala Phe Ala Ala Asn Tyr Glu Ala Pro Ala Arg Ala Asp  
                     20                      25                      30  
 Arg Met Trp Pro Asp Met Pro Pro Ala Ala Ala Thr Ala Phe Ala Ile

## 18601

35 40 45  
 Met Gly Ala Asn Leu Thr Ile Phe Leu Leu Trp Lys Phe Pro Pro Ala  
 50 55 60  
 Trp Arg Met Leu Asn Arg Tyr Phe Ile Ser Val Pro Phe Lys Pro His  
 65 70 75 80  
 Ala Leu Ser Ile Val Gly Asn Val Phe Ser His Gln Gln Phe Lys His  
 85 90 95  
 Met Ser Leu Asn Met Leu Met Leu Trp Phe Ile Gly Thr Lys Arg Glu  
 100 105 110  
 Cys Trp Ser Asn Leu Ser Gln Gly Leu Leu Met Leu Thr Val Pro Ser  
 115 120 125  
 Pro Arg  
 130

&lt;210&gt; 41856

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41856

Val Ala Pro Gly Pro Asn Ser Pro Ser Phe Pro Pro Ser Val Asp Ser  
 1 5 10 15  
 Pro Ala Pro Tyr Asp Pro Asp Ala Pro Lys Tyr Phe Phe Gln Glu Lys  
 20 25 30  
 Tyr Ala Pro Leu Asn Val Lys Gly Asn Phe Leu Thr Leu Cys Ala Cys  
 35 40 45  
 Pro Lys Asn Val Glu Leu Gly Glu Trp Leu Ala His Gln Ser Lys Arg  
 50 55 60  
 Phe Met Tyr Ile Ala Val Trp Ser Asp Pro Arg Cys  
 65 70 75

&lt;210&gt; 41857

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41857

Lys His Leu Ser Asn Tyr Val Cys Gly Ser Val Ser Asp Leu Ser Ile  
 1 5 10 15  
 Pro Arg Thr Arg Pro Asn Phe Ile Pro Pro Leu Thr Glu Phe Pro Asn  
 20 25 30  
 Ser Leu Thr Tyr Thr Trp Leu Val Asp Gly Arg Ala Ala Lys Ile Ser  
 35 40 45  
 Ala Pro Lys Phe Ile Asn Arg Val Glu Lys Trp Ile Val Ser Lys Ile  
 50 55 60  
 His Asp Pro Val Met Phe Pro Thr Glu Lys Val Thr Gly Thr Pro Asp  
 65 70 75 80  
 Thr Phe Ala Leu His Glu Ala Thr Asn Ala Asn Pro Gly Ser Ala Asp  
 85 90 95  
 Ala Asn Ser Thr Gly Glu Glu Trp Ile Gly Lys Ser Ser Gly Phe Pro  
 100 105 110  
 Gln Thr Phe Tyr Lys Asp Cys Gln Gly Ile Met Lys Gln Met Phe Arg  
 115 120 125  
 Cys Tyr Ala His Leu Tyr His Ala His Trp Leu Asn Pro Phe Trp His  
 130 135 140  
 Ile Asn Lys His Asp Ile Leu Asn Met Cys Phe Val His Phe Val Thr

## 18602

145                      150                      155                      160  
 Val Ala Lys Tyr Tyr Lys Leu Val Ser Asp Lys Glu Met Glu Pro Met  
                                  165                      170                      175  
 Gln Pro Leu Ile Asp Leu Phe Ile Lys Gln Gln Arg Ile Pro Gln Glu  
                                  180                      185                      190  
 Ala Leu Ala Gly Gly His Trp Gly Gln Pro Ser Ser Ser  
                                  195                      200                      205

<210> 41858  
 <211> 91  
 <212> PRT  
 <213> A.fumigatus

<400> 41858  
 Leu Ala Asp Tyr Ala His Asn Arg Glu Lys Phe Thr Ile Phe Phe Leu  
 1                      5                      10                      15  
 Pro Arg Glu Trp Gln Glu Val Ile Ser Ala Lys Gly Trp Val Leu Leu  
                                  20                      25                      30  
 Thr Gly Phe Val Ala Phe Glu Ile Phe Asn Leu Val Ser Pro Phe Arg  
                                  35                      40                      45  
 Val Met Lys Leu Asp His Phe Ala His Leu Gly Gly Tyr Leu Ile Gly  
                                  50                      55                      60  
 Ala Val Trp Ala Leu Ala Trp Lys Gly Glu Gln Lys Lys Arg Arg Gln  
 65                      70                      75                      80  
 Asn Arg Thr Trp Phe Glu Arg Leu Met Ser Glu  
                                  85                      90

<210> 41859  
 <211> 534  
 <212> PRT  
 <213> A.fumigatus

<400> 41859  
 Glu Asp Ser Asp Arg Asp Ile His Leu Ile Asn Gly Thr Ser Ala Thr  
 1                      5                      10                      15  
 Arg Arg Ala Leu Ala Lys Met Met Ala Leu Glu Val Lys Asp Glu Thr  
                                  20                      25                      30  
 Tyr Asp Glu Ser Glu Ile Phe Leu Ser Phe Ala Pro Trp Val Pro Leu  
                                  35                      40                      45  
 Ser Ala Thr Glu Asp Thr His Val Val Glu Pro Glu Ala Leu Thr Ser  
                                  50                      55                      60  
 Ser Val Lys His Pro Trp Gly Ile Ile Asp Tyr His Leu Tyr Leu Asn  
 65                      70                      75                      80  
 Ser Leu Glu Ala Gly Lys Asp Met His Ile Arg Arg Glu Asn Leu Tyr  
                                  85                      90                      95  
 Leu Phe Asp Asp Thr Asp Cys Glu Pro Ile Arg Tyr Cys Asp Leu Phe  
                                  100                      105                      110  
 Val Ala Glu Ile Tyr Arg Met Glu Glu Asp Ser Gln Arg Ala Arg Leu  
                                  115                      120                      125  
 Leu Phe Ala Ile Leu Pro Ile Ala Glu Lys Gly Ala Val Phe Gly Glu  
                                  130                      135                      140  
 Arg Asn Tyr Val Leu Gly Tyr Asp Trp Lys Tyr Arg Ser Leu Phe Ala  
 145                      150                      155                      160  
 Arg His Phe Asn Trp Met Pro His Asp Ile Arg Asp Ile Trp Ser Val  
                                  165                      170                      175  
 Trp Ser Glu Gly Thr Thr Val Tyr Thr Ile Ser Ile Ser Arg Leu Phe

Parameter	Estimate	Standard Error	t-Statistic	p-Value	95% Confidence Interval
Intercept	1.234	0.012	102.8	<0.001	[1.210, 1.258]
Age	0.005	0.001	5.2	<0.001	[0.003, 0.007]
Gender (Male)	-0.021	0.008	-2.6	0.010	[-0.037, -0.005]
Education (High School)	0.018	0.005	3.6	<0.001	[0.008, 0.028]
Income (Low)	-0.012	0.004	-3.0	0.003	[-0.020, -0.004]
Health (Poor)	-0.035	0.006	-5.8	<0.001	[-0.047, -0.023]
Time (1990)	0.001	0.001	1.2	0.230	[-0.001, 0.003]
Time (2000)	0.002	0.001	2.1	0.035	[0.000, 0.004]
Time (2010)	0.003	0.001	3.2	0.001	[0.001, 0.005]
Time (2020)	0.004	0.001	4.1	<0.001	[0.002, 0.006]
Time (2030)	0.005	0.001	5.0	<0.001	[0.003, 0.007]
Time (2040)	0.006	0.001	6.0	<0.001	[0.004, 0.008]
Time (2050)	0.007	0.001	7.0	<0.001	[0.005, 0.009]
Time (2060)	0.008	0.001	8.0	<0.001	[0.006, 0.010]
Time (2070)	0.009	0.001	9.0	<0.001	[0.007, 0.011]
Time (2080)	0.010	0.001	10.0	<0.001	[0.008, 0.012]
Time (2090)	0.011	0.001	11.0	<0.001	[0.009, 0.013]
Time (2100)	0.012	0.001	12.0	<0.001	[0.010, 0.014]
Time (2110)	0.013	0.001	13.0	<0.001	[0.011, 0.015]
Time (2120)	0.014	0.001	14.0	<0.001	[0.012, 0.016]
Time (2130)	0.015	0.001	15.0	<0.001	[0.013, 0.017]
Time (2140)	0.016	0.001	16.0	<0.001	[0.014, 0.018]
Time (2150)	0.017	0.001	17.0	<0.001	[0.015, 0.019]
Time (2160)	0.018	0.001	18.0	<0.001	[0.016, 0.020]
Time (2170)	0.019	0.001	19.0	<0.001	[0.017, 0.021]
Time (2180)	0.020	0.001	20.0	<0.001	[0.018, 0.022]
Time (2190)	0.021	0.001	21.0	<0.001	[0.019, 0.023]
Time (2200)	0.022	0.001	22.0	<0.001	[0.020, 0.024]
Time (2210)	0.023	0.001	23.0	<0.001	[0.021, 0.025]
Time (2220)	0.024	0.001	24.0	<0.001	[0.022, 0.026]
Time (2230)	0.025	0.001	25.0	<0.001	[0.023, 0.027]
Time (2240)	0.026	0.001	26.0	<0.001	[0.024, 0.028]
Time (2250)	0.027	0.001	27.0	<0.001	[0.025, 0.029]
Time (2260)	0.028	0.001	28.0	<0.001	[0.026, 0.030]
Time (2270)	0.029	0.001	29.0	<0.001	[0.027, 0.031]
Time (2280)	0.030	0.001	30.0	<0.001	[0.028, 0.032]
Time (2290)	0.031	0.001	31.0	<0.001	[0.029, 0.033]
Time (2300)	0.032	0.001	32.0	<0.001	[0.030, 0.034]
Time (2310)	0.033	0.001	33.0	<0.001	[0.031, 0.035]
Time (2320)	0.034	0.001	34.0	<0.001	[0.032, 0.036]
Time (2330)	0.035	0.001	35.0	<0.001	[0.033, 0.037]
Time (2340)	0.036	0.001	36.0	<0.001	[0.034, 0.038]
Time (2350)	0.037	0.001	37.0	<0.001	[0.035, 0.039]
Time (2360)	0.038	0.001	38.0	<0.001	[0.036, 0.040]
Time (2370)	0.039	0.001	39.0	<0.001	[0.037, 0.041]
Time (2380)	0.040	0.001	40.0	<0.001	[0.038, 0.042]
Time (2390)	0.041	0.001	41.0	<0.001	[0.039, 0.043]
Time (2400)	0.042	0.001	42.0	<0.001	[0.040, 0.044]
Time (2410)	0.043	0.001	43.0	<0.001	[0.041, 0.045]
Time (2420)	0.044	0.001	44.0</		

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<210> 41860
<211> 173
<212> PRT
<213> A.fumigatus
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<400> 41860
Lys Lys Thr Lys Thr Leu Gly Ile Cys Tyr Tyr Ser Ser Ser Arg Arg
1          5          10
Phe Val Pro Gln Leu Ala Glu Met Ser Glu Glu Ala Gln Pro Ile Ala
20          25          30

```

## 18604

Leu Glu Ala Phe Ala Glu Ala Ile Arg Glu Leu Pro Leu Ser Ala Val  
           35                                  40                                  45  
 Tyr Ala Lys Val Ser Glu Ile Arg Asn Ser Ile Ala His Leu Arg Arg  
           50                                  55                                  60  
 Ser Asn Ser Glu Leu Lys Ala Phe Ile Asp Glu Thr Cys Glu Ser Glu  
 65                                  70                                  75                                  80  
 Ser Asp Lys Arg Glu Leu Glu Gly Tyr Ile Ala Glu Asn Glu Gly Val  
                                   85                                  90                                  95  
 Ile Ala Thr Met Asn Asp Arg Ile Gly Leu Leu Lys Thr Glu Ile Glu  
                                   100                                  105                                  110  
 Ser Arg Gly Glu Arg Trp Ile Glu Glu Glu Ile Glu Ala Asn Ile Lys  
                                   115                                  120                                  125  
 Val Asp Gly Asp Glu Val Ser Thr Ser Gln Pro Ile Ile Asn Gly Thr  
                                   130                                  135                                  140  
 Ala Gly Asp Glu Arg Pro Arg Ala His Glu Asp Ala Thr Arg Arg Pro  
 145                                  150                                  155                                  160  
 Glu Asp Arg Gln Thr Asn Glu Glu Glu Gly Val Tyr Leu  
                                   165                                  170

&lt;210&gt; 41861

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41861

Asp Gln Phe Asn Glu Trp Pro Ile His Thr Ile Thr Leu Asp Gln Ile  
 1                                  5                                  10                                  15  
 Gln Lys Gln Leu Pro Ala Lys Asp Ile Asp Met Ala Ser Ala Ala Val  
                                   20                                  25                                  30  
 Gln Leu Pro Thr Thr His Gly Ser Gln Thr Gln Arg Ala Pro Leu Leu  
                                   35                                  40                                  45  
 Pro Thr Ser Asn Thr Pro His Val Gln Thr Thr Leu Asn Phe Leu  
                                   50                                  55                                  60  
 Lys Glu Asn Glu Asp Gly Ser Pro Pro Ala Pro Ser Tyr Val Gly Lys  
 65                                  70                                  75                                  80  
 Pro Glu Thr Tyr Asp Arg Pro Ser Val Thr Leu Pro Val Thr Ile His  
                                   85                                  90                                  95  
 Asp Val Ser Gly His Glu Leu Glu Tyr Thr Leu Asp Lys Asn Gly Phe  
                                   100                                  105                                  110  
 Gln Phe Tyr Tyr His Glu Ser Lys Glu Lys Asp Phe Leu Asp Asp Glu  
                                   115                                  120                                  125  
 Lys Ile Lys Ala Glu Tyr Tyr Pro Glu Val Glu Gln Leu Leu Lys Asp  
                                   130                                  135                                  140  
 Ala  
 145

&lt;210&gt; 41862

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41862

Glu His Pro Pro Ser Gly Thr Ile Leu Thr Glu Gln Pro Ala Pro Ala  
 1                                  5                                  10                                  15  
 His Pro Lys Ser Ser Ser Ser Thr Ile Gln Ser Ala Ala Asn Gln Glu  
                                   20                                  25                                  30

[illegible]

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<210> 41863
<211> 198
<212> PRT
<213> A.fumigatus
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<210> 41864
<211> 461
<212> PRT
<213> A.fumigatus
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<400> 41864  
Pro Val Val Ser Lys Glu Thr Val Lys Trp Tyr Arg Ser Thr Phe Tyr  
1 5 10 15

## 18606

Asn Ala Leu Ile Leu Gly Leu Cys Asn Phe Leu Ala Pro Gly Ile Trp  
 20 25 30  
 Gly Ala Met Asn Ser Leu Gly Ala Gly Gly Ala Glu Lys Pro Tyr Leu  
 35 40 45  
 Val Asn Ala Ala Asn Ala Leu Thr Phe Cys Leu Met Val Val Thr Cys  
 50 55 60  
 Phe Phe Gly Ser Ala Val Val Arg Leu Val Gly Ile Lys Trp Thr Leu  
 65 70 75 80  
 Val Ile Gly Thr Met Gly Tyr Ala Pro Tyr Ala Ala Gly Leu Tyr Thr  
 85 90 95  
 Asn Asn Arg Phe Gly Thr Glu Trp Phe Val Leu Leu Gly Ala Ala Leu  
 100 105 110  
 Cys Gly Leu Ser Ala Gly Leu Phe Trp Met Ala Glu Gly Ala Ile Ala  
 115 120 125  
 Leu Ser Tyr Pro Glu Pro His Asn Gln Gly Arg Phe Leu Gly Phe Trp  
 130 135 140  
 Leu Ser Phe Arg Val Gly Gly Gln Ile Leu Gly Gly Ala Ile Asn Leu  
 145 150 155 160  
 Gly Ile Asn Ala Asn Arg Ser Thr Ala Gly Ser Val Ser Tyr Thr Val  
 165 170 175  
 Tyr Leu Val Phe Ile Ala Leu Gln Ala Leu Gly Pro Phe Ala Ala Leu  
 180 185 190  
 Leu Leu Asn Lys Pro Ser Arg Val Gln Arg Thr Asp Gly Leu Pro Val  
 195 200 205  
 Arg Leu Gly Ile Ser His Ser Pro Leu Tyr Glu Leu Lys Ala Met Ala  
 210 215 220  
 Lys Leu Phe Ile Arg Arg Asp Phe Leu Leu Ile Val Pro Leu Val Val  
 225 230 235 240  
 Gln Ala Val Phe Thr Glu Ala Val Met Phe Thr Phe Leu Ser Leu Trp  
 245 250 255  
 Phe Ser Val Arg Ala Arg Ala Leu Gly Ser Phe Leu Ser Gly Ile Ile  
 260 265 270  
 Ala Leu Ile Val Gly Asn Leu Leu Gly Ala Phe Leu Asp Ser Arg Lys  
 275 280 285  
 Leu Ser Leu Arg Ser Arg Ser Arg Gly Ala Phe Phe Val Val Leu Gly  
 290 295 300  
 Leu Gln Gly Ala Trp Trp Val Trp Ala Thr Val Ile Val Thr Glu Tyr  
 305 310 315 320  
 His Arg Thr Leu Pro Ser Tyr Asp Trp Ala Asp Ala Gly Phe Gly Arg  
 325 330 335  
 Gly Phe Ala Leu Tyr Leu Phe Trp Val Ala Gly Phe Gln Leu Asn Tyr  
 340 345 350  
 Met Tyr Leu Tyr Val Ser Cys Leu Gly Leu Gly Leu Trp Val Cys Ala  
 355 360 365  
 His Lys Leu Gly Ser Leu Ser Ser Ala Ile Trp Arg Arg Val Lys Lys  
 370 375 380  
 Arg Leu Ser Gly Trp Pro Val Ser Tyr Val Gly Gln Ser Arg Pro Arg  
 385 390 395 400  
 Arg Leu Tyr Arg Tyr Ala Thr Ser Pro Asp Gly Thr Met Leu Leu Leu  
 405 410 415  
 Thr Pro Val Val Trp Pro Gly Gln Cys Gln Asp His Glu Leu Cys Gly  
 420 425 430  
 Gln His Leu Pro Glu Leu Arg Phe Val Gly His Arg Ser Ala Thr Cys  
 435 440 445  
 Val Ala Cys Asp Gln Gly Asp Trp Ser Val Ser Gly Gly  
 450 455 460



<210> 41865  
 <211> 201  
 <212> PRT  
 <213> A.fumigatus

<400> 41865

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Ala Ile Arg Gly Thr Gly Val His Glu Arg Asp Arg Met Lys Ser His
1           5           10           15
Thr Ala Ala Lys Val His Lys Met Asp Asp Ser Glu Asn Gln Ser Leu
          20           25           30
Leu His Pro Thr Ser Gly Leu Tyr Glu Thr Leu Ser Tyr Glu Ser Ile
          35           40           45
His Asp Ile Arg Thr Asn Gly Arg Pro Val Ser Ser Arg Ser Pro Ile
          50           55           60
Pro Glu Thr Ala Pro Tyr Gly Arg Asn Leu Thr Trp Thr Ser Ala Tyr
65          70          75          80
Ile Leu Val Ile Ser Arg Val Ile Gly Ser Gly Ile Phe Ala Thr Pro
          85          90          95
Gly Ser Ile Val Lys Ser Val Gly Ser Val Gly Leu Ala Leu Leu Val
          100         105         110
Trp Leu Val Gly Thr Val Leu Ala Ala Cys Gly Leu Ala Val Ser Met
          115         120         125
Glu Phe Gly Cys Met Leu Pro Arg Ser Gly Gly Asp Lys Val Tyr Leu
          130         135         140
Glu Tyr Thr Tyr Pro Arg Pro Arg Phe Leu Ala Ser Thr Leu Ile Ala
145          150          155          160
Gly Gln Gly Gly Ser Ile Gly Leu Tyr Gly Glu Gln Leu His Tyr Ile
          165          170          175
Leu Gln Gly Pro His Gly Phe Ala Leu Ser Phe Gly Ala Asn Gly Val
          180         185         190
Ala Ala Lys Gly Tyr Gly Gly Arg Pro
          195         200

```

<210> 41866  
 <211> 134  
 <212> PRT  
 <213> A.fumigatus

<400> 41866

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Ala Arg Val Asn Gln Glu Ile Ala Arg Gln Gly Phe Leu Pro Phe Ala
1           5           10           15
Ser Val Leu Ser Ser Ser Arg Pro Phe Asn Ser Pro Leu Gly Gly Leu
          20           25           30
Ile Val His Tyr Ile Pro Ser Leu Leu Val Ile Val Leu Pro Pro Pro
          35           40           45
Gly Asp Val Tyr Asn Phe Ile Leu Asp Val Glu Gly Tyr Pro Gly Gln
          50           55           60
Ile Phe Ala Leu Ala Ile Ala Val Gly Leu Leu Val Leu Arg Arg Arg
65          70          75          80
Gln Pro Asp Ile Thr Arg Pro Phe Lys Ala Trp Leu Pro Ala Val Trp
          85          90          95
Leu Arg Ile Ile Val Cys Val Ala Leu Leu Val Ala Pro Phe Ile Pro
          100         105         110
Pro Pro Asp Arg Lys Gly Asp Val Gly Phe Phe Tyr Ala Thr Tyr Ala
          115         120         125

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18608

Val Val Gly Val Gly Met  
130

<210> 41867  
<211> 212  
<212> PRT  
<213> A.fumigatus

<400> 41867  
Glu Asp Gln Ser Arg Val Leu Pro Arg Gly Arg Ala Val Ala Gln Arg  
1 5 10 15  
Cys Val Ser Val Arg Ala Ser Ser Leu Arg Asn Asp Thr Asp Arg Thr  
20 25 30  
Ala Ser Thr Gly Ala Ser Lys Ile Phe Ile Phe Asp His Thr Ile Arg  
35 40 45  
Arg Gln Pro Arg Asp Glu Arg Ser Val Ala Ala Gln Leu Arg Gly Pro  
50 55 60  
Val Gln Arg Val His Ile Asp Gln Ser Tyr Ala Ala Ser Lys Asp Arg  
65 70 75 80  
Val Ser Tyr His Leu Pro Asp Glu Ala Pro Glu Leu Leu Gln Gly Arg  
85 90 95  
Tyr Gln Ile Ile Asn Val Trp Arg Pro Ile Arg Thr Ile Leu Lys Asp  
100 105 110  
Pro Leu Ala Val Ala Asp Ala His Ser Val Pro Asp Asp Asp Leu Val  
115 120 125  
Pro Thr Lys Leu Ile Tyr Pro Asn Arg Val Gly Glu Thr Tyr Ser Val  
130 135 140  
Arg Pro Asn Pro Gly Phe Lys Trp Tyr Phe Arg Tyr Ala Gln Pro Pro  
145 150 155 160  
Glu Leu Val Thr Leu Ile Lys Cys Phe Asp Ser Lys Thr Asp Gly Arg  
165 170 175  
Ala Arg Arg Val Pro His Ser Ala Phe Val Asp Pro Ala Thr Glu Gly  
180 185 190  
Glu Ala Pro Arg Glu Ser Ile Glu Val Arg Ala Leu Val Phe His Pro  
195 200 205  
Glu Asp Arg Glu  
210

<210> 41868  
<211> 69  
<212> PRT  
<213> A.fumigatus

<400> 41868  
Asn Thr Leu Lys Arg Asp Val Glu Ser Lys Leu Gln Leu Gln Phe Asp  
1 5 10 15  
Pro Phe His Lys Leu Ser His Arg Lys Thr Ser Tyr Pro Val Leu Pro  
20 25 30  
Ala Ser Phe Asp Met Asp Met Gln Gly Ser Ser Arg Arg Lys Asn Ile  
35 40 45  
Thr Gln Ser Pro Val Ser Val Ile Ala Ala Asn Met Thr Ile Phe Ile  
50 55 60  
His Pro Ser Thr Phe  
65

<210> 41869

18609

<211> 299

<212> PRT

<213> A.fumigatus

<400> 41869

Gly	Phe	Arg	Phe	Ser	Gln	Asn	Gln	Gly	Val	Arg	Leu	Ser	Pro	Pro	Pro
1				5					10					15	
Trp	Pro	Val	Leu	Ala	Leu	Ile	Asp	Phe	Cys	Pro	Thr	Gly	Asp	Pro	Ala
			20					25					30		
Val	Ala	Lys	Leu	Ile	His	Phe	His	Gly	Phe	Ser	Asp	His	Ile	Asn	Asn
		35					40					45			
Thr	Tyr	Asp	Leu	Phe	Pro	Ser	Leu	Ala	Arg	Arg	Gly	Ile	Phe	Cys	Thr
	50					55					60				
Gly	Ile	Asp	Gln	Arg	Gly	Trp	Gly	Arg	Ser	Ala	Gln	Thr	Lys	Ala	Asp
65					70					75					80
Arg	Gly	Asn	Thr	Gly	Pro	Thr	Ala	Ala	Ile	Leu	Ala	Asp	Met	Ala	Ala
				85					90					95	
Phe	Ile	Glu	Ala	Gln	Phe	Glu	Val	Pro	Pro	Asp	Val	Pro	Val	Phe	Val
			100					105					110		
Met	Gly	His	Ser	Met	Gly	Gly	Gly	Leu	Val	Ala	Thr	Leu	Ala	Ser	Thr
		115					120					125			
Pro	Lys	Tyr	Gln	Glu	Leu	Val	Ser	Arg	Leu	Gly	Gly	Ile	Leu	Leu	Glu
	130					135					140				
Ala	Pro	Phe	Ile	Gly	Leu	Asp	Pro	Lys	Gln	Lys	Pro	Ser	Ile	Ile	Thr
145					150					155					160
Val	Phe	Leu	Gly	Arg	Leu	Ala	Gly	Arg	Leu	Leu	Pro	Arg	Phe	Gln	Ile
				165					170					175	
Val	Gln	Pro	Ile	Lys	Val	Glu	Thr	Val	Val	Arg	Asp	Pro	Val	Val	Gln
			180					185					190		
Lys	Thr	Leu	Lys	Glu	Asp	Pro	Leu	Asn	His	Ala	Thr	Gly	Thr	Leu	Glu
		195				200						205			
Met	Phe	Ala	His	Met	Leu	Gly	Arg	Ala	Ala	Asp	Leu	Thr	Ser	Gly	Lys
	210					215					220				
Leu	Val	Leu	Asn	Asp	Gly	Val	Lys	Ser	Val	Tyr	Val	Ala	His	Gly	Thr
225					230					235					240
Ala	Asp	Gln	Val	Thr	Ser	Tyr	Asp	Ala	Ser	Lys	His	Trp	Phe	Asp	Ala
				245					250					255	
Gln	Thr	Gly	Lys	Val	Ala	Asp	Arg	Gln	Phe	Lys	Ser	Tyr	Glu	Gly	Trp
			260					265					270		
Ser	His	Leu	Leu	His	Ala	Asp	Leu	Pro	Glu	Asn	Arg	Gln	Val	Phe	Ala
		275					280					285			
Asp	Asp	Val	Ala	Glu	Trp	Ile	Leu	Ala	Arg	Val					
	290					295									

<210> 41870

<211> 204

<212> PRT

<213> A.fumigatus

<400> 41870

Asn	Arg	Arg	Ser	Ser	Lys	Ser	Pro	Pro	Ala	Val	Cys	Arg	Leu	Ile	Leu
1				5					10					15	
Asp	Gly	Ile	Tyr	Leu	Ser	Leu	Phe	Pro	Leu	Glu	Gly	Phe	Gly	Ser	Ser
			20					25					30		
Asn	Asn	Ser	Ile	Thr	Phe	Lys	Met	Asp	Trp	Ile	Ile	Leu	Leu	Tyr	Gly
		35					40					45			

## 18610

Leu Tyr Val Ala Ala Phe Gly Val Thr Val Val Asp Gly Ile Gly Glu  
 50 55 60  
 Thr Ala Gly Asp Thr Thr Thr Leu Ser Gln Trp Arg Leu Gln Ser Ser  
 65 70 75 80  
 Leu Ala Val Ser Asn Val Ser Ala Trp Ser Leu Pro Gly Asn Asp Asp  
 85 90 95  
 Ser Ser Trp Tyr Gln Val Gly Ala Arg Ala Thr Val Met Ala Gly Leu  
 100 105 110  
 Leu Glu Asn Gly Val Tyr Asp Asp Thr Thr Leu Phe Tyr Ser Asn Asn  
 115 120 125  
 Met Glu Thr Lys Ile Gly Asp Ala Ala Lys Phe Asp Ala Pro Trp Leu  
 130 135 140  
 Tyr Arg His Glu Leu Leu Ile Lys Asn Lys Ile Arg Gln Gly Glu His  
 145 150 155 160  
 Tyr Leu Leu His Thr His Gly Ile Thr Ser Lys Gly Gly Tyr Ile Arg  
 165 170 175  
 Gln Arg Gly Ala Gly Cys Thr Glu Leu Gly Ser Ala Gly Ile Val Arg  
 180 185 190  
 Arg Ser His Val Arg His His Lys Ile Pro Ala Cys  
 195 200

&lt;210&gt; 41871

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41871

Gly His Leu Val Ile Ala Asn Asn Tyr Arg Asn Thr Asp Leu Phe Trp  
 1 5 10 15  
 Ala Leu Arg Gly Gly Gly Gly Gly Thr Phe Gly Val Val Val Ala Val  
 20 25 30  
 Thr Leu Arg Thr Phe Asp Glu Val Pro Val Val Phe Gly Asn Leu Asn  
 35 40 45  
 Val Ser Thr Val Ala Gly Asp Pro Asn Phe Trp Gln Val Met Thr Asp  
 50 55 60  
 Phe His Ala Ala Leu Pro Ala Ile Asn Gly His Ala Gly Gly Tyr Tyr  
 65 70 75 80  
 Trp Met Thr Pro Asn Met Pro Val Asp Lys Thr Leu Asn Val Ser Ser  
 85 90 95  
 Leu Ser Ile Ile Leu Met Ala Ala Asn Gln Ser Ser Thr Ala Met Met  
 100 105 110  
 Asp Arg Leu Phe Ala Pro Phe Arg Ser Lys Leu Asn Glu Thr Ser Gly  
 115 120 125  
 Val Phe Thr Glu Tyr Glu Ser Leu Ala Phe Pro Asp Ile His Thr Leu  
 130 135 140  
 Leu Ser Asp Leu Leu Leu Pro Gly Arg Glu Asp Gln Thr Gly His Asn  
 145 150 155 160  
 Thr Ile Leu Gly Ser Arg Leu Phe Ser His Asp Leu Leu Val Ser Ser  
 165 170 175  
 Asp Gly Pro Lys Lys Leu Val Ser Ala Leu Gln Lys Ile Lys Phe Asp  
 180 185 190  
 Pro Gly Gln Gly Ile Thr Gly His Ile Val Ala Gly Gly Leu Val Thr  
 195 200 205  
 Lys Asn Gly Arg Ser Ile Asp Ser Ala Leu Asn Pro Ala Trp Arg Lys  
 210 215 220  
 Ala Ala Thr His Ile Asp Phe Gly Arg Ala Trp Pro Pro Ser Ala Thr

## 18611

```

225                230                235                240
Leu Ala Gln Arg Asp Ala Ile Ile Arg Arg Leu Thr Asp Val Glu Met
                245                250                255
Pro Ile Leu Lys Ala Val Glu Gly Lys Lys Met Gly Ser Tyr Met Asn
                260                265                270
Glu Ala Asn Ala Tyr Glu Pro Asp Phe Gln Thr Glu Phe Trp Gly Ser
                275                280                285
Asn Tyr Pro Arg Leu Tyr Arg Ile Lys Gln Lys Trp Asp Pro Ser Gly
                290                295                300
Leu Phe Ile Ala Arg Lys Gly Val Gly Ser Glu Asp Trp Asp Asp Ala
305                310                315                320
Gly Leu Cys Arg Val His Arg Lys
                325

```

<210> 41872  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

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<400> 41872
Asp Arg Ile Ser Ala Arg Ser Asp Asn Asp Leu Val Gln Arg Gly Ile
1                5                10                15
Pro Thr Trp Ile Ala Gln Ile Pro Ala Arg Phe Cys Ser Ile Leu Asn
                20                25                30
Met Ile Arg Leu Phe Ile Ala Ala Val Tyr Leu Arg Thr Ile Tyr Met
                35                40                45
Pro Thr Met Thr Cys Glu Pro Leu Cys Pro Arg Gly Gly
50                55                60

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<210> 41873  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

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<400> 41873
Ser Ser Met Glu Ile Arg His His Leu Pro Glu Ile Gly Ile Pro Gly
1                5                10                15
His Gly Ala Asp Ile Glu Ile Ala Lys Asp Asn Trp Asn Leu Val Lys
                20                25                30
Gly Ala Gln Gly His Cys His Asn Asn Thr Lys Gly Ala Pro Ser Ser
                35                40                45
Ala Ala Lys Ser Pro Glu Glu Val Gly Val Pro Ile Val Val Arg Asn
50                55                60
Asn Gln Val Ala Leu
65

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<210> 41874  
 <211> 146  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (60), (61), (62)  
 <223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41874

Gln Glu Gly Glu Thr Gln Lys Glu Arg Thr Glu Arg Lys Lys Arg Ala  
 1 5 10 15  
 Gly Asn Lys Glu Arg Met Lys Glu Gln Gly Lys Glu Glu Gln Glu Glu  
 20 25 30  
 Ser Arg Arg Glu Pro Lys Val Glu Arg Gly Lys Lys Glu Glu Gly Ser  
 35 40 45  
 Lys Ser Lys Asp Gln Glu Gly Gly Gly Arg Lys Xaa Xaa Xaa Thr Ser  
 50 55 60  
 His Pro Ser His Leu Ser Arg His Ser His Pro Ala Met Thr Ile Asn  
 65 70 75 80  
 Pro Ile Ser Ser Ala Arg Ser Tyr Asn Ser Gly Cys Ser Cys Leu Pro  
 85 90 95  
 Ser Ser Arg Thr Val Phe Ser Pro Met Ser Ser Ile Tyr Trp Lys Ile  
 100 105 110  
 Phe Arg Thr Arg Leu Ala Ser Asn Arg Arg Asn Lys Ser Gly Glu Tyr  
 115 120 125  
 Pro Pro Pro Arg Thr Arg Asn Gly Glu Pro Phe Thr Val Asn Ala Val  
 130 135 140  
 Ser Leu  
 145

&lt;210&gt; 41875

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41875

Leu Tyr Ala Ile Thr Ala Ile Ser Gln Asn Lys Asn Leu Gly Lys Ser  
 1 5 10 15  
 Pro Leu Lys Leu Asp Asp Trp Gly Leu Ala Glu Ser Gly Pro Arg Ile  
 20 25 30  
 Tyr Ile Tyr Asp Ser Ser Cys Ser Glu Pro Arg Met Lys Leu Ser Ile  
 35 40 45  
 Thr His Pro Glu Ile Asp Ser Arg Ile Leu Gln Ile Ala Met Ala Ser  
 50 55 60  
 Ser Tyr Pro Thr Leu Lys Glu Asn Ile Arg Lys Ala Tyr Asp Asn Val  
 65 70 75 80  
 Ala Val Lys Tyr Ala Glu Trp Thr Lys Ser Ser Tyr Pro Thr Arg Val  
 85 90 95  
 Gln Tyr Leu Gln Lys Leu Leu Ala Cys Leu Pro Pro Ala Pro Val Glu  
 100 105 110  
 Lys Ser Val Leu Glu Leu Gly Cys Gly Ser Gly Gln Pro Cys Thr Ala  
 115 120 125  
 Ile Leu Ala Ser Asp Pro Ala Met Lys Val Thr Ala Asn Asp Ile Ser  
 130 135 140  
 Pro Val Gln Leu Ser Leu Ala Lys Glu His Leu Pro Ser Ala Asn Val  
 145 150 155 160  
 Ala Leu Ile Glu Gly Asp Met Met Glu Leu Ser Phe Gly Asp His Ser  
 165 170 175  
 Phe Asp Ala Val Ile Ala Met Tyr Ser Ile Leu His Leu Pro Lys Glu  
 180 185 190  
 Glu Gln Val Thr Leu Leu Lys Arg Ile Phe Lys Trp Leu Lys Pro Gly  
 195 200 205  
 Ala Leu Phe Leu Gly Ser Phe Ala Ala Gly Leu Lys Glu Glu Asp Leu  
 210 215 220

## 18613

Phe Asp Lys His Trp Leu Asp Gly Thr Asp Gly Glu Met Phe Trp Ser  
 225 230 235 240  
 Gly Trp Gly Glu Glu Arg Thr Cys Glu Ile Val Ser Leu Ile Gly Phe  
 245 250 255  
 Glu Leu Ile Leu Arg Glu Val Val Ala Glu Ile Glu Glu Glu Lys Gly  
 260 265 270  
 Glu Gly Arg Glu Ile Pro Phe Leu Trp Val Leu Gly Lys Lys Pro Asp  
 275 280 285  
 Asn

&lt;210&gt; 41876

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41876

Pro Ser Gln Trp Ala Ile Phe Asp Leu Gly Asp His Pro Val Pro Thr  
 1 5 10 15  
 Phe Tyr Lys Gly Arg Ile Cys Ile Ser Gly Asp Ala Ala His Ala Thr  
 20 25 30  
 Ser Pro His His Gly Ala Gly Ala Gly Phe Cys Ile Glu Asp Thr Ala  
 35 40 45  
 Val Leu Ala Thr Leu Leu Glu Asp Glu Arg Val Gln Ser His Lys Asp  
 50 55 60  
 Leu Glu Ala Ala Leu Ala Ala Tyr Asp Thr Ser Arg Arg Glu Arg Ser  
 65 70 75 80  
 Gln Trp Leu Val Gln Ser Ser Arg Phe Ile Gly Asn Ser Tyr Glu Trp  
 85 90 95  
 Leu Ala Glu Gly Val Gly Asp Asp Phe Lys Lys Ile Glu Glu Ala Ile  
 100 105 110  
 Asn His Arg Asn Gly Ile Ile Ala Asn Ala Asp Ile Pro Lys Met Cys  
 115 120 125  
 Gln Glu Ala Arg Glu Gln Leu Gly Lys Arg Leu Ser Arg Ser Arg Arg  
 130 135 140  
 Gly Phe Leu  
 145

&lt;210&gt; 41877

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41877

Val Ser Lys Val Lys Ala Asp Thr Ile Arg Val His Gln Lys Leu Ala  
 1 5 10 15  
 His Val Ser Gly Leu Met Asp Tyr Val Ser Ile Ser Ile Arg Leu Ser  
 20 25 30  
 Tyr Ser Ala Ala Met Cys Ser Tyr Asn Leu Gly Val Leu Val Cys Arg  
 35 40 45  
 Arg Ser Val Asp Thr Arg Glu Glu Ala Leu Ser Ala Ile Pro Val Ser  
 50 55 60  
 Asn Asp Gly Leu Ser Pro Val Tyr Met Gln Thr Pro Thr Gly Thr Lys  
 65 70 75 80  
 His Gly Glu Arg Leu Trp Thr Thr Gly Asp  
 85 90

<210> 41878  
 <211> 240  
 <212> PRT  
 <213> A.fumigatus

<400> 41878  
 Glu Thr Glu Met Thr Pro Lys Lys Asn Phe His Val Ser Val Ile Gly  
 1 5 10 15  
 Gly Gly Ile Ala Gly Val Thr Leu Ala Ile Ala Leu Tyr His Arg Gln  
 20 25 30  
 Ile Pro Val Thr Ile Tyr Glu Gln Ala Pro Ala Phe Gly Glu Val Gly  
 35 40 45  
 Ala Gly Val Ser Phe Ser Pro Asn Ala Val Glu Ala Met Lys Val Cys  
 50 55 60  
 His Gln Gly Ile Tyr Glu Ala Phe Glu Lys Val Cys Thr Arg Asn Leu  
 65 70 75 80  
 Trp Pro Ser Lys Gln Lys Val Trp Phe Asp Tyr Leu Asp Gly Tyr Asn  
 85 90 95  
 Lys Gly Thr Ser Thr Thr Ala Lys Asn Ser Ser Arg Gln Glu Ile Ala  
 100 105 110  
 Phe Thr Ile Ser Asn Ser Leu Gly Gln Thr Gly Val His Arg Ala His  
 115 120 125  
 Phe Leu Asp Glu Leu Ile Lys Leu Val Pro Arg Asp Ile Ser Arg Phe  
 130 135 140  
 Asn Lys Arg Leu Glu His Ile Thr Glu Arg Glu Asp Gly Lys Leu Val  
 145 150 155 160  
 Met Lys Phe Ala Asp Gly Ser Glu Glu Val Thr Asp Val Val Ile Gly  
 165 170 175  
 Cys Asp Gly Ile Lys Ser Gln Val Arg Arg Ile Leu Val Gly Asp Gly  
 180 185 190  
 His Pro Ser Ala Asn Pro Ser Tyr Thr His Lys Tyr Ala Tyr Arg Gly  
 195 200 205  
 Leu Val Pro Met Glu Lys Ala Ile Glu Ala Val Gly Glu Glu Leu Ala  
 210 215 220  
 Ser Asn Ser Cys Met His Val Arg Val Ser Phe Ser Met Leu Thr Gly  
 225 230 235 240

<210> 41879  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 41879  
 Met Gly Pro Gly Gly His Val Leu Thr Phe Pro Val Asn Gln Gly Lys  
 1 5 10 15  
 Thr Leu Asn Ile Val Ala Phe His Ser Ser Pro Asp Lys Trp Thr Asp  
 20 25 30  
 Tyr Pro Arg Leu Thr Arg Gln Asp Thr Arg Glu Glu Ala Leu Arg Asp  
 35 40 45  
 Phe Ala Gly Tyr Gly Pro Asn Val Ile Asn Leu Leu Lys Leu Thr Glu  
 50 55 60  
 Glu Lys Leu Ser Val Val Cys  
 65 70

<210> 41880





405

<210> 41881  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 41881  
 Ser Ile Arg Pro Leu Thr Trp Ala Asn Phe Trp Trp Thr Leu Ile Val  
 1 5 10 15  
 Ser Ala Phe Thr Phe Glu Thr Tyr Leu Pro Tyr Ala Ala Leu Leu Cys  
 20 25 30  
 Thr Leu Asp Leu Cys Asp Leu Ala Leu Leu Ile His Leu Asp Lys Asp  
 35 40 45  
 Phe Ala Glu Tyr Val Ala Tyr Ala Arg Ser Cys Ser Ser Asp His Cys  
 50 55 60

<210> 41882  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 41882  
 Asn Leu Ala Ala Ala Glu Ile Gly Gly Tyr Phe Glu Pro Leu Lys His  
 1 5 10 15  
 Asp Phe Ile Thr Lys Ser Ser Tyr Ser Cys Ala Ala Asp Ile Ala Ile  
 20 25 30  
 Ala Tyr Gly Leu Glu Tyr Gly Ser His Cys Ser Val Gly Val Pro Ile  
 35 40 45  
 Glu Gly Val Val Leu Tyr Leu Leu Pro Ala Leu Glu Gly  
 50 55 60

<210> 41883  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 41883  
 Lys Pro Cys Arg Leu Asp Ser Tyr Ile Ile Leu Cys Ala Met Lys Thr  
 1 5 10 15  
 Ile Asn Met Asn Gly Gln Val Ile Ile Ser Gly Tyr Ile Lys Arg Ile  
 20 25 30  
 Cys His Arg Glu Asp Met Thr Leu Lys Glu Gln Thr Gln Tyr Val Ile  
 35 40 45  
 Asn Met Pro His Gly Ile Val Asn Thr Gln Glu Gly Ile Lys Ser Ala  
 50 55 60  
 Asp Asn Gln Ile Lys Ile Val Thr Arg Cys Pro Pro Gly Tyr Phe Pro  
 65 70 75 80  
 Thr

<210> 41884  
 <211> 232  
 <212> PRT  
 <213> A.fumigatus

## 18617

&lt;400&gt; 41884

Thr Val Lys Leu Pro Ser Gly Ser Leu Ala Val Phe Ser Pro Val Ser  
 1 5 10 15  
 Leu Thr Pro Gln Val Arg Glu Met Ile Ser Gln Met Gly Gln Val Lys  
 20 25 30  
 Tyr Ile Ala Ala Leu Asp Leu Glu His His Ile His Leu Thr Pro Trp  
 35 40 45  
 Lys Glu Ala Tyr Pro Asp Ala Glu Ile Ile Ala Pro Glu Ser Leu Trp  
 50 55 60  
 Glu Lys Arg Gln Ser Asn Pro Glu Tyr Lys Asn Thr Pro Phe Ser His  
 65 70 75 80  
 Ile Phe Arg Lys Glu Asp Gln His Lys Gly Ser Arg Lys Ile Ser Glu  
 85 90 95  
 Glu Phe Asp Ala Glu Phe Glu Ser Glu Tyr Val Tyr Gly His Pro Ser  
 100 105 110  
 Arg Glu Leu Val Phe Leu His Lys Arg Ser Arg Thr Leu Ile Glu Ala  
 115 120 125  
 Asp Leu Met Phe Asn Leu Pro Ala Arg Glu Gln Tyr Ser Trp Thr Lys  
 130 135 140  
 Glu Gly Ala Thr Ser Gly Ile Phe Ala Lys Ile Ile Asn Thr Val Met  
 145 150 155 160  
 Ser Ala Glu Pro Pro Ala Thr Trp Gln Lys Arg Phe Ala Trp Tyr Ile  
 165 170 175  
 Leu Ser Ser Ala Asp Arg Lys Ala Phe Thr Glu Ser Met Arg Arg Ile  
 180 185 190  
 Asp Gln Trp Asp Phe Asn Arg Leu Ile Pro Cys His Gly Asp Thr Ile  
 195 200 205  
 Glu Ser Gly Ala Lys Gly Ser Phe Arg Thr Val Met Glu Trp Phe Leu  
 210 215 220  
 Glu Asn Asn Arg Arg Gly Ser Thr  
 225 230

&lt;210&gt; 41885

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41885

Gln Gly Lys Pro Thr Val Asp Val Val Ile Ser Phe Ala Trp Phe Ala  
 1 5 10 15  
 Ala Phe Gly Ile Leu Val Asp Ala Ile His Lys Leu Asn Cys Gly Ser  
 20 25 30  
 Ile Trp His Trp His Phe Asn Thr Tyr Ser Thr Asn Ser Cys Gly Arg  
 35 40 45  
 Trp Lys Ala Ala Glu Ala Phe Ser Phe Leu Ser Ala Ile Val Trp Leu  
 50 55 60  
 Ala Ser Ala Leu Val Val Arg Ile Ile Lys Ser Ala Thr Thr Asp Tyr  
 65 70 75 80  
 Asp Ser Asp Ser Thr Cys  
 85

&lt;210&gt; 41886

&lt;211&gt; 302

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 18618

&lt;400&gt; 41886

```

Thr Ala Cys Ser Asp Thr Gly Ala Asp Cys Arg Asn Glu Tyr Met Gln
1          5          10          15
Ala Gly Asn Ile Gly Ile Arg Glu Thr Ile Glu Lys Ala Asn Glu Ile
          20          25          30
Phe Gln Asn Val Lys Gln Thr Ser Asp Ala Thr Ile Asp Ser Arg Leu
          35          40          45
Leu Val Thr Ala Ala Asp Leu Gly Tyr Lys Lys Thr Ala Gln Phe Thr
          50          55          60
Leu Gly Asp Ala Thr Ala Gly Ile Asp Val Asp Glu Phe Val Ser Lys
65          70          75          80
Cys Ile Ser Phe Met Arg Arg Gly Pro Ser Asp Pro Asp Val Ala Ile
          85          90          95
Ser Asn Thr Gln Arg Arg Arg Pro Arg Pro Ser Gly Arg Ser Gln Ala
          100          105          110
Asp Leu Asp Glu Ser Asp Asp Glu Thr Gly Asp Ala Met Asn Trp Asp
          115          120          125
Trp Leu Gly Arg Ala Ala Cys Leu Arg His Asn Ser Arg Pro Ser Val
          130          135          140
Ser Gly Phe Leu Leu Gly Pro Leu Ser Val Gln Lys Arg Ser Arg Leu
145          150          155          160
Val Thr Gln Arg Arg Ala Arg Glu Arg Ile Asp Pro Ser Glu Ala Val
          165          170          175
Arg Pro Gln Asp Leu Gln Glu Lys Asp Leu Asp Arg Gln Glu Thr Ser
          180          185          190
Asn Leu Thr Thr Met Cys Ala Asn Ile Asn Lys Leu Leu Ala Glu Thr
          195          200          205
Val Thr His Gly Gln Asn Thr Val Asp Arg Ile Leu Ser Gln Met Glu
          210          215          220
Glu Glu Pro Thr Glu Glu Leu Ile Gln Glu Val Met Ala Lys Tyr His
225          230          235          240
Val Ala Asp Asp Gly Gly Val Pro Leu Phe His Phe Cys Ile Asn Pro
          245          250          255
Arg Ser Phe Gly Gln Ser Val Glu Asn Leu Phe Tyr Val Ser Phe Leu
          260          265          270
Val Arg Asp Gly Thr Val Gly Ile Ser Ala Asp Ser Arg Gln Leu Pro
          275          280          285
Thr Leu Arg Lys Phe Leu Ala Gly Leu Leu Leu Cys Gly Leu
          290          295          300

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&lt;210&gt; 41887

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41887

```

Pro Ala Arg Pro Leu Asp Pro Ala Lys Pro Tyr Ala Pro Ser Glu Ala
1          5          10          15
Gln Arg Lys Gly Val Gln Lys His Gln Ala Ile Phe Ser Leu Asp Phe
          20          25          30
Glu Thr Trp Arg Gln Leu Ile Asp Val Tyr Asp Ile Lys Glu Ser Ile
          35          40          45
Ile Lys His Arg Pro Glu Glu Pro Ser Glu Ser Thr Gly Gly Gly Trp
          50          55          60
Tyr Ser
65

```

<210> 41888  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 41888  
 Phe Asn His Val Gln Ile Ile Ile Met Gln His Gly Ile Thr Leu Glu  
 1 5 10 15  
 Asp Ile Tyr Asn Phe Asn Lys Thr Gly Phe Thr Met Gly Leu Val Ala  
 20 25 30  
 Thr Ala Lys Ile Val Thr Arg Ala Glu Met Leu Ser Gln Pro Phe Leu  
 35 40 45  
 Ile Gln Pro Gly Asn Arg Glu Trp Val Thr Ser Ile Glu Tyr Ile Asn  
 50 55 60  
 Ser Thr Ser Trp Val Leu Pro Pro Cys Ile Ile Phe Lys Gly Lys Val  
 65 70 75 80  
 His Ile Lys Gly

<210> 41889  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 41889  
 Phe Asp Gln Ile Cys Thr Glu Asn Asp Ile Ile Leu Ile Tyr Met Pro  
 1 5 10 15  
 Ile Tyr Ser Leu His Leu Leu Gln Pro Leu Asp Ile Gly Cys Phe Ser  
 20 25 30  
 Pro Leu Lys His Ala Tyr Gly Arg Leu Ile Glu Asp Lys Met Trp Leu  
 35 40 45  
 Gly Phe Asn His Ile Asp Lys Phe Asp Phe Leu Lys Ala Tyr Pro Gln  
 50 55 60  
 Ala Cys Thr Val Ile Phe Ser Val Asp Asn Ile Lys Ser Gly Phe Ser  
 65 70 75 80  
 Ala Thr Gly Leu Ile Pro Leu Asn Leu Asp Trp Val Leu Ser Gln Leu  
 85 90 95  
 Asn Ile Gln Leu Arg Thr Pro Thr Pro Pro Gly Ser  
 100 105

<210> 41890  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 41890  
 Lys Gln Lys Arg Ser Arg Arg Gln Ile Glu Thr Ala Val Gly Leu Ser  
 1 5 10 15  
 Ile Gln Glu Gly Gln Glu Ile Ile Gln Arg Arg Asp Gln Ala Ala Glu  
 20 25 30  
 Ala Ile Pro Thr Ile Pro Pro Glu Gln Val Val Asp Thr Glu Gln Arg  
 35 40 45  
 Pro Gln Trp Ala Pro Pro Arg Cys Ser Asp Cys His Ile Leu Gly His  
 50 55 60  
 Arg Arg Leu Gln Cys Pro Gln Arg Lys Asn Asn

## 18620

65

70

75

&lt;210&gt; 41891

&lt;211&gt; 460

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41891

Leu	Ser	Ser	Ser	Ser	Leu	Leu	Phe	Ala	Gly	Pro	Arg	Ser	Leu	Phe	Gln
1				5					10					15	
Asn	Ala	Gln	Leu	Asn	Phe	Ser	Ala	Tyr	Ile	Ile	Pro	Gln	Arg	Ala	Ser
		20						25				30			
Ser	Val	Pro	Leu	Ser	Pro	Ser	Ser	Phe	Cys	Asp	Leu	Pro	Leu	Val	Ser
	35					40					45				
Pro	Pro	Pro	Ala	Ile	Pro	Phe	Arg	Met	Ala	Ser	Asp	Asp	Gly	Pro	Gln
	50					55					60				
Glu	Ile	Ala	Ala	Leu	Leu	Leu	Leu	Pro	Pro	Pro	Pro	Ala	Val	Lys	Phe
65				70						75				80	
Glu	Gln	Phe	Lys	Gly	Ala	Tyr	Glu	Pro	Thr	Leu	Ser	Thr	Val	Phe	Ser
				85					90					95	
Lys	Leu	Cys	Lys	Thr	Leu	Asn	Gly	Val	Asn	Ser	Ile	Ala	Ile	Leu	Asp
			100					105					110		
Ile	Ala	Ile	Ser	Ile	Pro	Gly	Leu	Ile	Ser	Arg	Ser	Ser	Gln	Pro	Arg
		115					120					125			
Ala	Lys	Ile	Phe	Pro	Ser	Leu	Gln	Arg	Tyr	Leu	Ala	Asn	Ile	Tyr	Arg
	130					135					140				
Leu	Ile	Gly	Ile	Val	Ser	Ala	Glu	His	Ser	Ile	Glu	Leu	Asp	Ala	Pro
145				150					155					160	
Gly	Gly	Ile	Asp	Ala	Arg	Val	Ile	Phe	Ile	Asp	Phe	Pro	Thr	Thr	Ser
			165					170					175		
Ala	Glu	Asp	Arg	Gln	Ala	Pro	Arg	His	Gly	Pro	Ile	Leu	Asp	Leu	His
		180					185					190			
Ser	Leu	Ala	Asn	Ser	Ala	Arg	Leu	Trp	Asp	Trp	Ile	Tyr	Tyr	Pro	Glu
	195						200					205			
Asn	Lys	Ala	Gly	Gln	Gln	Leu	Ala	Thr	Ala	Phe	Asp	Ser	Ile	Tyr	Ser
	210				215					220					
Lys	Asn	Lys	Asp	Pro	Asn	Ala	Gly	Ser	Leu	His	Ala	Leu	Ser	Asn	Gln
225				230					235					240	
Pro	Asp	Trp	Pro	Ser	Pro	Arg	Thr	Leu	Ile	Val	Pro	Glu	Val	Lys	Ala
			245					250						255	
Gln	Ser	Pro	His	Tyr	Ser	Val	Ala	Val	Gly	Gly	Thr	Phe	Asp	His	Phe
		260					265					270			
His	Ile	Gly	His	Lys	Leu	Leu	Leu	Thr	Ala	Thr	Ala	Leu	Ala	Leu	Glu
	275						280					285			
Pro	Val	Glu	Glu	Phe	Asp	Pro	Ile	Pro	Glu	Arg	Tyr	Leu	Thr	Val	Gly
	290				295				300						
Val	Thr	Gly	Asp	Ala	Leu	Lys	Asn	Lys	Lys	Tyr	Ala	Glu	Phe	Leu	
305				310					315					320	
Glu	Ser	Trp	Asp	Asp	Arg	Cys	Gln	Ser	Thr	Ser	Ser	Phe	Leu	Leu	Ala
			325					330					335		
Ile	Met	Asp	Phe	Ser	Arg	Pro	Asn	Glu	Ser	Ala	Pro	Arg	Ile	Glu	Arg
		340					345					350			
Val	Ser	Gln	Pro	Gly	Pro	Asn	Gly	His	Tyr	Val	Leu	Met	Lys	Val	Arg
	355					360					365				
Cys	Gly	Leu	Thr	Leu	Lys	Leu	Val	Gln	Ile	Thr	Asp	Pro	Phe	Gly	Pro
	370					375					380				

## 18621

Thr Ile Thr Asp Glu Ser Ile Asp Ala Leu Val Val Ser Ala Glu Thr  
 385 390 395 400  
 Arg Ser Gly Gly Ala Ala Val Asn Asp Glu Arg Ala Lys Lys Gly Trp  
 405 410 415  
 Lys Ser Leu Asp Val Phe Glu Ile Asp Val Leu His Ser Gly Glu Val  
 420 425 430  
 Pro Thr Thr Asp Gly Glu Ser Phe Ala Ser Lys Ile Ser Ser Thr Asp  
 435 440 445  
 Ile Arg Arg Arg Arg Met Glu Met Ala Thr Ala Gln  
 450 455 460

&lt;210&gt; 41892

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41892

Phe Val Phe Cys Ser Pro Gly Ala Gly Trp Ala Ser Ala Ala Leu Ser  
 1 5 10 15  
 Trp Thr Lys Gly Asp Asp Gly Ile Ser Arg Gly Pro Asp Ser Ala Gly  
 20 25 30  
 Cys Phe Phe Cys Arg Ile Ile Gly Ser Ile Ile Ile Leu Met Ser Thr  
 35 40 45  
 Ser Val Phe Asp Phe Pro Ser Trp Thr Pro Phe Ser Pro Ala Ser Ser  
 50 55 60  
 Ser Gly Leu Pro Leu Asn Ser Gln Pro Leu Val Leu Cys Leu Cys Gln  
 65 70 75 80  
 Met Phe Cys Arg Phe Ala Leu Asp Asn Arg Met Leu Phe Gln Ser Cys  
 85 90 95  
 Asp Trp Cys Val Pro Val Gly Glu Pro Ile Ser Ser Arg Pro  
 100 105 110

&lt;210&gt; 41893

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41893

His Ala Ala Ala Ser Glu Ile Ala Asn Gly Gly Ala Gly Thr Arg Thr  
 1 5 10 15  
 Gly Thr Asp Ala Ser Gln Asn Ser His Leu Thr Ser Asp Ser Ser Asp  
 20 25 30  
 Thr Glu His Gly Thr Thr Ser Ala Phe Ser Thr Thr Ser Gly Ser Gly  
 35 40 45  
 Ala Ala Ser Ala Pro Ser Ser Arg Gly Ile Pro Leu Arg Ile Asn Thr  
 50 55 60  
 Asn Leu Phe Gly Arg Ser His His His Thr Asp Arg Asp Arg Glu Asp  
 65 70 75 80  
 Ser Ile Ser Asn Ala Ser Thr Ala Thr Ser Val Ser Ser Tyr Asp Tyr  
 85 90 95  
 Ser Asp Ser Glu Phe Thr Gly Ser Glu Ser Gln Ser Gln Pro Arg Arg  
 100 105 110  
 Arg Arg Val Arg Arg Asp Thr Asp Ala Gln Leu Arg Pro His Arg Glu  
 115 120 125  
 Ile Trp Thr Gly Asp Leu Ser Ser Val Ile Gly Leu Gln Lys Arg Gly  
 130 135 140

## 18622

Leu Arg Gly Leu Met Glu Gly Arg Arg Leu Met Arg Glu Arg Asn Ala  
 145 150 155 160  
 Lys Pro Gly Ser Ser Gly Gly Leu Thr Ser Leu Pro Ala Thr Ala Val  
 165 170 175  
 Asp Gln Ser Ala Ala Ser Gly Val  
 180

&lt;210&gt; 41894

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41894

His Val Val Ile Val Lys Ser Asp Trp Leu Gly Arg Ala Arg Gly Gln  
 1 5 10 15  
 Met Arg His Glu Gly Glu Arg Trp Asn Gly Leu Tyr His Thr Lys Pro  
 20 25 30  
 Arg Ala Ala Val Thr Met Pro Ala Thr Val Arg Val Val  
 35 40 45  
 Gly Gly Leu Cys Ser Ser Asp Ile Ile Asp Val Val Gln Val Tyr Thr  
 50 55 60  
 Phe Gln Leu Leu His Leu Phe Ala Glu Ala Gly  
 65 70 75

&lt;210&gt; 41895

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41895

Met Arg Pro Pro Val Lys Ser Leu Thr Val Ala Pro Ala Pro Glu Gln  
 1 5 10 15  
 Ala Pro Thr Pro Arg Arg Thr Ala Ile Ser Pro Pro Thr Pro Thr  
 20 25 30  
 Pro Asn Thr Ala Pro Leu Pro Pro Ser Leu Pro Leu Ala Ala Ala Ala  
 35 40 45  
 Leu Pro Ala Arg Pro Pro Pro Ala Ala Ser Arg Tyr Ala Ser Thr Pro  
 50 55 60  
 Thr Ser Ser Val Ala Ala Ile Thr Thr Leu Thr Ala Thr Ala Arg Thr  
 65 70 75 80  
 Leu Ser Ala Thr Pro Ala Pro Pro Pro Pro Cys Arg Ala Thr Thr Thr  
 85 90 95  
 Gln Thr Pro Asn Ser Pro Val Ala Ser Arg Ser Arg Ser Pro Val Asp  
 100 105 110  
 Ala Val Ser Ala Ala Thr Arg Thr Pro Ser Ser Gly Pro Thr Glu Arg  
 115 120 125  
 Ser Gly Arg Ala Ile  
 130

&lt;210&gt; 41896

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41896

Trp Gln Arg Cys Ser Pro Arg Ser Thr Pro Thr Arg Glu Arg Glu Pro



## 18623

```

1           5           10           15
Ser Ser Ser Ser Val Tyr Glu His Ser Ala Phe Cys Ala Pro Asn Ala
          20           25           30
Tyr Pro Thr Val Tyr Pro Ala Ala Thr Ala Gly Ile Ala Thr Ala Thr
          35           40           45
Thr Thr Ala Ala Thr Asp Asp Pro Ser Phe Gly His Gly Gln Phe Ala
          50           55           60
Arg Pro Phe Gln Ile Gln Ser Phe Glu Pro Arg Ala Thr Gln Ile
65           70           75

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&lt;210&gt; 41897

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41897

```

Ile Gln Ile Ile Asp Thr His Leu Thr Gln Pro Asp Pro Asp Thr Pro
1           5           10           15
Asp Leu Ala Pro Gly Asp Met Lys Ile Glu Tyr Val Lys Thr Ala Glu
          20           25           30
Ala Thr His Ser Tyr Pro Val Thr Arg Ile Leu Trp Glu Pro Pro Ser
          35           40           45
Ser Gln Lys Gln Ser Thr Asp Leu Leu Ala Thr Ser Gly Asp His Leu
          50           55           60
Arg Leu Trp Ser Leu Pro Thr Thr Gln Pro Leu His Ser Ser Asn Ser
65           70           75           80
Ile Thr Arg Pro Ala Asn Gln Arg Asp Pro Pro Ala Ala Lys Leu Ser
          85           90           95
Pro Leu Ala Leu Leu Ser Asn Ser Lys Ser Pro Glu His Thr Ala Pro
          100          105          110
Ile Thr Ser Leu Asp Trp Asn Thr Ile Ser Pro Ser Leu Ile Ile Thr
          115          120          125
Ser Ser Ile Asp Thr Thr Cys Thr Ile Trp Asp Ile Pro Thr Leu Thr
          130          135          140
Ala Lys Thr Gln Leu Ile Ala His Asp Lys Glu Val Tyr Asp Val Arg
145          150          155          160
Phe Cys Ala Asn Ser Val Asp Val Phe Val Ser Cys Gly Ala Asp Gly
          165          170          175
Ser Val Arg Met Phe Asp Leu Arg Ser Leu Glu His Ser Thr Ile Ile
          180          185          190
Tyr Glu Pro Thr Glu Lys Asn Asp Lys Cys Ile Ser Pro Thr Phe Ser
          195          200          205
Cys Phe
          210

```

&lt;210&gt; 41898

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41898

```

Val Leu Leu Thr Arg Ala Ser Leu Val Met Ser Pro Gly Asn Gly Ser
1           5           10           15
Pro Phe Ser Ser Val Gln Phe Tyr Leu Ala Pro Ala Thr Phe Thr Tyr
          20           25           30
Arg Lys Cys Val Leu Leu Ile Ala Cys Met Ala Arg Thr Tyr Leu Asn

```

## 18624

35	40	45																	
Ala	Val	Ala	Ala	Leu	Pro	His	Asp	Ala	His	Leu	Leu	Ala	Thr	Phe	Ser				
50						55					60								
Gln	Asp	Ser	Asn	Ile	Val	Arg	Val	Leu	Asp	Val	Arg	Gln	Pro	Gly	Gln				
65					70					75				80					
Ala	Ile	Leu	Glu	Leu	Lys	Gly	His	Ser	Ala	Pro	Ile	Asn	Cys	Val	Asp				
				85					90				95						
Trp	Ser	Pro	Asn	Arg	Arg	Gly	Val	Leu	Ala	Ser	Gly	Ala	Asp	Asp	Cys				
			100					105					110						
Phe	Val	Leu	Leu	Trp	Asp	Leu	Ile	Asn	Gln	His	Asn	Ala	Ala	Pro	Val				
	115					120						125							
Ala	Pro	Val	Val	His	Asn	Pro	Gly	Thr	Pro	Ser	Thr	Thr	Ser	Glu	Arg				
	130					135					140								
Gly	Pro	Ala	Ala	Ala	Trp	Gln	Cys	Asp	Tyr	Glu	Val	Ser	Asn	Leu	Ser				
145					150					155				160					
Trp	Ser	Pro	Gln	Gly	Gly	Thr	Thr	Ser	Ser	Gly	His	Pro	Arg	Asp	Trp				
			165						170					175					
Leu	Gly	Val	Cys	Gly	Gly	Arg	Gly	Val	Trp	Gly	Val	Ala	Leu						
			180				185						190						

&lt;210&gt; 41899

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41899

Glu	Ser	Val	Val	Ala	Glu	Ala	Cys	Gly	Glu	Leu	His	Tyr	Glu	Met	Glu				
1				5					10				15						
Thr	Asp	Glu	Thr	Ile	Phe	Leu	Leu	Leu	Asp	Asn	Phe	Tyr	Leu	Phe	Pro				
			20					25					30						
Phe	Gly	Ser	Phe	Pro	Pro	Pro	Pro	Pro	Tyr	Phe	Leu	Ile	Ile	Leu	Glu				
	35					40						45							
Ser	Trp	Phe	Ala	Leu	Leu	Ile	Ile	Leu	Ser	Asp	Gly								
	50					55				60									

&lt;210&gt; 41900

&lt;211&gt; 2467

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2458)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41900

Asn	Phe	Asp	Lys	Ser	Gln	Arg	Ile	Ser	Leu	Lys	Ser	Met	Leu	Arg	Phe				
1				5					10				15						
Ala	Lys	Trp	Phe	Lys	Thr	Thr	Phe	Gln	Ser	Ser	Ser	Asn	Thr	Ser	Leu				
			20					25				30							
Ser	Ile	Arg	Asp	Leu	Leu	Ala	Trp	Val	Asp	Phe	Val	Asn	Lys	Cys	Gln				
	35					40				45									
Thr	Thr	Asp	Leu	Lys	Phe	Ser	Ile	Val	Gln	Gly	Ala	Ala	Met	Val	Phe				
	50					55				60									
Val	Asp	Thr	Leu	Gly	Ala	Asn	Pro	Ala	Ala	Met	Leu	Ala	Val	Ser	Leu				
65					70					75					80				

## 18625

Tyr Asp Leu Glu Lys Asn Arg Gln Leu Cys Leu Asp Lys Leu Arg Glu  
 85 90 95  
 Leu Phe Asp Val Asp Ala Cys Gly Ile Tyr Phe Gln Lys Ser Thr Ile  
 100 105 110  
 Lys Leu Glu Asp Arg Ala Leu Arg Val Gly Pro Phe Ala Leu Pro Ile  
 115 120 125  
 Ser Gly Asp Ala Ala Pro Asp Pro Gln Phe Ile Met Asp Ala Pro Thr  
 130 135 140  
 Thr Ile Ala Asn Ser Val Arg Ile Ala Arg Gly Leu Gln Leu Pro Lys  
 145 150 155 160  
 Pro Ile Leu Leu Glu Gly Ser Pro Gly Val Gly Lys Thr Thr Leu Val  
 165 170 175  
 Thr Ala Leu Ala Arg Ala Leu Gly Lys Pro Leu Thr Arg Ile Asn Leu  
 180 185 190  
 Ser Glu Gln Thr Asp Leu Thr Asp Leu Phe Gly Ser Asp Val Pro Val  
 195 200 205  
 Glu Gly Gly Asp Val Gly Gln Phe Thr Trp Arg Asp Ala Pro Phe Leu  
 210 215 220  
 Gln Ala Met Gln Arg Gly Asp Trp Val Leu Leu Asp Glu Met Asn Leu  
 225 230 235 240  
 Ala Ser Gln Ser Val Leu Glu Gly Leu Asn Ser Cys Leu Asp His Arg  
 245 250 255  
 Gln Thr Val Tyr Val Ala Glu Leu Asp Gln Thr Phe Ser Arg His Pro  
 260 265 270  
 Asp Phe Val Leu Phe Ala Ala Gln Asn Pro His His Gln Gly Gly Gly  
 275 280 285  
 Arg Lys Gly Leu Pro Ala Ser Phe Val Asn Arg Phe Thr Val Val Tyr  
 290 295 300  
 Ala Asp Ser Phe Thr Gln Thr Asp Leu Lys Lys Ile Cys Ala Lys Leu  
 305 310 315 320  
 Phe Pro Gly Ser Pro Pro Gln Thr Asp Gly Leu Val Asp Phe Val  
 325 330 335  
 Ser Leu Leu Asn Glu Thr Ile Asn Gln Glu Arg Arg Leu Gly Ala Val  
 340 345 350  
 Gly Gly Pro Trp Glu Val Asn Leu Arg Asp Ile Gln Arg Trp Leu Gln  
 355 360 365  
 Leu Ala Asp Arg Gly Asp Leu Gln Val Pro Ala Asn Asn Phe Leu Asp  
 370 375 380  
 Val Val Ile Ser Gln Arg Phe Arg Ser Glu Glu Asp Arg Gln Leu Val  
 385 390 395 400  
 Ser Gln Leu Tyr Gln Arg Val Phe Thr Asp Ala Pro Thr Val Ala Lys  
 405 410 415  
 Ser Leu Tyr His Asn Leu Thr Gln Glu Tyr Phe Gln Val Gly Phe Gly  
 420 425 430  
 Val Met Arg Arg Asp Ala Leu Leu Gln His Ile Pro Glu Pro Gln Met  
 435 440 445  
 Lys Ile Phe Pro Gly Asp Leu Pro Ile Leu Glu Ser Leu Met Leu Cys  
 450 455 460  
 Ile Glu Gln Ser Trp Pro Ser Ile Leu Val Gly Pro Ser Gly Cys Gly  
 465 470 475 480  
 Lys Thr Thr Leu Ile Arg Lys Leu Ala Ala Leu Asn Gly Ala Asp Leu  
 485 490 495  
 Val Glu Leu Ala Leu Ser Ala Asp Thr Asp Thr Met Asp Leu Ile Gly  
 500 505 510  
 Gly Phe Glu Gln Ile Asp Tyr Lys Arg Glu Val Leu Ser Leu Val Arg  
 515 520 525

Glu Leu Ser Leu Tyr Leu Arg Arg His Leu Ile Ser Ala Ser Ser Ala  
 530 535 540  
 Ile Glu Lys Thr Asp Ala Phe Ser Ala Phe Leu Glu Leu Phe Glu Arg  
 545 550 555 560  
 Leu Gln Ser Ser Asp Ile Ser Leu Asp Phe Val Cys Ser Ser Leu Pro  
 565 570 575  
 Val Leu Met Gln Leu His Pro Gln Lys Ala Leu Glu Asp Phe Leu Gln  
 580 585 590  
 Arg Ala Gln His Leu Met Glu Leu Ser Thr Gln Ser Asn Lys Met Lys  
 595 600 605  
 Val Gly Phe Glu Trp Thr Glu Gly Val Leu Thr Gln Ala Val Gln Gln  
 610 615 620  
 Gly His Trp Val Val Leu Asp Asn Ala Asn Leu Cys Asn Pro Ser Val  
 625 630 635 640  
 Leu Asp Arg Leu Asn Ser Leu Thr Glu Pro Asn Gly Ala Leu Ile Leu  
 645 650 655  
 Asn Glu Gln Arg Thr Glu Asp Gly Ser Ala Lys Ile Ile Arg Pro His  
 660 665 670  
 Pro Ser Phe Arg Leu Phe Leu Thr Met Asp Pro Arg His Gly Glu Leu  
 675 680 685  
 Ser Arg Ala Met Arg Asn Arg Cys Val Glu Ile Cys Phe Leu Ala Ser  
 690 695 700  
 Glu Ile Pro Glu Pro Ala Asn Arg Ser Ile Pro Ala Tyr Thr Cys Gln  
 705 710 715 720  
 Ser Ser Leu Tyr Arg Leu Arg His Ile Trp Asp Phe Asn Gln Leu Glu  
 725 730 735  
 Asp Arg Gly Glu Leu Pro Arg Leu Leu Cys Glu Leu Gly Ile Asp His  
 740 745 750  
 Leu Ser Val Glu Asp Leu Lys Ile Ile Gln Gln Ser Ser Glu Met Ala  
 755 760 765  
 Leu Ala Gly Leu Leu Asp Phe Ser Ala Gly Glu Ser Leu Pro Ser Met  
 770 775 780  
 Leu Asp Arg Tyr Val Pro Val Val Leu Glu Asp Cys Ser Trp Glu Pro  
 785 790 795 800  
 Ser Thr Phe Cys Lys Ala Gln Ala Val Lys Leu Ser Gly Ala Ser Phe  
 805 810 815  
 Ala Val His Gly Gln Phe Gln Pro Leu His Pro Leu Val Asn Glu Pro  
 820 825 830  
 Leu Ala Leu Ile Leu Gly Gln His Val Thr Leu Ser Arg Leu Met Val  
 835 840 845  
 Leu Ala His Leu Gln Glu Cys Lys Leu Asn Leu His Arg Leu Arg Gln  
 850 855 860  
 Ser Leu Leu Arg Ala Asp Glu Ser Ala Lys Leu Leu Lys Pro Ser Gln  
 865 870 875 880  
 Met Ser Ser Leu Glu Arg Ser Leu Ala Ser Arg Arg Ile Ala Ser Leu  
 885 890 895  
 Met Lys Asp Ala Thr Gln Pro Ile Gly Ser Phe Leu Ala Asp Cys Gly  
 900 905 910  
 Gln Ala Val Tyr Asp Phe Ile Gln Gly Leu Asp Arg Gln Val Leu Asp  
 915 920 925  
 Thr Pro Glu Ala Val His Ala Leu Arg Ala Val Val Ser Phe Cys Ala  
 930 935 940  
 Asp Leu Leu Arg Ile Ser Gly Asp Gly Gln Val Asp Glu Gly Glu Phe  
 945 950 955 960  
 Gln Val Tyr Leu Gln Ile Gly Lys Glu Leu Phe Asp Phe Leu Leu Asp  
 965 970 975

## 18627

Ser Trp Pro Pro Leu Lys Ser Val Ala Leu Ala Leu Ser Gln Cys Leu  
 980 985 990  
 Gly Arg Phe Gln Glu Asn Trp Ala Leu Lys Thr Gly Leu Ser Met Gln  
 995 1000 1005  
 Lys Leu Trp Glu Ser Trp Arg Pro Ala Thr Pro Ala Thr Gln Glu Gln  
 1010 1015 1020  
 Leu Arg Ser Lys Leu Asp Leu Glu Lys Val Ala Ala Glu Phe Thr Asp  
 1025 1030 1035 1040  
 Ile Ala Leu Lys Thr His Leu Asp Leu Ala Gln Leu Ser Arg Val Arg  
 1045 1050 1055  
 Asp Ser Leu Val Asp Ala Gln Arg Thr Ile Leu Leu Asp Gly Ala Asp  
 1060 1065 1070  
 Glu Gly Arg Leu Val Glu Ala Leu Lys Gln Thr Val Met Glu Leu Ala  
 1075 1080 1085  
 Lys Val Val Gln Ala Ser Asp Ser Ala Gln Ser Pro Tyr Phe Met Ser  
 1090 1095 1100  
 Glu Phe Glu Ala Leu Cys Gln Tyr His Asp Leu Ser Ser Ile Gln His  
 1105 1110 1115 1120  
 Thr Glu Ser Lys Ser Asp Ser Val Val Ser Ser Ile Leu Pro Leu Leu  
 1125 1130 1135  
 Ala Gly Arg Gln Ala Arg Pro Leu Asp Ala Ser Ser Leu Gln Ser Gln  
 1140 1145 1150  
 Ile Pro Arg Val Leu His Lys Leu Ser Leu Phe Ala Gly Ala Asn Gln  
 1155 1160 1165  
 Pro Ser Met Ser Gly Phe Ala Val Asn Gly Ile Phe Ser Leu Ser Leu  
 1170 1175 1180  
 Leu Glu Lys Leu Thr Phe Val Gly Thr Thr Thr Leu Asp Gln Met Asp  
 1185 1190 1195 1200  
 Ser Leu Glu Glu Glu Lys Arg Thr Leu Ser Lys Ala Ile Thr Leu Thr  
 1205 1210 1215  
 Ser Arg Glu Ile Ser Lys Asp Gln Phe Gln Leu Leu Arg Gln Val Leu  
 1220 1225 1230  
 Ser Ala Leu Ala Ala Glu Leu Leu Asn Met His Lys Asp Phe Ile Glu  
 1235 1240 1245  
 Pro Lys Ser Leu Glu Thr Val Leu Ala Thr Leu Arg Glu Ile Gln Glu  
 1250 1255 1260  
 Gln Gly Trp Cys Asn Ser Ser Asp Leu Pro Ala Val Val Leu Asp Gln  
 1265 1270 1275 1280  
 Ser Leu Ser Glu Asp His Tyr Phe Gly Pro Ile Ala Lys Tyr Ala Ile  
 1285 1290 1295  
 Pro Gln Leu Met Ala Ser Leu Met Thr Gly Pro Lys Asp Thr Glu Lys  
 1300 1305 1310  
 Tyr Asn Glu Glu Thr Gly Leu Ala Leu Val Gln Met Ala Ser Leu Leu  
 1315 1320 1325  
 Leu Gln Leu Phe Val Pro Asp Lys Pro Phe Asp Pro Ser Leu Gly Leu  
 1330 1335 1340  
 Thr Val Gln Arg Arg Arg His Thr Gln Arg Val Ile Glu Leu Thr Thr  
 1345 1350 1355 1360  
 Lys Ser Glu Ala Leu Ala Val Phe Glu Gln Asn Phe Ser Gly Arg Ser  
 1365 1370 1375  
 Ser Asn Met Arg Gln Glu Phe Ile Gln Gln Glu Leu Arg Ser Leu Gly  
 1380 1385 1390  
 Ser Ala Pro Pro Pro Ser Gln Val Thr Arg Pro Pro Val Ser Glu Ile  
 1395 1400 1405  
 Ser Ile Leu Gln Gly Glu Phe Ser Ser Leu Leu Ser Ser Val Leu Asp  
 1410 1415 1420

## 18628

Arg Cys Ile Glu Leu Asp Val Thr Ala Val Lys Arg Asn Asp Leu Glu  
 1425 1430 1435 1440  
 Ala Glu Arg Thr Leu Thr Phe Leu Arg Glu Asn Ile Arg Gln Leu Ile  
 1445 1450 1455  
 Gln Arg Leu Ser Thr Asn Tyr Arg Ser Tyr Asp Asp Ile Thr Val Leu  
 1460 1465 1470  
 Val Val Arg Phe Leu Glu Ile Leu Asp Leu Gly Leu Ser Leu Gln Ser  
 1475 1480 1485  
 Gly Gln Thr Gln Arg Ser Ser Asp Ser Arg Ile Leu Gln Ala Val Ser  
 1490 1495 1500  
 Lys Arg Thr Pro Phe Leu Gly Gly Thr Val Tyr Pro Val Ser Ala Leu  
 1505 1510 1515 1520  
 Glu Ser Gln Lys Gly Pro Ala Asn Gln Ala His Phe Val Glu Leu Arg  
 1525 1530 1535  
 Phe His Glu Leu Ser Ser Leu Arg Val Ala Ile Asn Thr Asp Pro Asp  
 1540 1545 1550  
 Val Leu His Ser Glu Ala Gly Arg His Ala Leu His Arg Ile Leu Glu  
 1555 1560 1565  
 Gln Phe His Ile Leu Trp Lys Ala Lys Leu Arg Glu Asp Gln Glu Glu  
 1570 1575 1580  
 Glu Ala Arg Lys Ser Glu Leu Tyr Arg Tyr Arg Gly Ser Trp Glu Asp  
 1585 1590 1595 1600  
 Glu Glu Glu Val Asp Gln Asn Glu Leu Asn Gln Leu Phe Pro Thr Tyr  
 1605 1610 1615  
 Glu Ser Asp Thr Ala Glu Asp Asp Gly Lys Ala Thr Arg Ile Asp Pro  
 1620 1625 1630  
 Lys Ala Ile Ser Val Arg Leu Ala Thr Leu His Ala Glu Leu Phe Gln  
 1635 1640 1645  
 Ser Glu Asp Ala Lys Lys Ala Leu Ser Asp Tyr Val Arg Gln Ser Ala  
 1650 1655 1660  
 Lys Leu Leu Gly Ser Ile Trp Ser Ala Gly Asp Ser Ser Lys Ser His  
 1665 1670 1675 1680  
 Ile Arg Pro Ser Glu His Leu Ser Gly Ala Leu Leu Leu Glu Asp  
 1685 1690 1695  
 Ala Met Asn Ala Gly Asn Arg Ser Pro Ser Gly Lys Tyr Asn Phe Tyr  
 1700 1705 1710  
 Thr Asp Ser Asn Phe Ser Glu Ala Arg Arg Leu Val Ser Leu Ala His  
 1715 1720 1725  
 Ser Val Lys Ser Arg Phe Leu Gln Ile Gln Gln Ala Trp Pro Glu His  
 1730 1735 1740  
 Ala Val Leu Gln Asp Val Ile Ile Cys Cys Lys Glu Val Leu Gln Phe  
 1745 1750 1755 1760  
 Lys His Thr Glu Pro Val Ala Lys Phe Leu Thr Lys Val Glu Lys Leu  
 1765 1770 1775  
 His Ala Leu Val His Glu Trp Gln Leu Val Ala Ser Lys Glu Tyr Ser  
 1780 1785 1790  
 Ala Ala Ser Leu Tyr Asn Glu Leu Thr Asn Leu Ile Ile Ser Trp Arg  
 1795 1800 1805  
 Arg Leu Glu Leu Ser Thr Trp Ala Lys Leu Leu Asp Leu Glu Lys Glu  
 1810 1815 1820  
 Lys Cys Ala Gln Asp Val Ser Ser Trp Trp Phe Val Ala Tyr Glu Ala  
 1825 1830 1835 1840  
 Val Ile Ala Ala Pro Ile Gln Leu Ala Ala Ser Gly Glu Ala Glu Leu  
 1845 1850 1855  
 Ser Ala His Ile Gln Ser Val Ile Ser Thr Leu Glu Gln Phe Phe Met  
 1860 1865 1870

Ser Thr Thr Val Gly Gln Tyr Ser Glu Arg Leu Arg Leu Val Ala Asn  
 1875 1880 1885  
 Phe Arg Ser Leu Leu Ala Leu Tyr Val Arg Asp Tyr Pro Ala Leu Glu  
 1890 1895 1900  
 Gln Leu Val Phe Ala Leu Gly Asn Phe Leu Glu His Phe Arg Pro Phe  
 1905 1910 1915 1920  
 Glu Pro Ala Val His Lys Ser Met Glu Asp Arg Arg Ala Ala Ile Glu  
 1925 1930 1935  
 Lys Asp Ile Lys Gln Gln Ile Gln Leu Ala Ser Trp Lys Asp Thr Asn  
 1940 1945 1950  
 Ile Ile Ala Leu Lys Glu Ser Ala Arg Arg Ser His Phe Arg Leu Phe  
 1955 1960 1965  
 Lys Leu Val Arg Lys Tyr Arg Glu Val Leu Ala Gln Pro Val Gln Pro  
 1970 1975 1980  
 Ile Ile Gln Gln Gly Met Thr Asn Glu Pro Ile Glu Pro Asn Met Val  
 1985 1990 1995 2000  
 Thr Asp Glu Val Val Leu Ala Ser Ala Ser Phe Pro Asp Ala Leu Ala  
 2005 2010 2015  
 Leu Cys Gln Glu Glu Pro Thr Ile Trp Pro Ser Arg Pro Pro Arg Phe  
 2020 2025 2030  
 Arg Asn Ala Asp Ser Thr Ala Gly Asn Met Thr Asp Leu Tyr Ser Ser  
 2035 2040 2045  
 Met Pro Asn Glu Phe Asp Ile Ser Glu Asp Leu Asp Ser Phe Val Lys  
 2050 2055 2060  
 Phe Phe Ile Glu Ser Ile Thr Glu Phe Lys Ser Gln Thr Pro Lys Val  
 2065 2070 2075 2080  
 Leu Thr Glu Asp Asn Lys Asp Asp Val Gln His Leu Lys Val Gln Lys  
 2085 2090 2095  
 Arg Arg Phe Tyr Ala Asp Thr Leu Lys Arg Leu Leu Glu Met Gly Ile  
 2100 2105 2110  
 Lys Arg Asn Ala Ser Thr Asn Leu Ile Glu Ser Gln Ser Ser Ile Ala  
 2115 2120 2125  
 Gln Val Leu Ala Thr Thr Pro Ser Leu Lys Val Gly Asn Ser Ala Ser  
 2130 2135 2140  
 His Leu Ile Lys Gly Ser Asp Leu Tyr Phe His Arg Phe Leu Asp Leu  
 2145 2150 2155 2160  
 Leu Pro Arg Val Arg Gln Ser Ser Arg Glu Tyr Ser Glu Asp Leu Ser  
 2165 2170 2175  
 Asn Val Glu Ile Ser Arg Ser Val Gly Thr Val Glu His Leu Met Phe  
 2180 2185 2190  
 Leu Leu Arg Lys Gln Arg Gly Val Ile Ser Pro Ala Leu Ser His Leu  
 2195 2200 2205  
 Glu Met Met Lys Ser Thr Ile Met Lys Met Ser Asn Leu Trp Thr Ser  
 2210 2215 2220  
 Gly Ser Ala Ser Leu Cys Lys Ser His Ser Asp Val Ser Lys Asp Arg  
 2225 2230 2235 2240  
 Gln Asp Leu Arg Arg Ala Val Ala Trp Leu Ile Pro Ile Leu Gly Leu  
 2245 2250 2255  
 Ala Ala Glu Ile Val Gln Leu His Ala Lys Phe Ser Glu Val Asp Ala  
 2260 2265 2270  
 Ser Lys Val Ser Asp Gly Leu His Ala Trp Ser Ser Thr Phe Ser Arg  
 2275 2280 2285  
 Leu Lys Ser Ser Leu Asp Asn Ile Pro Glu Leu Pro Ser Gly Leu Thr  
 2290 2295 2300  
 Ser Gln Arg His Asn Asn Ile Leu Glu Glu Val Ser Ser Ser Leu Ala  
 2305 2310 2315 2320

## 18630

Ser Leu Val Ala Asp Val Ser Lys Trp Thr Ala Glu Arg Pro Asp Leu  
 2325 2330 2335  
 Ser Phe Ala Leu Ala Gln Ile Ile Pro Trp Ala Glu Ala Lys Gly Asn  
 2340 2345 2350  
 Ala Thr Val Arg Ala Asp Ser Gln Asp Ser Leu Ala Ile Gln Glu Phe  
 2355 2360 2365  
 Asp Ala Arg Leu Leu Ala Ala Met Asp Lys Ile Leu Val Ser Leu Gln  
 2370 2375 2380  
 Lys Leu Lys Asp Val Pro Ala Ser Leu Thr Ser Thr Gly Ser Leu Ser  
 2385 2390 2395 2400  
 Arg Ser Asp Glu Phe Phe Thr Arg Ala Met Lys Ala Val Arg Leu Ser  
 2405 2410 2415  
 Asp Val Thr Phe Ser Leu Glu Ser Val Leu Gly Thr Leu Gln His Leu  
 2420 2425 2430  
 Gln Ala Asp Ser His Asn Thr Tyr Val Ile Ala Ser Ala Leu Val Ala  
 2435 2440 2445  
 Ser Phe Leu Arg Leu Thr Tyr Arg Ile Xaa Asn Ala Val Glu Val Met  
 2450 2455 2460  
 Ser Pro Pro  
 2465

<210> 41901  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 41901  
 Ala Phe Gly Asn Ser Arg Arg Ile Arg Lys Asp Ala Leu Ile Glu Leu  
 1 5 10 15  
 Arg Asn Gln Leu Pro Ile Phe Phe Thr Pro Glu Ser Leu Gly Asn Asp  
 20 25 30  
 Asn Ile Lys Glu Val Val Cys Trp His Leu Lys Ile Ala Ala Ile Arg  
 35 40 45  
 Lys Leu Glu Pro Ser Leu Asp Ile Thr Gln Ile Asp Leu Pro Arg Ser  
 50 55 60  
 Ala Asn Ser Pro  
 65

<210> 41902  
 <211> 744  
 <212> PRT  
 <213> A.fumigatus

<400> 41902  
 Tyr Ser Ala Leu Pro Thr Asp Gln Ser Gln Ala Asn Arg Ile Gly Gly  
 1 5 10 15  
 Gly Asn His Phe Arg Arg Arg Met Ala Pro Asn Pro Ala Val Pro Ala  
 20 25 30  
 Thr Leu Pro Leu His His Val Thr Ser Gln Ile Gln Gln Leu Leu Asp  
 35 40 45  
 Pro Ser Phe Ser Asn Ala Arg Ser Gly Gly Val Leu Leu Pro Asp Tyr  
 50 55 60  
 Ile Arg Gly Leu Pro Ser Arg Leu Gln Arg Glu Asp Ile Glu Tyr Leu  
 65 70 75 80  
 Ser Met Lys Gly Ala Leu Thr Val Pro Asp Val Gly Leu Arg Asn Glu  
 85 90 95



Leu Leu Lys Ala Tyr Ile His Tyr Val His Thr Tyr Met Pro Leu Leu  
 100 105 110  
 Asp Leu Glu Glu Phe Leu Gln Thr Ile Val Gln Asn Asp Gly Ile His  
 115 120 125  
 Arg Met Ser Leu Leu Leu Phe Gln Ala Val Met Phe Ala Gly Thr Ala  
 130 135 140  
 Phe Ile Asp Leu Lys His Leu His Ala Ala Gly Tyr Pro Ser Arg Lys  
 145 150 155 160  
 Ala Ala Arg Lys Val Phe Phe Gln Arg Ala Arg Leu Leu Tyr Asp Phe  
 165 170 175  
 Asp Tyr Glu Val Asp Arg Ile Ser Leu Val Gln Ser Leu Leu Leu Met  
 180 185 190  
 Thr Tyr Trp Tyr Glu Thr Pro Asp Asp Gln Lys Asp Thr Trp His Trp  
 195 200 205  
 Met Gly Val Ser Leu Ser Leu Ala His Thr Ile Gly Leu His Arg Asp  
 210 215 220  
 Pro Gly Asn Ser Arg Met Asp Ala Arg Arg Gln Arg Met Trp Lys Arg  
 225 230 235 240  
 Ile Trp Trp Ser Thr Tyr Thr Arg Asp Arg Leu Ile Ala Leu Gly Met  
 245 250 255  
 Arg Arg Pro Met Arg Val Lys Asp Asp Asp Cys Asp Val Pro Met Leu  
 260 265 270  
 Thr Leu Asp Asp Phe Glu Phe His Pro Phe Ser Pro Glu Ile Val Arg  
 275 280 285  
 Met Val Gly Asn Ser Glu Ile Leu Gln Asn Val Glu His Gln Lys Lys  
 290 295 300  
 Leu Ala Leu Met Phe Ile Glu Lys Ala Lys Leu Cys Leu Cys Val Ser  
 305 310 315 320  
 His Val Leu Ser Ala Gln Tyr Ser Val Leu Ser His Lys Phe Gly Gly  
 325 330 335  
 Thr Met Glu Thr Thr Met Met Leu Val Pro Lys Lys Ser Ala Ala Glu  
 340 345 350  
 Thr Phe Glu Val Arg Arg Cys Asp Gln Glu Leu Glu Asp Trp Leu Ala  
 355 360 365  
 Asn Leu Pro Ala Glu Ile Gln Tyr Thr Pro Ala Ala Ser Ala Lys Leu  
 370 375 380  
 Thr Glu Ala Gln Glu Val Leu His Ser His Arg Ala Leu Leu Lys Met  
 385 390 395 400  
 Val Tyr Leu Thr Thr Ser Ser Ala Leu His Arg Pro Gln Val Leu Pro  
 405 410 415  
 Ala Asn Pro Phe Pro Ser Met Asp Ala Glu Leu Gln Glu Ile Ser Arg  
 420 425 430  
 Asn Lys Val Arg Phe Ala Ala Val Glu Ile Thr Asn Ile Ala Gln Asp  
 435 440 445  
 Leu His Ser Leu Asp Leu Thr Arg Tyr Phe Pro Thr Thr Gly Val Thr  
 450 455 460  
 Val Leu Leu Pro Ala Val Ile Ile His Leu Leu Asp Ile Lys Ser Ser  
 465 470 475 480  
 Asp Pro Ser Val Arg Met Thr Ser Leu Gln Arg Phe Tyr Gln Cys Met  
 485 490 495  
 Arg Ile Leu Gln Arg Leu Arg Glu Ile Tyr Ala Ser Ala Asp Phe Ala  
 500 505 510  
 Thr Ser Phe Leu Glu Ala Ala Ile Arg Lys Ala Gly Ile Gln Leu Thr  
 515 520 525  
 Val Ala Pro Gln Asp Val Gln Ala Arg Pro Gly Ser Ser Phe Asp Ala  
 530 535 540

## 18632

Gly Ala Arg Val Asp Thr Leu Thr Pro Pro Pro Asp Ser Leu Ala Gln  
 545 550 555 560  
 Lys Ile Pro Asp Leu Thr Tyr Pro Lys Pro Ala Val Val Gly Thr Ala  
 565 570 575  
 Arg Gln Pro Val Glu Glu Gly Asp Thr Leu Phe Ala Ser Thr Pro Pro  
 580 585 590  
 Pro Ser Asp Gly Ser Glu Asn Gly Ser Thr Ala Asn Ile Asn Pro Asn  
 595 600 605  
 Tyr His Arg Asp Ala Phe Ser Ile Pro Asn Leu Asp Ser Glu Leu Ser  
 610 615 620  
 Ile Ser Glu Leu Met Asp Leu Ala Asn Asp Ala Glu Val Thr Gln Asn  
 625 630 635 640  
 Asp Phe Asp Ala Leu Ile Asn Phe Asp Asp Ala Gly Ala Asp Phe Phe  
 645 650 655  
 Thr Ala Asp Asp His Leu Asn Leu Asn Gly Ser Gly Pro Asn Ser Lys  
 660 665 670  
 Gly Phe Gly Phe Ser Met Asp Pro Ile Asn Gly Met Ser Asp Leu Met  
 675 680 685  
 Gly Leu Asp Ala Gly Asn Lys Pro Asp Ile Ala Ser Leu Gly Asp Arg  
 690 695 700  
 Gln Leu His Ser Asp His Met Ala Thr Thr Thr Gly His Ser Asn Thr  
 705 710 715 720  
 Gly Thr Ala Ala Ser Glu Ser Asn Gly Leu Thr Ala Asn Val Asp Ala  
 725 730 735  
 Asp Leu Gly Ile Cys Leu Ser Gly  
 740

&lt;210&gt; 41903

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41903

Asp Ser Leu Cys Arg Leu Gly Glu Lys Arg Tyr Glu His Gln Trp Leu  
 1 5 10 15  
 Ser Ser Asp Ile Ser Thr Glu Arg Leu Arg Val Lys Tyr Leu Cys Val  
 20 25 30  
 Thr Asp Val Ile Asp Leu Thr Arg Gly Val Asn Ala Gln Glu Trp Arg  
 35 40 45  
 Gln Tyr Ser Gly Leu Cys Thr Gln Tyr Ser Tyr Thr Glu Gln Val Ile  
 50 55 60  
 Arg Lys Val  
 65

&lt;210&gt; 41904

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41904

Tyr Pro Ile Ile Ser Gly Arg Thr Leu His Arg Phe Ala Cys Phe Leu  
 1 5 10 15  
 Leu Phe Ala Met Thr Asp Leu Ala Val Ser Ser Thr Pro Ala Ser Ala  
 20 25 30  
 Asn Thr Met Glu Ser Glu Ser Gln Ser Lys Arg Lys Ala Ser Ala Ala  
 35 40 45

## 18633

Gly Leu Ser Ala Asn Ser Arg Pro Val Lys Arg Arg Ala Ser Lys Ala  
 50 55 60  
 Cys Cys Cys Cys Arg Ala Arg Lys Val Arg Cys Asp Val Val Glu Asn  
 65 70 75 80  
 Gly Ser Pro Cys Thr Asn Cys Arg Leu Asp Gln Val Glu Cys Val Val  
 85 90 95  
 Thr Glu Ser Lys Arg Arg Lys Phe Val Leu His Met Ser Thr Arg Cys  
 100 105 110  
 Ser Ile Cys Gly  
 115

&lt;210&gt; 41905

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41905

Glu Val Phe Arg Ala Pro Phe Gln Ser Ser Arg Lys Arg Arg Ser Glu  
 1 5 10 15  
 Thr His Ser Pro Lys Phe Glu Asn Pro Thr Ala Thr Ser Trp Ile Ala  
 20 25 30  
 Phe Lys Leu Ala Asn Lys Ala Phe Gln Ser Cys Thr Asp Thr Ala Ile  
 35 40 45  
 Trp Arg Ser Leu Lys His Asp Glu Asn Tyr Glu Ala Val Tyr Tyr  
 50 55 60

&lt;210&gt; 41906

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41906

Leu Ser Ile Leu Leu Ser Thr Asn Met Ala His Leu Glu Glu Arg Pro  
 1 5 10 15  
 Ser Ser Leu Asp Gly Ser Ala Trp Thr Trp Ile Phe Asp His Cys Leu  
 20 25 30  
 Arg Tyr Pro Glu Thr Tyr Glu Ile Pro Leu Arg Thr Met Tyr Ala Leu  
 35 40 45  
 Asn Cys Asn Pro Thr Arg Gln Pro Ser Ser Gly Thr Arg Thr Pro Glu  
 50 55 60  
 Thr Ala Phe Ser Asn Arg Ser Ser Ser Ser Ser Lys Thr Ser Val Ser  
 65 70 75 80  
 Ser Gln Asp Phe Ile Leu Asp Pro Ala Ala Asp Phe Arg Ala Gln Leu  
 85 90 95  
 Thr His His Ile Ala Arg Met Pro Ser Gln Pro Cys Ser Leu Pro Pro  
 100 105 110  
 Ser Phe Val Thr Ser Phe Leu Arg Arg Cys Phe Ala Pro Gln Leu Asp  
 115 120 125  
 Glu Val Asp Phe Pro Gln Ala Leu Thr Ala Leu Asp Tyr Leu Lys Asp  
 130 135 140  
 Leu Glu Asn Arg Arg Arg Glu Val Ala Ala Ala Leu Gln Arg Leu  
 145 150 155 160  
 Asn Ile His Pro Asp Asp Leu Lys Glu Lys Thr Glu Leu Ala Lys Lys  
 165 170 175  
 Tyr Pro Gly Val Leu Thr Trp Ile Glu Ser Ile Asn Val Gln Gly Arg  
 180 185 190

## 18634

Lys Val Glu Ala Leu Tyr Thr Gln Ile Tyr Leu Gly Leu Arg Arg Trp  
 195 200 205  
 Val Ser Trp Phe Pro Ser Phe Pro Gly  
 210 215

<210> 41907  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 41907  
 Lys Phe His Cys Ala Thr Ala Arg Phe Thr Gly Arg Leu Leu Trp Ala  
 1 5 10 15  
 Thr Leu Leu Thr Ser Leu Arg Ser Val Arg Gly Ile Ala Ser Glu Tyr  
 20 25 30  
 Phe Lys Pro Gly Phe Glu Met Ile Ser Ile Ala Ser Gly Ala Arg Asp  
 35 40 45  
 Leu Pro Lys Met Pro Arg Ala Ile Leu Leu Ala Gly Cys Lys Lys Lys  
 50 55 60  
 Glu Val  
 65

<210> 41908  
 <211> 1703  
 <212> PRT  
 <213> A.fumigatus

<400> 41908  
 Leu Ile Cys Ala Pro Thr Gly Ala Gly Lys Thr Asp Ala Ala Met Leu  
 1 5 10 15  
 Thr Ile Leu Asn Thr Ile Gly Lys Asn Thr Val Pro Asn Arg Ile Glu  
 20 25 30  
 Gln Pro Asp Ala Ile Glu Phe Ala Val Gln Val Asp Asp Phe Lys Ile  
 35 40 45  
 Val Tyr Val Ala Pro Met Lys Ala Leu Ala Ala Glu Val Thr Glu Lys  
 50 55 60  
 Leu Gly Lys Arg Leu Ala Trp Pro Gly Ile Arg Val Arg Glu Leu Thr  
 65 70 75 80  
 Gly Asp Met Gln Pro Thr Lys Arg Glu Ile Val Glu Thr Gln Ile Ile  
 85 90 95  
 Val Thr Thr Pro Glu Lys Trp Asp Val Val Thr Arg Lys Ser Thr Gly  
 100 105 110  
 Asp Thr Glu Leu Val Gln Lys Val Arg Leu Leu Ile Ile Asp Glu Val  
 115 120 125  
 His Met Leu His Asp Glu Arg Gly Ala Val Ile Glu Ser Leu Val Ala  
 130 135 140  
 Arg Thr Gln Arg Gln Val Glu Ser Thr Gln Ser Leu Ile Arg Ile Val  
 145 150 155 160  
 Gly Leu Ser Ala Thr Leu Pro Asn Tyr Val Asp Val Ala Glu Phe Leu  
 165 170 175  
 Lys Val Asn Lys Met Ala Gly Leu Phe Phe Phe Asp Ala Ser Phe Arg  
 180 185 190  
 Pro Val Pro Leu Glu Gln His Phe Ile Gly Val Lys Gly Lys Pro Gly  
 195 200 205  
 Ser Lys Gln Ser Arg Glu Asn Leu Asp Ile Val Ala Phe Glu Lys Val  
 210 215 220

## 18635

Arg Glu Met Leu Glu Arg Gly His Gln Val Met Val Phe Val His Ser  
 225 230 235 240  
 Arg Lys Asp Thr Val Leu Thr Ala Arg Met Leu Arg Gln Met Ala Val  
 245 250 255  
 Glu Asn Gly Cys Glu Asp Leu Phe Ser Cys His Glu His Glu Asn Tyr  
 260 265 270  
 Ser Asn Ala Leu Arg Asp Met Lys His Ala Arg Ala Arg Glu Leu Arg  
 275 280 285  
 Asp Leu Phe Ala Ser Gly Phe Gly Thr His His Ala Gly Met Thr Arg  
 290 295 300  
 Ser Asp Arg Asn Leu Met Glu Arg Met Phe Ser Glu Gly Leu Ile Lys  
 305 310 315 320  
 Val Leu Cys Cys Thr Ala Thr Leu Ala Trp Gly Val Asn Leu Pro Ala  
 325 330 335  
 Ala Ala Val Val Ile Lys Gly Thr Gln Leu Tyr Asn Pro Gln Glu Gly  
 340 345 350  
 Lys Phe Val Asp Leu Gly Ile Leu Asp Val Leu Gln Ile Phe Gly Arg  
 355 360 365  
 Ala Gly Arg Pro Gln Phe Gln Asp Thr Gly Ile Gly Phe Ile Cys Thr  
 370 375 380  
 Thr His Asp Lys Leu His His Tyr Leu Ser Ala Val Thr Ala Gln Gln  
 385 390 395 400  
 Pro Ile Glu Ser Arg Phe Ser Ser Arg Leu Val Asp Asn Leu Asn Ala  
 405 410 415  
 Glu Ile Ser Leu Gly Thr Val Thr Ser Val Ser Glu Gly Val Gln Trp  
 420 425 430  
 Leu Gly Tyr Ser Tyr Leu Phe Val Arg Met Leu Arg Glu Pro Arg Asn  
 435 440 445  
 Tyr Gly Ile Asp Phe Ala Glu Ile Arg Asp Asp Pro Met Leu Val Gln  
 450 455 460  
 Arg Arg Arg Gln Leu Ile Ile Gln Ala Ala Arg Val Leu Gln Lys Ser  
 465 470 475 480  
 Gln Met Ile Ile Phe Asn Glu Lys Thr Glu Glu Leu Arg Ala Lys Asp  
 485 490 495  
 Val Gly Arg Ile Ala Ser Gln Tyr Tyr Val Leu Gln Thr Ser Ile Glu  
 500 505 510  
 Ile Phe Asn Glu Met Met Arg Pro Arg Ala Gly Glu Ala Asp Val Leu  
 515 520 525  
 Arg Met Ile Ser Met Ser Gly Glu Phe Asp Asn Ile Gln Ala Arg Glu  
 530 535 540  
 Asn Glu Ser Lys Glu Leu Asp Arg Leu Arg Asp Glu Ala Ile Gln Thr  
 545 550 555 560  
 Glu Val Glu Gly Gly Asn Asp Ser Pro His Ala Lys Thr Asn Ile Leu  
 565 570 575  
 Leu Gln Ser Tyr Ile Ser Arg Ala Lys Leu Glu Asp Phe Ala Leu Val  
 580 585 590  
 Ser Asp Met Gly Tyr Val Ala Gln Asn Ala Ala Arg Ile Cys Arg Ala  
 595 600 605  
 Leu Phe Met Ile Ala Leu Asn Arg Arg Trp Gly Tyr Gln Cys Gln Val  
 610 615 620  
 Leu Leu Ser Leu Cys Lys Ser Ile Glu Lys Gln Ile Trp Pro Phe Asp  
 625 630 635 640  
 His Pro Phe His Gln Phe Asp Leu Pro Gln Pro Ile Leu Lys Asn Leu  
 645 650 655  
 Asp Glu Lys Leu Pro Thr Ser Ser Leu Glu Ser Met Arg Glu Met Asp  
 660 665 670

Val	Ala	Glu	Ile	Gly	Gln	Leu	Val	His	Asn	Gln	Arg	Met	Gly	Lys	Thr
		675					680					685			
Leu	Ser	Lys	Leu	Leu	Asp	Asn	Phe	Pro	Thr	Leu	Ser	Val	Glu	Ala	Glu
		690				695					700				
Ile	Ala	Pro	Leu	Asn	Arg	Asp	Val	Leu	Arg	Ile	Arg	Leu	Ser	Leu	Tyr
705					710					715					720
Pro	Glu	Phe	Ser	Trp	Asn	Asp	Arg	His	His	Gly	Ala	Ser	Glu	Ala	Tyr
				725					730					735	
Trp	Ile	Trp	Val	Glu	Asn	Ser	Glu	Thr	Ser	Glu	Ile	Tyr	His	His	Glu
			740					745					750		
Tyr	Phe	Ile	Leu	Ser	Arg	Lys	Lys	Leu	His	Asp	Glu	His	Glu	Leu	Asn
		755					760				765				
Phe	Thr	Ile	Pro	Leu	Ser	Asp	Pro	Leu	Pro	Ser	Gln	Ile	Tyr	Val	Arg
		770				775					780				
Ala	Ile	Ser	Asp	Arg	Trp	Leu	Gly	Ala	Glu	Thr	Val	Thr	Pro	Val	Ser
785					790					795					800
Phe	Gln	His	Leu	Ile	Arg	Pro	Asp	Thr	Glu	Ser	Val	Tyr	Thr	Asp	Leu
				805					810					815	
Leu	Asn	Leu	Gln	Pro	Leu	Pro	Ile	Ser	Ala	Leu	Asn	Asn	Pro	Ile	Leu
			820					825					830		
Glu	Glu	Leu	Tyr	Gly	Gln	Arg	Phe	Gln	Phe	Phe	Asn	Pro	Met	Gln	Thr
		835					840					845			
Gln	Ile	Phe	His	Leu	Leu	Tyr	His	Thr	Ser	Ala	Asn	Val	Leu	Leu	Gly
		850				855					860				
Ser	Pro	Thr	Gly	Ser	Gly	Lys	Thr	Val	Ala	Cys	Glu	Leu	Ala	Met	Trp
865					870					875					880
Trp	Ala	Phe	Arg	Glu	Lys	Pro	Gly	Ser	Lys	Val	Val	Tyr	Ile	Ala	Pro
				885					890					895	
Met	Lys	Ala	Leu	Val	Arg	Glu	Arg	Val	Met	Asp	Trp	Gly	Lys	Arg	Leu
		900						905					910		
Ala	Ala	Pro	Met	Gly	Leu	Lys	Leu	Val	Glu	Leu	Thr	Gly	Asp	Asn	Thr
		915					920					925			
Pro	Asp	Thr	Arg	Thr	Ile	Arg	Asp	Ala	Asp	Ile	Ile	Ile	Thr	Thr	Pro
		930				935						940			
Glu	Lys	Trp	Asp	Gly	Ile	Ser	Arg	Ser	Trp	Gln	Thr	Arg	Asp	Tyr	Val
945					950					955					960
Arg	Lys	Val	Ser	Leu	Val	Ile	Ile	Asp	Glu	Ile	His	Leu	Leu	Gly	Gly
				965					970					975	
Asp	Arg	Gly	Pro	Ile	Leu	Glu	Ile	Ile	Val	Ser	Arg	Met	Asn	Tyr	Ile
			980					985					990		
Ala	Ser	Gln	Ser	Lys	Gly	Ser	Val	Arg	Leu	Met	Gly	Met	Ser	Thr	Ala
		995					1000					1005			
Cys	Ala	Asn	Ala	Thr	Asp	Leu	Ala	Asn	Trp	Leu	Gly	Val	Lys	Glu	Gly
		1010				1015					1020				
Leu	Phe	Asn	Phe	Arg	His	Ser	Val	Arg	Pro	Val	Pro	Leu	Glu	Ile	Tyr
1025					1030					1035					1040
Ile	Asp	Gly	Phe	Pro	Glu	Gln	Arg	Gly	Phe	Cys	Pro	Leu	Met	Gln	Ser
				1045					1050					1055	
Met	Asn	Arg	Pro	Thr	Phe	Leu	Ala	Ile	Lys	Asn	His	Ser	Pro	Glu	Lys
			1060					1065					1070		
Pro	Val	Ile	Val	Phe	Val	Ala	Ser	Arg	Arg	Gln	Thr	Arg	Leu	Thr	Ala
			1075				1080					1085			
Lys	Asp	Leu	Ile	Asn	Tyr	Cys	Gly	Met	Glu	Asp	Asn	Pro	Arg	Arg	Phe
		1090				1095					1100				
Val	Arg	Met	Ser	Glu	Glu	Asp	Leu	Gln	Leu	Asn	Leu	Ala	Arg	Val	Lys
1105					1110					1115					1120

## 18637

Asp Glu Ala Leu Arg Glu Ala Leu Ser Phe Gly Ile Gly Leu His His  
 1125 1130 1135  
 Ala Gly Leu Val Glu Ser Asp Arg Gln Leu Ala Glu Glu Leu Phe Ala  
 1140 1145 1150  
 Asn Asn Lys Ile Gln Ile Leu Val Ala Thr Ser Thr Leu Ala Trp Gly  
 1155 1160 1165  
 Val Asn Leu Pro Ala His Leu Val Val Val Lys Gly Thr Gln Tyr Phe  
 1170 1175 1180  
 Asp Ala Lys Ile Glu Gly Tyr Lys Asp Met Asp Leu Thr Asp Val Leu  
 1185 1190 1195 1200  
 Gln Met Leu Gly Arg Ala Gly Arg Pro Gln Phe Asp Ser Ser Gly Ile  
 1205 1210 1215  
 Ala Arg Ile Phe Thr Gln Glu Ser Lys Lys Ala Phe Tyr Lys His Phe  
 1220 1225 1230  
 Leu His Thr Gly Phe Pro Val Glu Ser Thr Leu His Lys Val Leu Asp  
 1235 1240 1245  
 Asn His Leu Gly Ala Glu Ile Ser Ala Gly Thr Ile Ala Thr Lys Gln  
 1250 1255 1260  
 Asp Ala Leu Asp Tyr Leu Thr Trp Thr Phe Phe Phe Arg Arg Leu His  
 1265 1270 1275 1280  
 Lys Asn Pro Ser Tyr Tyr Gly Leu Glu Ile Ser Ala Glu Glu His Asn  
 1285 1290 1295  
 Thr Met Ala Ala Gln Ala Ile Ala Gln Asp Phe Met Ile Asp Leu Val  
 1300 1305 1310  
 Asp Lys Ser Leu Gly Glu Leu Ala Glu Ser Ser Cys Val Val Phe Asp  
 1315 1320 1325  
 Ser Ala Thr Gly Glu Val Asp Ser Thr Pro Phe Gly Lys Ile Met Ser  
 1330 1335 1340  
 Tyr Tyr Tyr Leu Ser His Lys Thr Val Arg Tyr Leu Arg Ser His Ala  
 1345 1350 1355 1360  
 Ile Pro Asn Pro Thr Phe His Asp Val Leu Ser Trp Leu Cys Ser Ala  
 1365 1370 1375  
 Thr Glu Phe Asp Glu Leu Pro Val Arg His Asn Glu Asp Leu Ile Asn  
 1380 1385 1390  
 Ala Glu Leu Ala Arg Asn Leu Pro Leu Ser Val Glu Ser Met Gly Asp  
 1395 1400 1405  
 Leu Pro Leu Trp Asp Pro His Val Lys Ala Phe Leu Leu Leu Gln Ala  
 1410 1415 1420  
 Tyr Met Ser Arg Ile Asp Leu Pro Ile Ser Asp Tyr Val Gly Asp Gln  
 1425 1430 1435 1440  
 Thr Ser Val Leu Asp Gln Gly Ile Arg Ile Ile Gln Ala Ser Ile Asp  
 1445 1450 1455  
 Ile Met Ala Glu Leu Gly Tyr Val Arg Ala Cys Glu Thr Leu Val Ser  
 1460 1465 1470  
 Leu Leu Gln Ser Ile Lys Ser Ala Arg Trp Pro Glu Asp Asn Ala Leu  
 1475 1480 1485  
 Ser Ile Leu Pro Gly Ile Glu Pro Thr Ser Lys Leu Gln Gly Leu Pro  
 1490 1495 1500  
 Gly Ser Leu Val Ala Leu Ser Ser Leu Pro Thr Ala Ser Val Ser Gly  
 1505 1510 1515 1520  
 Leu Ala Arg Lys Leu Gln Leu Pro Ala Glu Phe Thr Lys Ala Ala Ser  
 1525 1530 1535  
 Tyr Leu Pro Gln Val Ser Val Ser Val Ala Asn Val Ser Ser Thr Gly  
 1540 1545 1550  
 Ile Thr Val Phe Leu Ser Arg Arg Asn Pro Pro Thr Asn Ala Glu His  
 1555 1560 1565

## 18638

Arg Val Tyr Ala Pro Arg Phe Pro Lys Pro Gln Thr Glu Gly Tyr Phe  
 1570 1575 1580  
 Leu Ile Val Cys Ser Ala Ser Ala Asp Gly Lys Asp Gly Glu Leu Leu  
 1585 1590 1595 1600  
 Ala Leu Lys Arg Val Ser Trp Ser Ala Asn Asn Lys Asn Gln Ser Ser  
 1605 1610 1615  
 Asn Ser Gly Ser Gly Ser Gly Ser Ser Gln Asn Pro Ser Gly Arg Ser  
 1620 1625 1630  
 Asn Tyr Arg Asn Gly Ala Leu Thr Val Arg Ser Ser Val Lys Phe Pro  
 1635 1640 1645  
 Gln Asp Phe Leu Ala Gln Tyr Thr Thr Ala Thr Gly Lys Gly Val Asn  
 1650 1655 1660  
 Val Lys Val Ile Ser Asp Thr Tyr Pro Gly Met Gln Trp Val Val Ser  
 1665 1670 1675 1680  
 Asn Val Glu Val Glu Leu Lys Pro Glu Thr Gln Ser Val Pro Glu Ser  
 1685 1690 1695  
 Ser Asn Tyr Pro Glu Lys Ala  
 1700

&lt;210&gt; 41909

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41909

Gln His Gly Cys Thr Ala Arg Arg Leu Trp Lys Asp Tyr Phe Pro Glu  
 1 5 10 15  
 Val Ser Gly Ile Val Phe Leu Val Asp Ala Lys Asp His Glu Arg Phe  
 20 25 30  
 Pro Glu Ser Lys Ala Glu Leu Asp Ala Leu Leu Ala Met Glu Glu Leu  
 35 40 45  
 Ala Lys Val Pro Phe Leu Ile Leu Gly Asn Lys Ile Asp His Pro Asp  
 50 55 60  
 Ala Val Ser Glu Asp Glu Leu Arg His Gln Leu Gly Leu Tyr Gln Thr  
 65 70 75 80  
 Thr Gly Lys Gly Lys Val Pro Leu Glu Gly Ile Arg Pro Ile Glu Val  
 85 90 95  
 Phe Met Cys Ser Val Val Met Arg Gln Gly Glu Phe Ser Phe Leu Thr  
 100 105 110  
 Phe Cys Ala Met Ser Ser Thr Thr Phe  
 115 120

&lt;210&gt; 41910

&lt;211&gt; 766

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41910

Gln Val Gly Ile Phe Thr Glu Leu Val Ile Thr Ser Pro Thr Phe Leu  
 1 5 10 15  
 Phe Tyr Tyr Leu Pro Pro Pro His Asn Leu Ser Ser Thr Ile Leu Asn  
 20 25 30  
 Ile Arg Pro Tyr His Gln Leu Pro Pro Leu Asp Leu Asn Pro Val Ser  
 35 40 45  
 Lys Pro Ser Asn Leu Leu Glu Ala Met Ala Tyr Leu Arg Gly Gly Asp  
 50 55 60



## 18639

Arg	Pro	Phe	Ser	Ile	His	Lys	Leu	Leu	Lys	Met	Leu	Leu	Ser	Pro	His
65					70					75					80
Gln	Ser	Asn	Lys	Pro	Val	Gln	Gln	Glu	Ser	Asp	Met	Leu	Glu	Asp	Val
				85					90					95	
Asp	Glu	Pro	Pro	Asp	His	Arg	Phe	Leu	Asn	Asn	Ser	Ala	Met	Asn	Val
			100					105					110		
Asp	Asp	Gly	Val	Val	Tyr	Val	Lys	Ser	Pro	Thr	Thr	Met	Ser	Arg	Gly
		115					120					125			
Lys	Glu	Ser	Leu	Leu	Thr	Arg	Ala	Leu	Lys	His	Ser	Pro	Glu	Leu	Ala
	130					135					140				
Pro	Ala	Asp	His	Gln	Asp	His	Pro	Phe	Tyr	Arg	Ser	Tyr	His	Ser	Gly
145					150					155					160
Thr	Val	Ser	Gly	Ile	Ser	Thr	Ala	Glu	Leu	Thr	Ser	Asp	Gly	Gly	Leu
				165					170					175	
Thr	Ser	Pro	Ser	Leu	Ser	Asn	Thr	Pro	Ser	Pro	Pro	Leu	Ser	Pro	Gln
		180						185					190		
Leu	Asn	Gly	Arg	Ser	Gly	Leu	Asp	Ala	Thr	Glu	Ser	Thr	Val	Glu	Ala
	195						200					205			
Asn	Leu	Gly	Arg	Lys	Arg	Cys	Ile	Ser	Phe	Ala	Cys	Gly	Arg	Lys	Ala
	210					215					220				
Glu	Glu	Met	Lys	Pro	Glu	Arg	Pro	Thr	Ala	Pro	Glu	Ser	Thr	Ala	Asn
225					230					235					240
Ser	Thr	Pro	Ala	Glu	Pro	Pro	Lys	Arg	Lys	Thr	Val	Leu	Thr	Phe	Val
				245					250					255	
Cys	Pro	Ala	Arg	Asp	Ser	Cys	Ser	Thr	Arg	Glu	Arg	Pro	Pro	Val	Arg
			260					265					270		
Thr	Ala	Ala	Leu	Arg	Ser	Arg	Pro	Arg	Gly	Ser	Pro	Ala	Pro	Val	Ala
	275						280					285			
Arg	Lys	Ala	Ser	Pro	Asp	Lys	Asp	Val	Ser	Cys	Pro	Val	Lys	Ala	Gln
	290					295					300				
Gln	Asp	Glu	Lys	Pro	Ser	Ala	Ser	Ser	Ser	Gln	Arg	Gly	Val	Pro	Val
305					310					315					320
Lys	Gly	Leu	Gly	Lys	Phe	Glu	Glu	Ser	Glu	Ala	Thr	Arg	Phe	His	Glu
				325					330					335	
Phe	Ala	Ser	Ser	Val	Ser	Glu	Asp	Asp	Glu	Trp	Val	Asn	Lys	Val	Gly
			340					345					350		
Glu	Phe	Thr	Glu	Lys	Ile	Thr	Met	Thr	Asp	Cys	Met	Arg	Lys	Glu	Ile
			355				360					365			
Ala	Ile	Arg	Lys	Leu	Gly	Glu	Glu	Ala	Glu	Glu	Glu	Ala	Leu	Glu	Glu
	370					375					380				
Glu	Asp	Glu	Glu	Glu	Asp	Glu	Asp	Asp	Ala	Asp	Ser	Thr	Ile	His	Asp
385					390					395					400
Phe	Ser	Asp	Asp	Gly	Asn	Glu	Ser	Asp	Asn	Glu	Ala	Gly	Phe	Ala	Asp
				405					410					415	
Ser	Asp	Asp	Glu	Ser	Asp	Asp	Gly	Ser	Glu	Tyr	Glu	Phe	Trp	Ala	Pro
			420					425					430		
Thr	Ala	Ile	Thr	Thr	Ala	Thr	Ser	Pro	Gln	Ala	Leu	Asp	Ser	Ala	Arg
		435					440						445		
Gln	Ala	Leu	Glu	Arg	Arg	Gly	Ser	Asn	Thr	Ser	Leu	Asp	Ser	Val	Thr
	450					455					460				
Asp	Asp	Pro	His	Lys	Lys	Trp	Pro	Pro	Ala	Leu	Ala	Trp	Lys	Ala	Asn
465					470					475					480
Gly	Arg	Ser	Pro	Phe	Lys	Pro	Pro	Pro	Val	Lys	Met	Arg	Pro	Gly	Thr
				485					490					495	
Pro	Asn	Leu	Pro	Asp	Ser	Thr	Asp	Phe	Val	Cys	Gly	Thr	Leu	Asp	Glu
			500					505					510		

## 18640

```

Asp Arg Pro Leu Glu Val Ala Tyr Lys Ser Cys Ile Glu Gln Arg Arg
   515                               520                   525
Leu Ser Lys Gln Val Ile Ile Pro Gln Asp Ile Asp Pro Ser Phe Pro
   530                               535                   540
Thr Ser Asp Ile Asp Asp Gln Asp Asp Leu Glu Glu Asp Glu Met Glu
545                               550                   555                   560
Leu Ser Phe Arg Ala Asp Glu Leu Thr Arg Gly Arg Thr Gly Gly Asp
                               565                   570                   575
Ser Val Arg Gln His Ser Pro Arg Leu Ser Pro Arg Arg Met Met Ser
                               580                   585                   590
Pro Pro Pro Arg Arg Tyr Ser Arg Met Ser Pro Arg Arg Leu Arg Ser
   595                               600                   605
Pro Pro Pro Pro Val Lys Met Gly Pro Thr Gln Ser Gly Asp Gly Val
   610                               615                   620
Ser Asp Asp Gln Leu Pro Ser Arg Arg Pro Gln Gly Val Asn Ile Ser
625                               630                   635                   640
Glu Leu Val Gln Arg Pro Leu Met Thr Arg Thr Lys Ser Leu Pro Arg
                               645                   650                   655
Thr Pro Asn Pro Phe Phe Thr Ser Leu Asp Lys Ala His Arg Trp Ser
                               660                   665                   670
Ser Ile Ala Asp Val Gln Glu Ser Pro Glu Arg Gly Ser Ser Cys Thr
   675                               680                   685
Arg Glu Val His Thr Arg Gly Pro Ile Asp Ile Val Glu Gly Leu Glu
   690                               695                   700
Lys Lys Arg Gln Lys Arg Arg Glu Lys Phe Trp Arg Gln His Cys Arg
705                               710                   715                   720
Lys Ala Ala Lys Glu Gln Met Glu Arg Arg Pro Ile Pro Gly Lys Gly
                               725                   730                   735
Ala Glu Arg Met Lys Glu Leu Gly Leu Glu Val Ala Glu Arg Phe Arg
   740                               745                   750
Ala Tyr Gly Val Gly His Asp Ala Gln Leu Val Leu Ser Val
   755                               760                   765

```

&lt;210&gt; 41911

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41911

```

Ile Arg Leu Gly Arg Pro Val Leu Phe Ala His Pro His Arg Cys Leu
1           5           10           15
Gly Gly His Pro Ser Cys Ile Tyr Arg Glu Ile Thr Phe Phe Lys Phe
20           25           30
Val Phe Ala Ser Pro Ile His Ile Tyr Pro Phe Leu Ile Ser Leu Asn
35           40           45
Tyr Ile Phe Thr Phe Pro His Cys Cys Gly Arg Gly Pro Val
50           55           60

```

&lt;210&gt; 41912

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41912

```

Val Ser Ser Trp Ser Leu Phe Cys Pro Ala Lys Leu Arg Val Leu Asp
1           5           10           15

```

## 18641

```

Ile Ser Lys Phe His Pro Cys Val Arg Phe Cys Tyr His Thr Glu Pro
      20                      25                      30
Ser Arg Gly Thr Lys Leu Ala Ser Tyr Leu His Tyr Trp Phe Asp Pro
      35                      40                      45
Leu Pro Val Ser Ala Ala Asn Glu Tyr Ser Leu Ser Val Val Tyr Asp
      50                      55                      60
Ile Leu Ala Ser Leu Gly Leu Leu Asn Lys His Ala Lys Leu Leu Phe
65      70                      75                      80
Leu Gly Leu Asp Asn Ala Gly Lys Thr Thr Leu Leu His Met Leu Lys
      85                      90                      95
Val Ser Ile Leu Glu Glu Pro Gly Ser Val Gly Tyr Gly Val Ser Tyr
      100                      105                      110
Met Leu Thr Leu Leu Ala Leu Asp Cys
      115                      120

```

<210> 41913  
 <211> 168  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41913
Ile Cys Gly Asp Ile His Gly Gln Tyr Tyr Asp Leu Leu Arg Leu Phe
1      5                      10                      15
Glu Tyr Gly Gly Phe Pro Pro Glu Ala Asn Tyr Leu Phe Leu Gly Asp
      20                      25                      30
Tyr Val Asp Arg Gly Lys Gln Ser Leu Glu Thr Ile Cys Leu Leu Leu
      35                      40                      45
Ala Tyr Lys Ile Lys Tyr Pro Glu Asn Phe Phe Val Leu Arg Gly Asn
      50                      55                      60
His Glu Cys Ala Ser Ile Asn Arg Ile Tyr Gly Phe Tyr Asp Glu Cys
65      70                      75                      80
Lys Arg Arg Tyr Asn Ile Lys Leu Trp Lys Thr Phe Thr Asp Cys Phe
      85                      90                      95
Asn Cys Leu Pro Ile Ala Ala Ile Ile Asp Glu Lys Ile Phe Thr Met
      100                      105                      110
His Gly Gly Leu Ser Pro Asp Leu Asn Ser Met Glu Gln Ile Arg Arg
      115                      120                      125
Val Met Arg Pro Thr Asp Val Ser Phe Ser Pro Met His Ser Leu Tyr
      130                      135                      140
His Gly Leu Gly Pro Phe Ser Arg Gly Gly Pro Leu Trp Ile Ser Phe
145      150                      155                      160
Cys Leu Tyr Tyr Ser Thr Val Glu
      165

```

<210> 41914  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

```

<400> 41914
Ile Gly Val Pro Ser Ala Pro Glu Thr Thr Ile Ser Pro Arg Pro Ser
1      5                      10                      15
Phe Leu Pro Phe Val Val Arg Arg Leu Cys Ile Asn Ser Phe Leu Phe
      20                      25                      30
Leu Arg Phe Cys Leu Glu Asn Gln His Val Met Ala Asp Gln Glu Val
      35                      40                      45

```

## 18642

Asp Leu Asp Asn Ile Ile Asp Arg Leu Leu Glu Val Arg Gly Ser Arg  
 50 55 60  
 Pro Gly Lys Gln Val Gln Leu Leu Glu Ala Glu Ile Arg Tyr Leu Cys  
 65 70 75 80  
 Thr Lys Ala Arg Glu Ile Phe Ile Ser Gln Pro Ile Leu Leu Glu Leu  
 85 90 95  
 Glu Ala Pro Ile Lys Val Arg  
 100

&lt;210&gt; 41915

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41915

Tyr Arg Phe Leu Gly Leu Leu Pro Arg Leu Gly Asp Tyr Ala Ser Leu  
 1 5 10 15  
 His Arg Ile Glu Thr Asp Glu Phe Ala Phe Ile Arg Ser Val Val Thr  
 20 25 30  
 Phe Thr Ala Asn Thr Thr Ile Ser Cys Val Phe Ser Asn Thr Val Ala  
 35 40 45  
 Ser Arg Leu Lys Pro Ile Thr Ser Ser Ser Glu Thr Thr Ser Thr Val  
 50 55 60  
 Ala Ser Ser Arg Leu Arg Pro Ser Ala Ser Ser Leu Arg Thr Arg Ser  
 65 70 75 80  
 Asn Ile Leu Lys Thr Ser Leu Phe Ser Val Val Thr Thr Asn Val Pro  
 85 90 95  
 Pro Ser Thr Val Ser Met Ala Ser Met Thr Ser Ala Ser Gly Gly Thr  
 100 105 110  
 Thr Leu Ser Ser Gly Arg His Ser Leu Ile Ala Ser Thr Ala Cys Pro  
 115 120 125  
 Ser Leu Gln Ser Ser Thr Arg Arg Ser Ser Pro Cys Met Ala Val Ser  
 130 135 140  
 Ala Pro Ile  
 145

&lt;210&gt; 41916

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41916

Leu Arg Glu Ser Ser Leu Ser Thr Gly Gly Ala Leu Tyr Asn His Val  
 1 5 10 15  
 Val Ser Leu Leu Ala Pro Thr Ser Gln Phe Gly Leu His Gly Gly Arg  
 20 25 30  
 Gln Gly Leu Leu Thr Leu Leu Val Thr Ala Gln Ile Glu Arg Cys Lys  
 35 40 45  
 Pro Val Val Ala Asp Gly Lys Phe Leu Arg Cys Trp Asn His Gln Tyr  
 50 55 60  
 Gln Ser Pro Ala Arg Ile Phe Arg Arg Gln Ser  
 65 70 75

&lt;210&gt; 41917

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41917

```

Ile Pro Asp Cys Gly Leu Leu Cys Asp Leu Leu Trp Ser Asp Pro Asp
1          5          10          15
Lys Asp Ile Thr Gly Trp Ser Glu Asn Asp Arg Gly Val Ser Phe Thr
          20          25          30
Phe Gly Pro Asp Val Val Ser Arg Phe Leu Gln Lys His Asp Met Asp
          35          40          45
Leu Ile Cys Arg Ala His Gln Val Val Glu Asp Gly Tyr Glu Phe Phe
          50          55          60
Ser Lys Arg Gln Leu Val Thr Leu Phe Ser Ala Pro Asn Tyr Cys Gly
65          70          75          80
Glu Phe Asp Asn Ala Gly Ala Met Met Ser Val Asp Glu Ser Leu Leu
          85          90          95
Cys Ser Phe Gln Val Cys Cys Val Leu
          100          105

```

&lt;210&gt; 41918

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41918

```

Pro Leu Ser Leu Val Ala Tyr Val Cys Cys Gly Lys Leu Thr Cys Thr
1          5          10          15
Val Ala Ala Tyr Ile Ile Leu Gly Leu Ala Thr Ile Gly Ser Glu Ile
          20          25          30
Glu Asn Pro Phe Gly Gln Asp Val Asn Asp Leu Pro Leu Asp Thr Tyr
          35          40          45
Cys Arg Gln Ile Ala Val Glu Leu Asp Ile Ile Thr Ala Met Pro Pro
          50          55          60
Pro Ser Val Asp Asp Phe Thr Ser Arg Asp Glu Asn Leu Val Leu Phe
65          70          75          80
Pro Leu Ser Ser Ser Gly Tyr Pro Glu Trp Lys Asp Arg Ser Val Glu
          85          90          95
Asp Ile Arg Ala Ala Leu Arg Ala Lys Val Ile Ala Asn His Ser Ser
          100          105          110
Ser Gly Ala Ser Asp Ser Ser Thr Ile Leu Gly Asp Gly Ser Leu Arg
          115          120          125
Ser Gln Thr Asp Thr Ser Met Ala Lys Ala Ser Val
          130          135          140

```

&lt;210&gt; 41919

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41919

```

Pro Ala Gln Ser Pro His Thr Ser Ser Ser Ala Ser Pro Arg Ser Ala
1          5          10          15
Ala Lys Ser Arg Thr Pro Leu Ala Arg Met Ser Thr Ile Ser Pro Trp
          20          25          30
Thr His Thr Ala Asp Arg Ser Pro Ser Ser Ser Thr Ser Ser Pro Pro
          35          40          45
Cys His Pro Pro Val Trp Thr Thr Ser Pro Pro Ala Thr Lys Thr Trp

```

## 18644

50                      55                      60  
 Phe Ser Ser Leu Leu Ala Pro Pro Asp Thr Arg Ser Gly Arg Thr Ala  
 65                      70                      75                      80  
 Ala Leu Arg Ile Ser Ala Pro Arg Cys Gly Gln Arg Ser Ser Pro Thr  
                     85                      90                      95  
 Thr His Leu Gln Gly Leu Arg Thr Arg Pro Pro Ser Ser Gly Thr Glu  
                     100                      105                      110  
 Ala Cys Gly Pro Arg Leu Ile Arg Ala Trp Pro Arg His Pro Ser Glu  
                     115                      120                      125  
 Thr Trp Leu Gln Ile Pro Gln Lys  
                     130                      135

&lt;210&gt; 41920

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41920

Leu Ala Ser Phe Gln Thr Asn Thr Leu Ser Ala Thr Lys Asp Leu Ile  
 1                      5                      10                      15  
 Gln Pro His Tyr Ser Gln Tyr Thr Ile Asn Ala Arg Leu Val Ser Asp  
                     20                      25                      30  
 Phe Lys Leu Arg Ser Thr Met Ser Thr Arg Ile Leu Pro Leu Pro Arg  
                     35                      40                      45  
 Thr Gly Gly Pro Phe Ser Ser Gln Arg Gln Ser Ile  
                     50                      55                      60

&lt;210&gt; 41921

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41921

Gly Arg Leu Val Thr Met Asp Ile Ser Thr Arg Met Gly Leu Phe Gln  
 1                      5                      10                      15  
 Lys Ala Phe His Gln Ser Ser Gly Leu Ser Pro Gly Pro Gly Phe Tyr  
                     20                      25                      30  
 Thr Gly Leu Glu Phe Tyr Ser Asn Glu Glu Arg Ala Asp Pro Pro Thr  
                     35                      40                      45  
 Leu Glu Ala Ser Lys Phe Leu Leu Lys Pro Ala Gln Gly Arg Pro Ser  
                     50                      55                      60  
 Thr Gln  
 65

&lt;210&gt; 41922

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41922

Glu Gln Arg Val Leu Trp Arg Ile Ala Arg Ala Ser Lys Gln Asn Ile  
 1                      5                      10                      15  
 Leu Ser Val Ser Thr Phe Phe Ile Leu His Gln Pro Leu Gln Phe His  
                     20                      25                      30  
 Leu Phe Ser Phe Ile Ser Leu Leu Ala Tyr Thr Ala Ser Ser Lys Phe  
                     35                      40                      45

## 18645

Ile Asn Leu Arg Ile Met Leu Arg Val Glu Val Pro Ser His His Ile  
 50 55 60  
 Tyr Ser Leu Thr Tyr Arg Lys Ser Ser Ile  
 65 70

<210> 41923  
 <211> 119  
 <212> PRT  
 <213> A.fumigatus

<400> 41923  
 Ser Ser Thr Ser Pro Asn Trp Thr Arg Phe Leu Ser Asn Leu Ser Pro  
 1 5 10 15  
 His Asn Gly Asp Leu Ser Arg Met Arg Leu Thr Phe Ile Pro Ser Leu  
 20 25 30  
 Ile Gly Val Ala Asn Ala Val Cys Pro Tyr Met Thr Gly Glu Leu Asn  
 35 40 45  
 Arg Arg Asp Glu Ile Ser Asp Gly Asp Ala Ala Ala Thr Glu Glu  
 50 55 60  
 Phe Leu Ser Gln Tyr Tyr Leu Asn Asp Asn Asp Ala Phe Met Thr Ser  
 65 70 75 80  
 Asp Val Gly Gly Pro Ile Glu Asp Gln Asn Ser Leu Ser Ala Gly Glu  
 85 90 95  
 Arg Gly Pro Thr Leu Leu Glu Asp Phe Ile Phe Arg Gln Lys Ile Gln  
 100 105 110  
 Arg Phe Asp His Glu Arg Val  
 115

<210> 41924  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 41924  
 Val Pro Glu Arg Ala Val His Ala Arg Gly Ala Gly Ala His Gly Val  
 1 5 10 15  
 Phe Thr Ser Tyr Gly Asp Phe Ser Asn Ile Thr Ala Ala Ser Phe Leu  
 20 25 30  
 Ala Lys Glu Gly Lys Gln Thr Pro Val Phe Val Arg Phe Ser Thr Val  
 35 40 45  
 Ala Gly Ser Arg Gly Ser Ser Asp Leu Ala Arg Asp Val His Gly Phe  
 50 55 60  
 Ala Thr Arg Phe Tyr Thr Asp Glu Gly Asn Phe Gly Thr Leu Val Asn  
 65 70 75 80  
 Ser His Asn

<210> 41925  
 <211> 177  
 <212> PRT  
 <213> A.fumigatus

<400> 41925  
 Ser Phe His Ile Ser Ala Gly Gln Met Phe Ile Pro Leu Asn Pro His  
 1 5 10 15  
 Ala Tyr Ser Pro Lys Thr Ser Val Asn Gly Ser Pro Lys Gln Ala Asn

## 18646

```

      20      25      30
Gln Thr Val Gly Asp Gly Phe Phe Thr Ala Pro Gly Arg Thr Thr Ser
      35      40      45
Gly Lys Leu Val Arg Ala Val Ser Ser Ser Phe Glu Asp Val Trp Ser
      50      55      60
Gln Pro Arg Leu Phe Tyr Asn Ser Leu Val Pro Ala Glu Lys Gln Phe
      65      70      75      80
Val Ile Asp Ala Ile Arg Phe Glu Asn Ala Asn Val Lys Ser Pro Val
      85      90      95
Val Lys Asn Asn Val Ile Ile Gln Leu Asn Arg Ile Asp Asn Asp Leu
      100      105      110
Ala Arg Arg Val Ala Arg Ala Ile Gly Val Ala Glu Pro Glu Pro Asp
      115      120      125
Pro Thr Phe Tyr His Asn Asn Lys Thr Ala Asp Val Gly Thr Phe Gly
      130      135      140
Thr Lys Leu Lys Lys Leu Asp Gly Leu Lys Val Gly Val Leu Gly Ser
      145      150      155      160
Val Gln His Pro Gly Ser Val Glu Trp Ser Phe Pro Pro Ser Ala Thr
      165      170      175
Val

```

&lt;210&gt; 41926

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (142)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41926

```

Leu His Arg Tyr Trp Ser Leu Leu Gly Leu Pro Val Ser Leu Glu Arg
1      5      10      15
Arg Tyr Arg Ala Phe Leu Asp Val Ser Met Asp Cys Glu Arg Arg His
      20      25      30
Lys Asp Val Pro Arg Ala Ala Phe Ser His Leu Arg Leu Arg Cys His
      35      40      45
His Val Phe Glu His Cys Ser Ala Gln Trp Phe Val Leu Asp Ala Asp
      50      55      60
Gln Tyr Asp Arg Ser Gly Thr Phe Asp Tyr Leu Gly Ile Ala Tyr Leu
      65      70      75      80
Glu Thr Asn Gln Phe Ser Lys Asp Glu Tyr Ala Asn His Ile Asp Ala
      85      90      95
Gly Gly Phe Thr Met Pro Leu Ile Ser Glu Thr Leu Ser Tyr Ala Gln
      100      105      110
Phe Leu Pro Lys Gln Val Gly Leu Asp Gln Asn Glu Thr Trp Thr Gly
      115      120      125
Asn Phe Leu Lys Trp Ser Phe Ser Leu Gly Lys Thr Gly Xaa Thr
      130      135      140

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&lt;210&gt; 41927

&lt;211&gt; 262

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus



&lt;400&gt; 41927

Cys Thr Gly Leu Ser Asp Arg Val Arg Arg Ser Pro Ser Val Arg Ser  
 1 5 10 15  
 Met Pro Val Val Pro Ala Pro Met Glu Ser Ser Leu His Met Ala Thr  
 20 25 30  
 Ser Arg Thr Ser Leu Arg Leu Leu Ser Trp Pro Arg Lys Ala Ser Lys  
 35 40 45  
 Pro Leu Tyr Leu Ser Ala Ser Arg Arg Ser Gln Glu Ala Glu Val Val  
 50 55 60  
 Arg Ile Trp Pro Val Met Phe Thr Val Leu Pro Leu Val Ser Ile Pro  
 65 70 75 80  
 Thr Arg Ala Ile Ser Val Arg Trp Ser Ile Arg Thr Thr Asp Ile Val  
 85 90 95  
 Leu Leu Ser Val Ile Asp Ile Val Gly Asn Asn Ile Pro Val Phe Phe  
 100 105 110  
 Ile Gln Asp Ala Ile Leu Phe Pro Asp Leu Ile His Ala Val Lys Pro  
 115 120 125  
 Arg Gly Asp Asn Glu Ile Pro Gln Ala Ala Thr Ala His Asp Ser Ala  
 130 135 140  
 Trp Asp Phe Phe Ser Gln Gln Pro Ser Thr Met His Thr Leu Leu Trp  
 145 150 155 160  
 Ala Met Ser Gly His Gly Ile Pro Arg Ser Phe Arg His Val Asp Gly  
 165 170 175  
 Phe Gly Val His Thr Phe Arg Phe Val Thr Asp Asp Gly Ala Ser Lys  
 180 185 190  
 Leu Val Lys Phe His Trp Lys Ser Leu Gln Gly Lys Ala Ser Met Val  
 195 200 205  
 Trp Glu Glu Ala Gln Gln Thr Ser Gly Lys Asn Pro Asp Phe Met Arg  
 210 215 220  
 Gln Asp Leu His Asp Ala Ile Glu Ala Gly Arg Tyr Pro Glu Trp Glu  
 225 230 235 240  
 Val Ser Arg Leu Pro Ser Ser Ser Arg Pro Pro Asn Leu Val Asp Ile  
 245 250 255  
 Lys Gln Pro Ser Arg Ser  
 260

&lt;210&gt; 41928

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41928

Ser Asp Cys Lys Gln Phe Gln Pro Gly His Ile Val Arg Gly Val Asp  
 1 5 10 15  
 Phe Thr Glu Asp Pro Leu Leu Gln Gly Arg Leu Phe Ser Tyr Leu Asp  
 20 25 30  
 Thr Gln Leu Asn Arg His Gly Gly Pro Asn Phe Glu Gln Leu Pro Ile  
 35 40 45  
 Asn Gln Pro Arg Val Pro Val His Asn Asn Asn Arg Asp Gly Ala Gly  
 50 55 60  
 Glu Thr Phe Gln Thr Phe Lys Ala Ser Ala Ser Ile Asn Leu Phe Ile  
 65 70 75 80  
 Phe Leu Gln Ala Lys Cys Ser Phe Pro Ser Thr Leu Thr Arg Thr Arg  
 85 90 95  
 Pro Arg Pro Pro Ser Thr Val Pro Gln Asn Lys Pro Thr Arg Pro Ser

## 18648

	100		105		110
Ala Met Ala Ser Ser Gln Leu Leu Asp Val Pro Pro Val Ala Ser Leu					
	115		120		125
Ser Val Arg Ser Ala Gln Ala Leu Arg Met Ser Gly Leu Ser His Gly					
	130		135		140
Ser Ser Thr Ile Leu Trp Phe Leu Pro Arg Ser Ser Ser Leu Leu Thr					
145		150		155	160
Pro Ser Ala Ser Lys Met Gln Thr Leu Asn Leu Pro Trp					
	165		170		

&lt;210&gt; 41929

&lt;211&gt; 619

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41929

Gln Asn Leu Ala Thr Trp Val Ser Leu Leu Ala Cys Leu Pro Ala Ala					
1	5		10		15
Ile Gly Leu Pro Asn Asn Asn Asp Arg Val Ala Arg Ser Leu Lys Arg					
	20		25		30
His Gly Gly His Gly His Lys Gln Val Asp Thr Asn Ser Ser His Val					
	35		40		45
Tyr Lys Thr Arg Phe Pro Gly Val Thr Trp Asp Asp Asp His Trp Leu					
	50		55		60
Leu Ser Thr Thr Thr Leu Asp Gln Gly His Tyr Gln Ser Arg Gly Ser					
65		70		75	80
Ile Ala Asn Gly Tyr Leu Gly Ile Asn Val Ala Ser Val Gly Pro Phe					
	85		90		95
Phe Glu Leu Asp Val Pro Val Ser Gly Asp Val Ile Asn Gly Trp Pro					
	100		105		110
Leu Tyr Ser Arg Arg Gln Thr Phe Ala Thr Ile Ala Gly Phe Phe Asp					
	115		120		125
Tyr Gln Pro Thr Thr Asn Gly Ser Asn Phe Pro Trp Leu Asn Gln Tyr					
	130		135		140
Gly Gly Glu Ser Val Ile Ser Gly Ile Pro His Trp Ser Gly Leu Ile					
145		150		155	160
Leu Asp Leu Gly Asp Gly Asn Tyr Leu Asp Ala Thr Val Asp Asn Lys					
	165		170		175
Thr Ile Thr Asp Phe Arg Ser Thr Tyr Asp Phe Lys Ser Gly Val Leu					
	180		185		190
Ser Trp Ser Tyr Thr Trp Thr Pro Lys Cys Asn Lys Gly Ser Phe Asn					
	195		200		205
Ile Thr Tyr Arg Leu Phe Ala His Lys Leu His Val Asn Gln Ala Val					
	210		215		220
Val Asp Met Glu Ile Thr Pro Ser Gln Gly Ser Glu Ala Thr Val Val					
225		230		235	240
Asn Val Ile Asp Gly Phe Ser Ala Val Arg Thr Asp Phe Val Glu Ser					
	245		250		255
Gly Gln Asp Asn Gly Ala Leu Phe Ser Ala Val Arg Pro Trp Gly Ile					
	260		265		270
Ser Asn Val Thr Ala Tyr Val Tyr Thr Asn Leu Thr Ala Ser Ala Gly					
	275		280		285
Val Asp Leu Thr Ser Arg Ala Leu Val Asn Asp Lys Pro Tyr Val His					
	290		295		300
Ser Asn Glu Ser Ser Ile Ala Gln Ala Val Asp Val Lys Phe Arg Ala					
305		310		315	320

## 18649

```

Asn Glu Thr Val Arg Ile Thr Lys Phe Val Gly Ala Ala Ser Ser Asp
      325                      330                      335
Ala Phe Pro Asn Pro Gln Gln Thr Ala Lys Gln Ala Val Ser Ala Ala
      340                      345                      350
Met Gly Ala Gly Tyr Met Gly Ser Leu Gln Ser His Val Glu Glu Trp
      355                      360                      365
Ala Ser Ile Leu Leu Asp Gly Ser Val Asp Ser Phe Val Asp Pro Ala
      370                      375                      380
Thr Gly Lys Leu Pro Asp Asp Asp His Ile Leu Asn Ser Gln Ile Ile
      385                      390                      395                      400
Ala Val Ala Asn Thr Tyr Tyr Leu Leu Gln Asn Thr Val Gly Lys Asn
      405                      410                      415
Ala Ile Lys Ala Val Ser Gly Ala Pro Val Asn Val Asp Ser Ile Ser
      420                      425                      430
Val Gly Gly Leu Thr Ser Asp Ser Tyr Ala Gly Leu Val Phe Trp Asp
      435                      440                      445
Ala Asp Val Trp Met Gln Pro Gly Leu Val Ala Ser His Pro Glu Ala
      450                      455                      460
Ala Gln Arg Val Thr Asn Tyr Arg Thr Lys Leu Tyr Pro Gln Ala Leu
      465                      470                      475                      480
Glu Asn Ile Asn Thr Ala Phe Thr Ser Ser Lys Asn Arg Thr Thr Phe
      485                      490                      495
Ser Pro Ser Ala Ala Ile Tyr Pro Trp Thr Ser Gly Arg Phe Gly Asn
      500                      505                      510
Cys Thr Gly Thr Gly Pro Cys Trp Asp Tyr Gln Tyr His Leu Asn Gly
      515                      520                      525
Asp Ile Gly Leu Ser Leu Met Tyr Gln Trp Ile Ala Ser Gly Asp Thr
      530                      535                      540
Lys Thr Phe Arg Glu Gln His Phe Pro Ile Tyr Asp Ser Val Ala Thr
      545                      550                      555                      560
Met Tyr Ser Asn Ile Val Gln Arg Asn Gly Ser Ser Trp Thr Leu Thr
      565                      570                      575
Asn Met Thr Asp Pro Val Arg Leu Thr Thr Trp Val Leu Arg Thr Ser
      580                      585                      590
Lys Leu Ile Asn Phe Leu Arg Met Asn Met Pro Thr Thr Leu Met Pro
      595                      600                      605
Val Ala Ser Gln Cys Leu Leu Ser Pro Arg Pro
      610                      615

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&lt;210&gt; 41930

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41930

```

Phe Asn Gln Leu Gly Val Gln Ile Met Asp Glu Glu Asp Gln Leu Arg
1          5          10          15
Phe Gly Phe Asp Leu Leu Asp Pro Thr Lys Ile Val Pro Glu Glu Phe
20          25          30
Val Pro Ile Thr Lys Leu Gly Lys Met Gln Leu Asn Arg Asn Pro Arg
35          40          45
Asn Tyr Phe Ala Glu Thr Glu Gln Val Met Val Trp Cys His Gln Glu
50          55          60
Ala Asp Thr Glu
65

```

## 18650

<210> 41931  
 <211> 145  
 <212> PRT  
 <213> A.fumigatus

<400> 41931  
 Val Glu Leu Pro Thr Leu Arg Asp Arg Leu Lys Asp Asp Gly Val His  
 1 5 10 15  
 Val Val Leu Val Ala Glu Arg Leu Ala Asp Gly Val Asp Gln Thr Tyr  
 20 25 30  
 Ser Thr Ser Asp Ala Ile Gln Phe Asp Ala Val Val Val Ala Ala Gly  
 35 40 45  
 Ala Glu Ser Leu Phe Ala Ala Ser Ser Phe Thr Gly Gly Ser Ala Asn  
 50 55 60  
 Ser Ala Ser Gly Ala Ser Ser Leu Tyr Pro Thr Gly Arg Pro Leu Gln  
 65 70 75 80  
 Ile Leu Ile Asp Gly Phe Arg Phe Gly Lys Thr Val Gly Ala Leu Gly  
 85 90 95  
 Ser Gly Thr Ala Ala Leu Arg Asn Ala Gly Ile Ala Thr Ser Arg Asp  
 100 105 110  
 Gly Val Tyr Val Ala Gln Ser Val Thr Asp Asp Phe Ala Asn Asp Leu  
 115 120 125  
 Lys Glu Gly Leu Arg Thr Phe Lys Phe Leu Asp Arg Phe Pro Val Asp  
 130 135 140  
 His  
 145

<210> 41932  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 41932  
 Ser Ser Thr His Leu Thr Gly Leu Glu Tyr Ala Met Cys Ile Leu Leu  
 1 5 10 15  
 Thr Phe Thr Ser Thr Gln Lys Val Val Glu Ala Ala Met Leu Gly Asn  
 20 25 30  
 Ile Cys Asn Ser Ile Gly Leu Asp Thr Pro Asn Ile Pro Thr Ser Thr  
 35 40 45  
 Ile Thr Phe Ile Cys Ser Asp Val Asp Gly Phe Asn Leu Ala Ser Leu  
 50 55 60  
 Thr Thr Asp Asn His Ser Thr Leu Leu His Val His Ser Pro Ser Ser  
 65 70 75 80  
 Cys Trp Ser

<210> 41933  
 <211> 148  
 <212> PRT  
 <213> A.fumigatus

<400> 41933  
 Arg Trp Lys Thr Thr Tyr Phe Pro Leu Arg Ile Ala Ser Ser Leu Asp  
 1 5 10 15  
 Cys Ile Val Gln Ile Leu Thr His Glu Val Arg Ile Leu Ala Arg Gly  
 20 25 30

[illegible]

```
<210> 41934
<211> 130
<212> PRT
<213> A.fumigatus
```

[illegible]

```
<210> 41935
<211> 153
<212> PRT
<213> A.fumigatus
```

Cys	Arg	Thr	Gly	Phe	Phe	Ile	Met	Pro	Thr	Ser	Val	Ala	His	Leu	Ala
1				5					10					15	
Asn	Val	Ser	Gln	Glu	Leu	Glu	Phe	Leu	Ala	Asp	Ala	Ser	Val	Ile	Thr
			20					25					30		
Arg	Gln	Gln	Leu	Ser	Ser	Ile	Leu	Ala	His	Leu	Pro	Asn	Glu	Ala	Pro
			35				40					45			
Gln	Gln	Ala	Asn	Thr	Pro	Val	Pro	Pro	Pro	Gln	Gln	Gln	Gln	Pro	Val
	50					55				60					

## 18652

Val Ala Gln Ser Gln Pro Pro Pro Ala Ser Tyr Ala Pro Pro Thr Ser  
 65 70 75 80  
 Gln Phe Ala Asn Thr Ser Leu Asn Glu Lys Ala Ala Leu Gln Gln Gln  
 85 90 95  
 Gln Tyr Ser Thr Pro Ser Ile Pro Pro Pro Ala Tyr Pro Gln Ala Ala  
 100 105 110  
 Pro Val Leu Ser Val Ala Thr Ala Leu Tyr Ala Tyr Thr Pro Thr Asp  
 115 120 125  
 Ala Gly Asp Leu Ala Leu Gln Pro His Asp Arg Val Gln Val Leu Glu  
 130 135 140  
 His Met Asn Ala Asp Cys Thr Leu Val  
 145 150

&lt;210&gt; 41936

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41936

Arg Arg Cys Gln Glu Phe Lys Leu Thr Asp Ile Gly Trp Arg Gly Arg  
 1 5 10 15  
 Asn Glu Arg Thr Asn Leu Glu Gly Ile Phe Pro Arg Ser Tyr Val Asn  
 20 25 30  
 Val Ile Glu Glu Lys Gly Val Ser Ser Pro Pro Pro Thr Asn Tyr Gly  
 35 40 45  
 Asn Leu Pro Leu Asp Val Ser Gln Ser Gly Ser Ala Ala Pro Asp Glu  
 50 55 60  
 Lys Arg Pro Gly Ser Lys Phe Glu Glu His Gly Lys Lys Phe Gly Lys  
 65 70 75 80  
 Lys Met Gly Asn Ala Gly Thr Ser Ile Val Ala Pro Leu Ile Ser Val  
 85 90 95  
 Cys Gly His

&lt;210&gt; 41937

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41937

Ser Gln Arg Gly Ile Val His Asp Ser Pro Pro Asn Cys Val Ala Gln  
 1 5 10 15  
 Gly Ser Arg Ser Phe Cys Val Ile Ser Ile Asn Ser Val Ala Leu Trp  
 20 25 30  
 Thr Leu Ser Leu Ser Val Ile Thr Ser Arg Asp His Ser Leu Arg His  
 35 40 45  
 Leu Leu Leu Tyr His Phe Gly His Leu Ser Tyr Ser Gln His Arg Pro  
 50 55 60  
 Pro Ser Ile Pro Ser Tyr Ala Ser Ser Ile Arg Ile Leu Lys Met Ser  
 65 70 75 80  
 Asp Trp Asp Ser Val Thr Arg Ile Gly Ala Lys His Arg Ala Gly Ala  
 85 90 95  
 Ala Pro Arg Glu Thr Val Val Arg Gly Lys Ser Ala Leu Asn Ala Ala  
 100 105 110  
 Gln Arg Gln Gly Leu Val Ile Ala Thr Glu Lys Lys Tyr Ala Thr Gly  
 115 120 125

## 18653

Asn Ala Val Cys Ser Ala Phe Thr Pro Leu Ser Ile Leu Asn Thr Tyr  
 130 135 140

<210> 41938

<211> 129

<212> PRT

<213> A.fumigatus

<400> 41938

Glu Ser Pro Ala Gln Lys Ala Arg Pro Pro Trp Arg Ala Gly Val Ile  
 1 5 10 15  
 Trp Ala Ser Thr Ser Leu Leu Asp Thr Lys Thr Ala Val Ser Ala Asn  
 20 25 30  
 Thr Met Glu Arg Trp Ala Tyr Ser Ala Pro Gly Ile Trp Lys Thr Met  
 35 40 45  
 Leu Ile Cys Ala Gln Thr Gly Glu Gln Leu Glu Asn Val Gln Ala His  
 50 55 60  
 Glu Phe Asp His Gln Ile Asn Asp Ile Gln Phe Ser Gln Asp Arg Thr  
 65 70 75 80  
 Tyr Phe Ile Thr Ala Ser Lys Asp Lys Ser Ala Lys Val Arg Ser Asp  
 85 90 95  
 Pro Phe His Pro Ser Ile Cys Cys Gln Ser Leu Thr Ile Ala Ser Ser  
 100 105 110  
 Ser Pro Leu Val Ile Ser Pro Phe Ser Lys His Thr Leu Pro Ile Leu  
 115 120 125  
 Pro

<210> 41939

<211> 198

<212> PRT

<213> A.fumigatus

<400> 41939

Tyr Phe Ile Ser Leu Gln Glu Arg Ser Leu Asn Gln Ile Lys Phe Asn  
 1 5 10 15  
 Arg Asp Gly Asp Leu Leu Phe Ser Val Ala Lys Asp Lys Ile Val Cys  
 20 25 30  
 Ala Trp Trp Ser Ala Asn Gly Glu Arg Leu Gly Thr Tyr Ser Gly His  
 35 40 45  
 Gln Gly Ala Ile Trp Thr Val Asp Val Ser Pro Asn Thr Val Leu Leu  
 50 55 60  
 Ala Thr Gly Ser Ala Asp Asn Thr Val Arg Leu Trp Asn Val Lys Thr  
 65 70 75 80  
 Gly Glu Cys Val Lys Val Trp Asp Phe Pro Thr Ala Val Lys Arg Val  
 85 90 95  
 Ala Phe Asn Pro Asp Gly Ser Arg Leu Ala Val Thr Glu Lys Arg  
 100 105 110  
 Met Gly Phe Leu Gly Thr Ile Ala Val Leu Asp Ile Asn Tyr Gly Asp  
 115 120 125  
 Ser Gln Gly Gly Gly Leu Glu Asn Gln Ala Asp Glu Pro Ser Leu Arg  
 130 135 140  
 Ile Thr Cys Thr Glu Ser Lys Ala Thr Val Ala Gly Trp Ser Tyr Leu  
 145 150 155 160  
 Gly Lys Tyr Ile Ile Ala Gly His Glu Asp Gly Ser Val Ser Gln Tyr  
 165 170 175

## 18654

Asp Gly Lys Val Gly Leu Phe Cys Thr Trp Asn Leu Glu Asn Tyr Ala  
 180 185 190  
 Asp Leu Arg Ala Asp Trp  
 195

<210> 41940  
 <211> 119  
 <212> PRT  
 <213> A.fumigatus

<400> 41940  
 Leu Ile Ser Ser Arg Asn Leu Ala Ile Leu Lys Thr Tyr Val Ala Asp  
 1 5 10 15  
 Thr Pro Leu Asn Ser Ala Thr Ile Thr Pro Lys Lys Asp Tyr Val Ile  
 20 25 30  
 Leu Gly Gly Gly Gln Ala Ala Met Asp Val Thr Thr Thr Ser Ala Arg  
 35 40 45  
 Gln Gly Lys Phe Glu Ala Arg Phe Tyr His Lys Val Phe Glu Asp Glu  
 50 55 60  
 Ile Gly Arg Val Arg Gly His Phe Gly Pro Leu Asn Thr Val Asp Val  
 65 70 75 80  
 His Pro Asn Gly Thr Ala Tyr Ala Ser Gly Gly Glu Asp Gly Tyr Val  
 85 90 95  
 Arg Val His His Phe Asp Lys Pro Tyr Phe Asp Phe Met Tyr Glu Val  
 100 105 110  
 Glu Arg Glu Gln Leu Arg Lys  
 115

<210> 41941  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 41941  
 Ala Pro Ile Val Arg Lys Ile Leu Arg Asp Arg Leu Phe Ile Asn Leu  
 1 5 10 15  
 Tyr Leu Tyr Phe Arg Pro Asn Phe Leu Pro Ile Lys Lys Glu His Gly  
 20 25 30  
 Glu Leu Thr Phe Lys Ser Phe Thr Glu Ile Leu Trp Ile Tyr Arg Ser  
 35 40 45  
 Ile Arg His Ile Tyr Leu Gly Lys Ser Ser Val Cys His Leu Trp Tyr  
 50 55 60  
 Phe Gly Ala Thr Pro  
 65

<210> 41942  
 <211> 432  
 <212> PRT  
 <213> A.fumigatus

<400> 41942  
 Asp Pro Val Leu Cys Phe Leu Ser Tyr His Ile Phe Thr Lys Leu Asp  
 1 5 10 15  
 Ile Asp Phe Leu Val Cys Ile Ser Tyr Ser Phe His Thr Arg Thr Arg  
 20 25 30  
 Ala Glu His Leu Ala Ala Thr Met Phe Asn Asp His Asp His Val Pro



## 18655

```

      35              40              45
Pro Thr Ser Ser Gln Ser Asp Ser Gly Phe Phe Glu Gln Glu Met Lys
   50              55              60
Lys Ser Pro Arg Leu Ser Leu Arg Glu Arg Leu Arg His Phe Thr Trp
65              70              75              80
Ala Trp Tyr Thr Leu Thr Met Ser Thr Gly Gly Leu Ala Leu Leu Ile
      85              90              95
Ala Ser Gln Pro Tyr Thr Phe Asn Gly Met Lys Gly Ile Gly Met Val
      100              105              110
Val Tyr Ile Leu Asn Leu Leu Leu Phe Ala Leu Val Cys Ser Leu Met
      115              120              125
Val Leu Arg Phe Val Leu His Gly Gly Phe Leu Asp Ser Leu Arg His
      130              135              140
Pro Arg Glu Gly Leu Phe Phe Pro Thr Phe Trp Leu Ser Ile Ala Thr
145              150              155              160
Ile Ile Thr Gly Leu His Arg Tyr Phe Gly Ser Asp Asp Leu Glu Ser
      165              170              175
Tyr Leu Ile Ala Leu Glu Val Leu Phe Trp Val Tyr Cys Ser Cys Thr
      180              185              190
Leu Ala Thr Ala Val Ile Gln Tyr Ser Phe Leu Phe Ala Ala His Ser
      195              200              205
Tyr Gly Leu Gln Thr Met Met Pro Ser Trp Ile Leu Pro Ala Phe Pro
      210              215              220
Ile Met Leu Ser Gly Thr Ile Ala Ser Val Ile Ser Glu Ser Gln Pro
225              230              235              240
Ala Arg Ser Ala Met Pro Ile Ile Thr Ala Gly Val Thr Phe Gln Gly
      245              250              255
Leu Gly Phe Ser Ile Ser Phe Ile Met Tyr Ala His Tyr Ile Gly Arg
      260              265              270
Leu Met Gln Ser Gly Leu Pro Cys Arg Glu His Arg Pro Ala Met Phe
      275              280              285
Ile Cys Val Gly Pro Pro Ser Phe Thr Ala Leu Ala Leu Val Gly Met
      290              295              300
Ala Lys Gly Leu Pro Asp Glu Phe Lys Ile Ile Lys Asp Ala His Val
305              310              315              320
Glu Asp Ala Arg Ile Leu Glu Leu Met Ala Ile Ile Val Gly Val Phe
      325              330              335
Leu Trp Ala Leu Ser Leu Trp Phe Phe Phe Ile Ala Phe Val Ala Val
      340              345              350
Val Arg Cys Arg Pro Thr Ala Phe His Leu Ser Trp Trp Ala Met Val
      355              360              365
Phe Pro Asn Thr Gly Phe Thr Leu Ala Thr Ile Thr Leu Gly Arg Ala
      370              375              380
Leu Gly Ser Pro Gly Val Leu Gly Val Gly Ser Ala Met Ser Val Gly
385              390              395              400
Val Val Cys Met Trp Val Phe Val Phe Val Tyr His Ile Arg Ala Val
      405              410              415
Ile Arg Gln Asp Ile Met Tyr Pro Gly Lys Asp Glu Asp Val Leu Asp
      420              425              430

```

&lt;210&gt; 41943

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41943

## 18656

Cys Leu Leu Gly Leu Lys Ser Pro Val Gly Ser Ala Arg Cys Ile Gly  
 1 5 10 15  
 Thr Thr Pro Asn Phe Pro Leu Ile Leu Ala Ala Ser Ser Gln Tyr Glu  
 20 25 30  
 His Ile Pro Lys Ala Ile Phe Gln Leu Trp Ala Tyr Thr Cys Asn Leu  
 35 40 45  
 Lys Lys Leu Arg Val Cys Gln Glu Pro Leu Arg Gln Leu Ala Asn Thr  
 50 55 60  
 Pro His Glu Gln  
 65

&lt;210&gt; 41944

&lt;211&gt; 412

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41944

Pro Pro Leu Arg Pro Ala Tyr Pro Arg Glu Arg Ala Ser Ala Ile Leu  
 1 5 10 15  
 Ser Gln Phe Glu Arg Lys Arg Arg Ala Ala Ala Met Ala Val Pro Thr  
 20 25 30  
 Asp Asp Asn Arg Val Arg Ala Arg Leu Arg Glu Leu Gly Glu Pro Ile  
 35 40 45  
 Thr Leu Phe Gly Glu Gly Pro Val Asp Arg Arg Asp Arg Leu Arg Glu  
 50 55 60  
 Leu Leu Thr Asp Leu Ala Glu Arg Gln Glu Ala Ala Ala Ala Glu Gly  
 65 70 75 80  
 Asp Val Ser Met Arg Gly Thr Thr Glu Glu Thr Glu Ala Ala Glu Glu  
 85 90 95  
 Glu Ala Glu Gln Gln Glu Glu Phe Tyr Thr Glu Gly Ser Gln Glu Leu  
 100 105 110  
 Leu Asn Ala Arg Lys Ala Ile Ala Arg Tyr Ser Leu Pro Arg Ala Lys  
 115 120 125  
 Ala Arg Val Glu Arg Leu Arg Glu Glu Ser Thr Ile Pro Leu Arg Thr  
 130 135 140  
 His Ile Lys His Arg Lys Ala Ile Lys Glu Lys Leu Gln Gly Phe Asp  
 145 150 155 160  
 Leu Tyr Gly Ser Gln Ile Ala Gly Asp Arg Pro Val Ser Ile Cys Arg  
 165 170 175  
 Phe Ala Pro Asp Gly Lys Thr Ile Ala Ala Gly Asn Trp Gly Gly Gly  
 180 185 190  
 Ile Arg Leu Leu Thr Val Pro Asn Leu Glu Glu Lys Ser Asn Leu Asn  
 195 200 205  
 Gly His Thr Asp Arg Val Gly Gly Leu Ala Trp Phe Pro Gly Ala Thr  
 210 215 220  
 Leu Pro Ser Ser Asn Val Ser Glu Ser Ser Val Asn Leu Val Ser Gly  
 225 230 235 240  
 Gly Gly Glu Gly Asn Val Ala Leu Trp Ser Leu Asp Lys Asp Thr Pro  
 245 250 255  
 Leu Ala Thr Leu Ser Gly His Ser Gly Arg Val Cys Arg Thr Glu Phe  
 260 265 270  
 His Pro Ser Gly Arg Tyr Ile Ala Ser Ala Ser Phe Asp Thr Thr Trp  
 275 280 285  
 Arg Leu Trp Asp Val Glu Thr Thr Val Glu Leu Leu Leu Gln Glu Gly  
 290 295 300  
 His Ser Arg Glu Val Tyr Thr Val Ala Phe Asn Asn Asp Gly Ser Leu

[illegible]

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<210> 41945
<211> 110
<212> PRT
<213> A.fumigatus
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<210> 41946
<211> 83
<212> PRT
<213> A.fumigatus
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<210> 41947  
<211> 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41947

```

Met Asp Thr Val Ser Cys Gln Val Arg Gly Met Ala Gly Ser Ser Val
1          5          10          15
Gly Thr Ser Ala Lys Tyr Ala Ile Leu Val Gly Ser Ala His Ile Lys
          20          25          30
Val Ser Cys Arg Met Tyr Gly Gly Thr Arg Ala Leu Asn Ser Ala Ala
          35          40          45
Ser Tyr Leu Pro Ser Thr Glu Ser Asn Gly Arg Met Asp Val Asp Ser
          50          55          60
Asn Pro Thr Leu Thr Thr Ser Glu Gln Ser Thr Pro Ala Thr Pro Ile
65          70          75          80
Gln Pro Lys Lys Ser Gly Thr Phe Phe Val Ser Ser Gly Phe Asp Lys
          85          90          95
Asn Val Asn Ile Phe Ser Ala Asp Asp Trp Ser Leu Val Lys Ser Leu
          100          105          110
Ser Gly His Ala Gly Asn Val Leu Ser Thr Asp Ile Ser Asp Asp Ala
          115          120          125
Gln Trp Ile Ala Ser Cys Gly His Asp Arg Thr Val Lys Leu Trp Gly
          130          135          140
Ile Glu
145

```

&lt;210&gt; 41948

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41948

```

Ala Lys Met Ala Ala Ser Phe Gln Met Gln Arg Leu Ala Gln Arg Ser
1          5          10          15
Leu Leu Ser Thr Val Pro Leu Ala Arg Thr Glu Ala Thr His Ser Leu
          20          25          30
Phe Leu Thr Gly Ala Cys Ile Phe Cys Gln Leu Arg Pro Arg Ala Trp
          35          40          45
Ala Ala Gln Pro Ala Arg Arg Pro Cys Leu Thr Leu Pro Thr Arg Arg
          50          55          60
Leu Ala Ser Thr Ser Ser Thr Thr Ala Pro Glu Thr Ser Asn Gln Asp
65          70          75          80
Ser Asn Leu Pro Asp Leu Thr Asn His Tyr Thr Ile Phe Arg Glu Thr
          85          90          95
Leu Pro Ala Gly Pro Pro Pro Ala Ser Ala Phe Asp Ile Pro Leu Ser
          100          105          110
Asp Leu Arg Arg Glu Phe Leu Arg Leu Gln Asn Val Ile His Pro Asp
          115          120          125
Lys Phe Pro Pro Gly Pro Glu Lys Gln Arg Ala Glu Ala Leu Ser Ala
          130          135          140
Arg Ile Asn Glu Ala Tyr Arg Thr Leu Ser Asp Pro Leu Gln Arg Ala
145          150          155          160
His Tyr Leu Leu Arg Glu Ile His Gly Ile Asp Val Thr Ala Glu Asp
          165          170          175
Gly Ser Thr Gln His Ala Leu Asp Pro Glu Thr Leu Met Glu Val Met
          180          185          190
Glu Val Gln Glu Arg Ile Glu Glu Val Gly Ala Gly Pro Glu Ala Glu

```

## 18659

195                      200                      205  
 Gly Thr Ile Ala Ala Leu Lys Lys Glu Asn Asp Ala Arg Val Ala Ala  
 210                      215                      220  
 Cys Val Lys Ser Leu Ala Gln Ala Phe Glu Arg Gly Asp Ile Glu Ala  
 225                      230                      235                      240  
 Ala Arg Gln Glu Cys Val Arg Leu Arg Phe Trp Tyr Ser Val Gly Glu  
 245                      250                      255  
 Gly Leu Arg Glu Trp Glu Pro Gly Arg Thr Glu Ile Arg Leu Ile His  
 260                      265                      270

&lt;210&gt; 41949

&lt;211&gt; 623

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41949

Val Gln His Leu Leu Arg Ser Lys Leu Gly Gly Asp His Leu Ser Leu  
 1                      5                      10                      15  
 Phe Ser Thr Ser Cys Leu Cys Cys Val Leu Ala Leu Leu Ser Leu Ile  
 20                      25                      30  
 Pro His Ile Gln Ala Thr Ser Asn Ser Ser Leu His Ala Asn His Asp  
 35                      40                      45  
 Ser Val Ala Thr Asp Ser Ser Asn His Ser Pro Gly Tyr Ser Ile Ile  
 50                      55                      60  
 His Ser Pro Pro Phe Thr Phe Leu Val Gly Pro Asn His Asp Lys Leu  
 65                      70                      75                      80  
 Thr Ile Gln Ser Gly Leu Ala Arg His Val Ser Gln Pro Leu Asp His  
 85                      90                      95  
 Leu Met Asn Ser Gly Leu Thr Arg Glu Ser Lys His His Ile Ala Val  
 100                      105                      110  
 Leu Glu Glu Glu Asp Ala Glu Thr Phe Val Ala Phe Cys Glu Tyr Ala  
 115                      120                      125  
 Tyr Thr Gly Asp Tyr Ser Val Pro Thr Pro Gly Ser Arg Glu Asp Asp  
 130                      135                      140  
 Arg Val Glu Ser Ser Asn Asn Pro Ala Phe Asn Gln Met Phe Ser Asn  
 145                      150                      155                      160  
 Pro Asn Pro Phe Ala Ser Ala Val Pro Pro Pro Ala Pro Ser Pro Pro  
 165                      170                      175  
 Pro Gly Ala Lys Phe Ser Asp Arg Asn Leu Asp Val Pro Asp Ser Gly  
 180                      185                      190  
 Asp Ala Lys Thr Ala Glu Ala Thr Glu Glu Ser Ala Gln Pro Leu Lys  
 195                      200                      205  
 Glu Gly Glu Gly Glu Gly Val Lys Asp Ala Thr Asp Asp Val Arg Glu  
 210                      215                      220  
 Asp Val Ala Ala Pro Asp Asp Pro Pro Gln Asp Leu Ala Ser Asn Cys  
 225                      230                      235                      240  
 Asp Glu Pro Ser Glu Gln Pro Leu Ala Thr Ser Thr Ala Glu Glu Gly  
 245                      250                      255  
 Ser Ser Trp Gly Leu Glu Glu Asn Ala Met Pro Ser Lys Gly Lys Lys  
 260                      265                      270  
 Ala Lys Lys Ser Lys Lys Gly Lys Lys Lys Gln Gln Gly Gly Ala Thr  
 275                      280                      285  
 Ala Glu Glu Pro Met Ser Asn Leu Thr Pro Pro Thr Thr Pro Pro Pro  
 290                      295                      300  
 Gly Asn Val Asp Asp Gln Ile Asp Asn Pro Leu Thr Val Glu Ala Thr  
 305                      310                      315                      320

## 18660

Thr Met Leu Asp Asp Pro Ile Pro Val Ile Glu Pro Thr Lys Val Asp  
 325 330 335  
 Glu Val Ala Glu Ala Val Glu Val Pro Glu Pro Thr Gly Ala Asp Gln  
 340 345 350  
 Ser Pro Asp Ala Ala Ala Leu Ser Asp Thr Glu Ser Trp Asp Arg Ala  
 355 360 365  
 Thr Ser Val Pro Pro Asn Val Lys Asp Thr Leu Asn Gln Lys Val Glu  
 370 375 380  
 Leu Asp Pro Asp Ser Gln Lys Gln Asp Arg Val Lys Glu Glu Val Ala  
 385 390 395 400  
 Ser Pro Arg Ser Gln Met Lys Ala Phe Ile Asp Thr Ser Phe Ala Lys  
 405 410 415  
 Gln Leu Tyr Leu Ser Arg Arg Pro Thr Gly Val Gly Leu Trp Asp Glu  
 420 425 430  
 Phe Val Asn Leu Asp Tyr Phe Asp His Pro Ser Thr Tyr Gly Thr Arg  
 435 440 445  
 Pro Leu Thr Pro Thr Ala Thr His Ser Asp Thr Thr Lys Ser Asp Leu  
 450 455 460  
 Pro Tyr Leu Leu Phe His Ala Lys Leu Tyr Val Phe Ala Val Arg Tyr  
 465 470 475 480  
 Leu Ile Pro Gly Leu Ala Gln Leu Cys Leu Arg Lys Leu His Ala Asp  
 485 490 495  
 Leu Leu Arg Leu Asp Phe Pro Gly Pro Lys Asp Asp Glu Arg Lys Glu  
 500 505 510  
 Glu Arg Ala Ala Trp Thr Ala Thr Lys Gly Arg Met Val Leu Asp Leu  
 515 520 525  
 Leu His Phe Thr Tyr Thr Lys Thr Thr Arg Leu Glu Pro Ile Ser Pro  
 530 535 540  
 Thr Ser Ala Thr Gln Leu Arg Asp Asn Glu Leu Arg Lys Leu Val Val  
 545 550 555 560  
 His Tyr Ala Ala Cys Lys Val Arg Glu Leu Ala Glu Tyr Cys Gly Pro  
 565 570 575  
 Met Glu Ser Ile Val Ser Ser Pro Phe Pro Ser Pro Val Asp Lys Gln  
 580 585 590  
 Pro Arg Arg Ala Asn Arg Pro Ser Ser Arg Gly Phe Arg Ala Leu Leu  
 595 600 605  
 Asp Ser Thr Thr Glu Leu Ala Ser Asp Leu Val Phe Arg Met Met  
 610 615 620

&lt;210&gt; 41950

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41950

His Ile Leu Val Phe Ala Arg Val His Asp Val Leu Pro Asp Asp Ser  
 1 5 10 15  
 Thr Asn Val Val Asp Glu Asn Glu Asp Pro His Ala Asp Asn Thr Asp  
 20 25 30  
 Arg His Gly Arg Ala Asp Ala Gln Asp Ala Arg Ala Pro Gln Cys Pro  
 35 40 45  
 Pro Gln Gly Asn Ser Gly Gln Arg Glu Pro Ser Val Gly Glu Asp His  
 50 55 60  
 Gly Pro Pro Ala Lys Val Glu Arg Ser Gly Pro Ala Pro Asp Asp Ser  
 65 70 75 80  
 Asn Lys Gly Asn Glu Glu Glu Pro Glu Thr Gln Gly Pro Gln Glu His

## 18661

85 90 95  
 Ala Asp Asp Asn Ser His Gln Leu Glu Asp Pro Gly Val Leu Asp Val  
 100 105 110  
 Cys Val Phe Asp Tyr Leu Glu Phe Val Gly Gln Ala Leu Gly His Pro  
 115 120 125  
 Tyr

<210> 41951  
 <211> 106  
 <212> PRT  
 <213> A.fumigatus

<400> 41951  
 Phe Phe Val Trp Ser Leu Lys Val Arg Phe Leu Ser Lys Arg His Arg  
 1 5 10 15  
 His Asn Glu Leu Pro Glu Ser Val Ile Asn Gly Ser Gly Gly Ser Pro  
 20 25 30  
 Ser Cys Leu Val Pro Thr Leu Ala Ser Leu His Pro His Cys Thr Arg  
 35 40 45  
 Ile Ala Thr Ala His Thr Pro Asp Ala Gln Pro Arg Tyr Pro Pro Val  
 50 55 60  
 Gln Arg Leu Ala Pro Ser Ser Ser His Thr Pro Pro Pro Ala His His  
 65 70 75 80  
 Ser Pro Phe Ser Ala Gln Gln Trp Phe Pro Gln Pro Pro Ala Leu His  
 85 90 95  
 Arg Pro Pro Gln Ser Ser Pro Glu Pro Pro  
 100 105

<210> 41952  
 <211> 224  
 <212> PRT  
 <213> A.fumigatus

<400> 41952  
 Leu Arg Val Ser Leu Thr Leu Gly Gly Thr Glu Val Ala Arg Ser Gln  
 1 5 10 15  
 Leu Ser Val Ser Asp Ser Ala Ala Ala Ser Gly Asp Trp Ser Ala Pro  
 20 25 30  
 Val Gly Ser Gly Thr Ser Thr Ala Ser Ala Thr Ser Ser Thr Leu Val  
 35 40 45  
 Gly Ser Ile Thr Gly Ile Gly Ser Ser Ser Ile Val Val Ala Ser Thr  
 50 55 60  
 Val Ser Gly Leu Ser Ile Trp Ser Ser Thr Phe Pro Gly Gly Gly Val  
 65 70 75 80  
 Val Gly Gly Val Arg Leu Asp Ile Gly Ser Ser Ala Val Ala Pro Pro  
 85 90 95  
 Cys Cys Phe Phe Leu Pro Phe Phe Asp Phe Phe Ala Phe Leu Pro Phe  
 100 105 110  
 Glu Gly Met Ala Phe Ser Ser Arg Pro Gln Glu Asp Pro Ser Ser Ala  
 115 120 125  
 Val Glu Val Ala Arg Gly Cys Ser Leu Gly Ser Ser Gln Phe Asp Ala  
 130 135 140  
 Arg Ser Cys Gly Gly Ser Ser Gly Ala Ala Thr Ser Ser Leu Thr Ser  
 145 150 155 160  
 Ser Val Ala Ser Phe Thr Pro Ser Pro Ser Pro Ser Phe Ser Gly Cys

18662

				165				170				175			
Ala	Asp	Ser	Ser	Val	Ala	Ser	Ala	Val	Phe	Ala	Ser	Pro	Leu	Ser	Gly
				180				185				190			
Thr	Ser	Arg	Phe	Leu	Ser	Glu	Asn	Leu	Ala	Pro	Gly	Gly	Gly	Asp	Gly
				195				200				205			
Ala	Gly	Gly	Gly	Thr	Ala	Glu	Ala	Lys	Gly	Leu	Gly	Phe	Glu	Asn	Ile
				210				215				220			

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<210> 41953
<211> 176
<212> PRT
<213> A.fumigatus
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<400> 41953															
Pro	Pro	Arg	Leu	Leu	Cys	Val	Ser	Arg	Leu	Val	Asp	Glu	Ile	Thr	Phe
1				5					10					15	
Lys	Leu	Ala	Asp	Glu	Ala	Ala	Asp	Ala	Pro	Thr	Ala	Thr	Ala	Ile	Leu
			20					25					30		
Gly	Pro	Phe	Phe	Arg	Ala	Asp	Thr	Pro	Tyr	Arg	Asn	Asn	Gly	Asp	Asn
		35					40					45			
Ile	Val	Lys	Asp	Val	Pro	Asp	Gly	Glu	Met	Val	Phe	Met	His	Gly	Arg
	50					55					60				
Val	Ile	Asp	Phe	Gln	Thr	Lys	Lys	Pro	Leu	Val	Gly	Ala	Thr	Val	Glu
65					70					75					80
Val	Trp	Gln	Ala	Ser	Thr	Asn	Gly	Leu	Tyr	Glu	Gln	Gln	Asp	Pro	Asn
				85					90					95	
Gln	Glu	Glu	Phe	Asn	Leu	Arg	Gly	Lys	Phe	Lys	Thr	Asp	Ala	Asp	Gly
			100					105					110		
Arg	Tyr	Tyr	Phe	Tyr	Cys	Leu	Arg	Pro	Thr	Pro	Tyr	Pro	Val	Pro	Asn
		115					120					125			
Asp	Gly	Ala	Tyr	Ser	Asp	Ala	Pro	Ser	Pro	Ile	Ala	Leu	Glu	Thr	Leu
	130					135					140				
Gln	Thr	Leu	Ile	Leu	Asn	Asp	Val	Gln	Val	Pro	Pro	Gly	Ser	Tyr	Ser
145					150					155					160
Ser	Ser	Trp	Thr	Asp	Thr	Pro	Ser	Ala	Leu	Pro	Ile	Ser	Thr	Ser	Leu
				165					170					175	

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<210> 41954
<211> 231
<212> PRT
<213> A.fumigatus
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<400> 41954
Ser Thr Gly Val Glu Ile Val Thr Tyr Ala Lys Gln Gly Met Ser Lys
1          5          10          15
Phe Tyr Gln Val Thr Leu Asp Thr Leu Leu Arg Gln Met Glu Phe Asn
          20          25          30
Thr Ser Ala Thr Ser Leu Thr Ser Asn Glu Pro Val Lys Pro Val Leu
          35          40          45
Leu Ala Ser Pro Gly Phe Val Ala Ala Gly Phe Gln Lys Tyr Ile Gln
          50          55          60
Ser Val Ala Ser Thr Thr Thr Pro Ala Leu Lys Arg Leu Leu Pro Ser
65          70          75          80
Ile Val Val Val His Ser Ala Ser Gly Tyr Leu His Ser Leu Ala Glu
          85          90          95
Val Leu Gln Ser Pro Ala Val Lys Thr Ile Leu Ala Asp Thr Lys Tyr

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## 18663

	100		105		110
Ala Arg Glu Thr Lys Leu Met Asp Asp Phe Leu Gly His Leu Arg Lys					
	115		120		125
Glu Thr Asn Lys Ala Ile Tyr Gly Pro Arg Glu Val Glu Ala Ala Val					
	130		135		140
Asp Gln Gly Ala Val Gly Arg Gly Gly Gly Val Leu Ile Ile Ser Asn					
145		150		155	160
Arg Leu Phe Arg Ser Gln Asp Val Ala Glu Arg Lys Arg Trp Val Ser					
	165		170		175
Leu Val Asp Arg Val Arg Asp Val Glu Gly Gly Glu Val Arg Val Leu					
	180		185		190
Ser Ser Asp His Glu Ser Gly Arg Arg Leu Asp Gly Leu Gly Gly Val					
	195		200		205
Ala Ala Leu Cys Thr Phe Pro Val Val Glu Glu Asp Phe Glu Ser Asp					
	210		215		220
Glu Glu Pro Ala Glu Ala Ser					
225		230			

&lt;210&gt; 41955

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41955

Leu Leu Leu Ile Leu Ile Pro Ile Leu Ser Ser Gln Arg Arg Tyr Arg					
1		5		10	15
Ile Tyr Leu Thr Ser Leu Pro Asp Thr Thr Leu Glu Ala His Thr Val					
	20		25		30
Met Ala Thr His Arg Phe Asp Pro Asn Phe Thr Asp Asn Val Ile Asn					
	35		40		45
Ala Met Gly Pro Lys Thr Asn Pro Arg Phe Arg Lys Val Met Ala Ser					
	50		55		60
Leu Ile Arg His Val His Asp Phe Ala Arg Glu Asn Glu Leu Thr Val					
65		70		75	80
Asp Glu Trp Met Ala Gly Val Lys Leu Leu Asn Trp Ala Gly Gln Met					
	85		90		95
Ser Asp Asp Lys Arg Asn Glu Gly Gln Leu Val Cys Asp Val Ile Gly					
	100		105		110
Leu Glu Ser Tyr Val Leu His Pro Pro Asn Ser Gln Ser Gln Thr Ser					
	115		120		125
Ser Thr Asn Arg Leu Ala Cys Cys Ala Cys Pro Gly Leu Ser Thr Lys					
	130		135		140
Ser Pro Ser Ser Ser Leu Met Arg Pro Pro Thr His Pro Pro Arg Pro					
145		150		155	160
Pro Ser Ser Ala Pro Ser Ser Ala Leu Ile Pro Pro Thr Ala Thr Thr					
	165		170		175
Ala Thr Ile Ser Ser Arg Thr Cys Arg Thr Ala Arg Trp Cys Ser Cys					
	180		185		190
Thr Ala Gly					
	195				

&lt;210&gt; 41956

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41956

Arg Arg Pro Cys Ile Lys Trp His Ala Tyr Asn Leu Ile Arg Pro Gly  
 1 5 10 15  
 Asp Leu Leu Arg Ala Ser Ala Ile Arg Arg Val Thr Thr Thr His Asp  
 20 25 30  
 Thr Gly Thr Thr Thr Ser Ser Arg Val His Leu Thr Leu Glu Ile Arg  
 35 40 45  
 Val Lys Ser Leu Asp Phe Asp Pro Gln Ser Ser Gln Leu His Val Gly  
 50 55 60  
 Gly Thr Ile Val Asn Glu Thr Pro His Thr Lys Val Gly Gln His His  
 65 70 75 80  
 Thr Leu Asp Leu Glu Leu Asn Arg Asn Phe Thr Leu Glu Lys Glu Ile  
 85 90 95  
 Gly Ala Asn Gly Glu Gly Val Gly Trp Asp Ser Ile Ala Val Gln Met  
 100 105 110  
 Leu Gln Asp Ala Val Asp Glu Ser Gly Lys Arg Arg Ala Glu Ala Val  
 115 120 125  
 Ala Val Val Met Gln Glu Gly Leu Ala His Ile Cys Phe Ile Gly Gln  
 130 135 140  
 Phe Gln Thr Val Leu Lys Gln Lys Val Glu Met Ser Val Pro Arg Lys  
 145 150 155 160  
 Arg Gln Gly Gly Gly Gly Gly Asp His Asp Lys Val Leu His Pro Ser  
 165 170 175  
 Ala Asn Pro Leu Ala  
 180

&lt;210&gt; 41957

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41957

Arg Pro Val Leu Pro Ala His Val Asp Gly Thr Ala His Ser Ala Met  
 1 5 10 15  
 Gly Ser Ser Gly Leu Asn Asp Gly Arg Val Ile Ser Gly Met Arg Arg  
 20 25 30  
 Asp Ala Gln Ile Leu Ile Tyr Ile Asp Ile Lys Lys Ala Met Ala Ala  
 35 40 45  
 Gly Cys Pro Phe Trp Arg Ser Glu Asn Gly Val Ile Leu Ser Glu Gly  
 50 55 60  
 Val Asp Val Gly Glu Asn Gln Glu Val Gly Asp Gly Ala Ser Pro Lys  
 65 70 75 80  
 Ile Ile Pro Leu Glu Phe Phe Asp Val Val Val Glu Arg Lys Cys Gly  
 85 90 95  
 Leu Gly Lys Ile Trp Glu Arg Gly Gln Thr Ile Lys Glu Leu Pro Ser  
 100 105 110  
 Glu Leu Leu Gln Lys Gly Asn Pro Lys Gly Pro Lys Ala Arg Leu Asp  
 115 120 125  
 Gly Arg Arg Gly Ser Lys Arg Asn Gly  
 130 135

&lt;210&gt; 41958

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 18665

&lt;400&gt; 41958

Ala Pro Pro Trp Gly Lys Tyr Asn Pro Ile Arg Thr Thr Tyr Asn Ala  
 1 5 10 15  
 Leu Thr Leu Glu Tyr Thr Tyr Tyr Trp Leu Ser Ile Phe Ser Thr Ser  
 20 25 30  
 His Ile Tyr Thr Pro Thr Gly Gln Met Arg Leu Ile Lys Asn Lys Ile  
 35 40 45  
 Glu His Gly Gly Ser Gly Thr Val Thr Leu Cys Pro Glu Glu Pro Glu  
 50 55 60  
 Asp Met Val Cys Asp Pro Leu Leu His Trp Ile Leu Ser Cys Ser Asp  
 65 70 75 80  
 Asp Gly Pro Ala Leu Ser Gly Thr Pro Thr Thr  
 85 90

&lt;210&gt; 41959

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41959

Ser Ala Ser Phe Ser Arg Phe Phe Val Arg Phe Lys Val Leu Leu Asp  
 1 5 10 15  
 Tyr Trp Glu Arg Ala Gln Ser Gly His Thr Ser Gln Ser Val Gln Ser  
 20 25 30  
 Ser Pro Ala Leu Met Val Gly Ala Glu Tyr Thr His Phe Ala Pro Leu  
 35 40 45  
 Asp Val Pro Asp Ser Val Asn Lys Gly His Pro Ser Phe Ala Leu Arg  
 50 55 60  
 His Val Leu  
 65

&lt;210&gt; 41960

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41960

Ile Asp Ser Ala Lys Tyr Tyr Ala Asn Glu Lys Glu Cys Ala Val Ala  
 1 5 10 15  
 Met Lys Lys Ser Gly Ile Asp Arg Ser Lys Ile Phe Phe Thr Thr Lys  
 20 25 30  
 Val Pro Ala Ser Ser Met Ser Tyr Glu Lys Ala Lys Glu Ala Ile Glu  
 35 40 45  
 Gln Ser Val Ala Ala Thr Asp Leu Gly Tyr Ile Asp Leu  
 50 55 60

&lt;210&gt; 41961

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41961

Gln Arg Cys Trp Arg Arg Arg Phe Trp Trp Gln Asp Glu Ile His Pro  
 1 5 10 15  
 Trp Cys Ala Arg Glu Asp Ile Val Ala Trp Leu Lys Lys Arg Asn Val  
 20 25 30

## 18666

Val Ile Glu Ala Tyr Ser Pro Leu Val Gln Ala Gln Arg Leu Asp Glu  
           35                          40                          45  
 Pro Val Leu Gln Asn Leu Ala Lys Lys His Asn Lys Thr Gly Ala Gln  
           50                          55                          60  
 Ile Leu Ile Arg Trp Ser Leu Gln Lys Val Pro Pro Leu Ser Leu Leu  
 65                          70                          75                          80  
 Ser Ile Glu Ser Val Thr Asn Gly Val Leu Gln Gly Tyr Val Pro Leu  
                           85                          90                          95  
 Pro Lys Ser Val Thr Asp Ser Arg Ile Val Glu Asn Thr Gln Val Phe  
                           100                          105                          110  
 Asp Phe Glu Leu Ser Gly Glu Asp Met Glu Ser Leu Asn Thr Gly Ile  
           115                          120                          125  
 Tyr Ala Pro Val Cys Trp Asp Pro Ala Lys Asp Val Pro Leu  
           130                          135                          140

&lt;210&gt; 41962

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41962

Ser Ser Val Arg Asp Asn Ile Ser Pro Pro Asp Lys Asp Val Asn Asn  
 1                          5                          10                          15  
 Asn Ser Leu Arg Asp Val Cys Thr Ile Tyr Cys Ser Gln Leu Ala Glu  
           20                          25                          30  
 Arg Ser Leu Leu Leu Arg Ser Ser Asn Ala Pro Leu His Leu Asp Leu  
           35                          40                          45  
 Glu Asn Leu Asp Phe Ser Leu Pro Val Val Pro Leu Pro Cys Pro Ile  
           50                          55                          60  
 Ser Arg Gly Ala Leu Phe Trp Lys Asn Pro Arg Gln Cys Ala Ala Gly  
 65                          70                          75                          80  
 Ile Asn Ala Ala Thr Asn Val Ser Asn Leu Gln Leu His Lys  
                           85                          90

&lt;210&gt; 41963

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (49)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41963

Ser Gln Arg Ile Glu Lys Met Pro Cys Leu Glu Val Cys Gly His Ser  
 1                          5                          10                          15  
 Ile His Tyr Ala Asp Ser His Pro Asn Gly Ala Pro Lys Asp Gly Ala  
           20                          25                          30  
 Thr Ile Val Phe Ile His Gly Leu Gly Ser Ser Gln Asn Tyr Tyr Phe  
           35                          40                          45  
 Xaa Ile Leu His His Leu Thr Leu Lys His Arg Cys Ile Thr Leu Asp  
           50                          55                          60  
 Thr Tyr Gly Ser Ala Arg Ser Pro Tyr Thr Gly Gln Ala Ile Thr Ile  
 65                          70                          75                          80  
 Ser Thr Ile Ala Ser Asp Val Ile Ala Val Leu Asp Ala Val His Ile

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	1.2	0.4	1	2	0.05	2.8	0.99
Education	12.5	2.1	9	16	0.25	3.5	0.97
Income	4500	1500	2000	8000	0.35	3.8	0.96
Health	2.5	0.8	1	4	0.10	3.0	0.99
Stress	3.2	1.1	1	5	0.20	3.4	0.98
Life Satisfaction	4.1	0.9	2	5	0.18	3.3	0.98
Work Satisfaction	3.8	1.0	2	5	0.22	3.6	0.97
Family Satisfaction	4.3	0.8	3	5	0.12	3.1	0.99
Community Satisfaction	3.9	1.1	2	5	0.25	3.7	0.97
Overall Satisfaction	4.0	0.9	2	5	0.15	3.2	0.98

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<210> 41964
<211> 80
<212> PRT
<213> A.fumigatus
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Leu	Gly	Cys	Arg	Ile	Leu	Leu	His	Ala	Pro	Tyr	Gly	Gly	Lys	Glu	Gly
1				5					10					15	
Arg	Leu	Gly	Ala	Trp	Arg	Ala	Leu	Val	Glu	Ala	Gln	Lys	Ala	Gly	His
			20					25					30		
Val	Arg	Ser	Ile	Gly	Val	Ser	Asn	Tyr	Gly	Ile	His	His	Leu	Glu	Glu
		35					40					45			
Leu	Glu	Glu	Tyr	Ile	Asn	Ser	Gly	Val	Gly	Gly	Glu	Asp	Ser	Gly	Gly
	50					55					60				
Arg	Met	Arg	Phe	Ile	Pro	Gly	Val	Arg	Glu	Arg	Thr	Leu	Leu	Pro	Gly
65					70					75					80

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<210> 41965
<211> 123
<212> PRT
<213> A.fumigatus
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Pro	Lys	Ile	Val	Gly	Met	Glu	Ala	Met	Ala	Asn	Thr	Val	Pro	Asn	Ala
1				5					10					15	
Ala	Thr	Gly	Cys	Gln	Ala	Ser	Pro	Leu	Ala	Lys	Ala	Phe	Ile	Arg	Glu
			20					25					30		
Leu	Leu	Leu	Gly	Gln	Asn	Pro	Asn	Gly	Tyr	Ala	Thr	Leu	Cys	Gln	Ala
		35					40					45			
Ile	Ala	Lys	Ala	Pro	Ala	Ile	Asp	Tyr	Ser	Arg	Ile	Thr	Val	Pro	Phe
	50					55					60				
Leu	Leu	Ile	Ala	Gly	Glu	Glu	Asp	Lys	Ser	Ala	Ser	Leu	Glu	Gly	Cys
65					70					75				80	
Lys	Tyr	Ile	Phe	Asp	Arg	Val	Ser	Ser	Lys	Thr	Lys	Lys	Met	Glu	Val
			85						90					95	
Leu	Pro	Lys	Val	Gly	His	Trp	His	Cys	Ile	Glu	Ala	Pro	Asp	Leu	Val
			100					105					110		
Gly	Gly	Met	Ile	Ala	Gly	Phe	Ile	Glu	Arg	Val					
		115					120								

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<210> 41966
<211> 132
<212> PRT
<213> A.fumigatus
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<400> 41966

## 18668

Leu Phe Leu Arg Gln Trp Ile Ser Arg Trp Val Glu Tyr Leu Ile Met  
 1 5 10 15  
 Ile Pro Ala Ser Ala Ala Leu Ser Phe Ser Arg Asn Arg His Leu Asp  
 20 25 30  
 Leu Leu Leu Gln Asp Gly Leu Glu Leu Pro Asn Glu Ala Asn Val Gly  
 35 40 45  
 Gln Ser Leu Leu His His Asn Ser Asn Arg Phe Arg Pro Pro Phe Ala  
 50 55 60  
 Ala Leu Val Asn Gly Ile Leu Glu His Leu Tyr Ser Asn Thr Val Pro  
 65 70 75 80  
 Pro Asn Ser Phe Pro Ile Arg Thr Asp Leu Phe Leu Gln Gly Glu Ile  
 85 90 95  
 Ala Ile Gln Leu Gln Ile Gln Cys Met Met Leu Ser Asp Phe Gly Val  
 100 105 110  
 Arg Cys Leu Val His Asn Cys Ser Ser Asp Met Gln Leu Gly Ala Leu  
 115 120 125  
 Arg Val Glu Ile  
 130

&lt;210&gt; 41967

&lt;211&gt; 270

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41967

Pro Thr Cys Arg Pro Ser Thr Met Pro Asp Gln Pro Arg Arg Ile Ile  
 1 5 10 15  
 Leu Glu Lys Ser Lys Thr Val Arg Arg Arg Tyr Gln Arg Ser Asn Lys  
 20 25 30  
 Arg Phe Gln Phe Thr Ala Ser Gln Ile Glu Arg Ile Gln Arg Glu Glu  
 35 40 45  
 Glu Arg Glu Ala Arg Ala Lys Arg Leu Arg Glu Lys Glu Lys Lys Arg  
 50 55 60  
 Gln Ala Asn Lys Lys Lys Lys Ala Glu Lys Glu Ala Lys Ala Arg Glu  
 65 70 75 80  
 Ala Arg Arg Arg Leu Gly Leu Pro Asp Pro His Ala Leu Pro Ile Pro  
 85 90 95  
 Ser Ser Gln Pro Leu Leu Ser Lys Phe Leu Lys Lys Pro Ala Ala Lys  
 100 105 110  
 Pro Asp Thr Glu Thr Glu Thr Cys Glu Asp Thr Glu Ser Asp Ser His  
 115 120 125  
 Ser Gln Gly Ser Ile Ala Thr Glu Ile Asp Glu Ser Leu Leu Ser Asp  
 130 135 140  
 Leu Asp Val Ala Ala Phe Asp Gly Gln Thr Ala Ala Gly Ala Ser Gly  
 145 150 155 160  
 Pro Asp Asn His Pro Ala Ser Ile Asp Glu Lys Gly His Val Gly Arg  
 165 170 175  
 Thr Gln Gly Asp Asp Asp Glu Phe Ser Glu Cys Ser Ile Phe Tyr Asp  
 180 185 190  
 Glu Asp Ile Ile Lys Glu Val Glu Thr Ile Ala Thr Ala Gln Val Thr  
 195 200 205  
 Thr Gly Arg Leu Gly Glu Ile Asp Gln Ala Met Lys Glu Ser Cys Lys  
 210 215 220  
 Pro Ala Leu Thr Val Gly Glu Ser Phe Gln Asp Asp Thr Ala Ile Leu  
 225 230 235 240  
 Leu Glu Glu Phe Gly His Glu Phe Ala Ser Asp Glu Glu Phe Glu Gln

## 18669

				245						250				255
Glu	Leu	Ile	Lys	Leu	Asp	Thr	Val	Ser	Val	Gly	Lys	Gln	Ser	
			260					265					270	

&lt;210&gt; 41968

&lt;211&gt; 1097

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (37)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41968

His	Gln	Lys	Ala	Ser	Arg	Arg	Glu	Gly	Thr	Leu	Glu	Thr	Glu	Lys	Ala
1				5					10					15	
Ser	Leu	Ser	Ala	Arg	His	Asp	Asn	Met	Gln	Lys	Arg	Leu	Arg	Lys	Leu
			20					25					30		
Gln	Ala	Glu	Ala	Xaa	Ala	Met	Arg	Ser	Glu	Arg	Ser	Gln	Leu	Glu	Arg
		35					40					45			
Glu	Val	Ala	Asp	Val	Lys	Lys	Leu	Leu	Glu	Glu	Lys	Ile	Ser	Glu	Asp
	50					55					60				
Ala	Glu	Ala	Gly	Glu	Ser	Arg	Lys	Leu	Leu	Glu	Gln	Gln	Ile	Gln	Asp
65						70				75					80
Leu	Lys	Asn	Gln	Leu	Phe	Gln	Ala	Gln	Ala	Asp	Leu	Ser	Arg	Glu	Arg
				85					90					95	
Gln	Ser	Arg	Asp	Asp	Val	Gln	Met	Leu	Ala	Glu	His	Asn	Leu	Ala	Glu
			100					105					110		
Leu	Arg	Asp	Lys	Tyr	Ala	Ser	Leu	Asn	Glu	Ser	Lys	Ile	Ile	Ile	Glu
	115						120						125		
Lys	Glu	Met	Tyr	Ile	Gln	Gln	Asp	Thr	Leu	Arg	Arg	Ala	Thr	Glu	Ala
	130						135					140			
Arg	Ala	Ala	Ala	Glu	Lys	Ser	Arg	Lys	Glu	Leu	Gln	Thr	Glu	Leu	Ile
145					150					155					160
Lys	Leu	Arg	Asp	Arg	Phe	Thr	Lys	Val	Glu	Ser	Ala	Arg	Leu	Asn	Ala
			165						170					175	
Glu	Ala	Glu	Ile	Glu	Arg	Asn	Val	Lys	Lys	Gln	Ala	Asn	Glu	Arg	Leu
		180					185						190		
Asp	Ser	Val	Arg	Lys	Asp	Leu	Glu	Glu	Lys	Ala	Arg	Gln	Leu	Glu	Asp
		195					200					205			
Val	Glu	Glu	Glu	Arg	Ser	Arg	Leu	Ser	Leu	Arg	Val	Gln	Glu	Leu	Thr
	210					215					220				
Asn	Ala	Ile	Ala	Glu	Ser	Glu	Asn	Phe	Arg	Ile	Arg	His	Asp	Gln	His
225					230					235					240
Lys	Glu	Arg	Leu	Glu	Arg	Glu	Leu	Val	Thr	Leu	Lys	Gly	Arg	Leu	Thr
			245						250					255	
Ala	Ser	Glu	Asn	Asp	Asn	Arg	Ala	Leu	Leu	Thr	Lys	Ile	Gln	Gln	Lys
			260					265					270		
Asn	Leu	Asp	Ile	Ala	Arg	Ser	Asn	Ser	Lys	Ala	Ser	Glu	Ser	Gln	Arg
		275					280					285			
Leu	Arg	Ile	Thr	Asn	Leu	Gln	Arg	Glu	Lys	Ala	Lys	Leu	Glu	Glu	Asp
	290					295					300				
Asn	Arg	Lys	Leu	Thr	Arg	Gln	Leu	Gly	Asp	Leu	Gln	Leu	Ser	Ile	Thr
305					310					315					320
Ser	Leu	Glu	Lys	Gln	Lys	Glu	Lys	Leu	Ser	Leu	Ser	Leu	Glu	Asp	Leu

												325				330				335				
Asn	His	Glu	Val	Asn	Arg	Glu	His	Lys	Ala	Ser	Arg	Asn	Ala	Glu	Lys									
												340				345				350				
Ala	Ala	Ser	Thr	Ala	Gly	Ile	Gln	Leu	Ala	Glu	Ala	Asn	Arg	Asn	Leu									
												355				360				365				
Glu	Thr	Glu	Arg	Gln	Leu	Arg	Thr	Gln	Ala	Gln	Ala	Asn	Thr	Arg	Lys									
												370				375				380				
Leu	Gln	Gly	Ser	Leu	Asp	Thr	Ala	His	Lys	Glu	Ile	Glu	Ala	Leu	His									
385													390				395				400			
Arg	Gln	Leu	Met	Leu	Leu	His	Lys	Phe	Val	Glu	Pro	Leu	Ser	Asp	Lys									
												405				410				415				
Pro	Pro	Glu	Ser	Trp	Glu	Ser	Val	Gln	Pro	Asp	Leu	Val	Glu	Lys	Val									
												420				425				430				
Asn	Leu	Ala	Gln	Leu	Leu	Asp	Thr	Ala	Gln	Ser	Lys	Leu	Gln	Val	Met									
												435				440				445				
Glu	Glu	Lys	Tyr	Asn	Arg	Ala	Glu	Ser	Gln	Leu	Ala	Glu	Met	Arg	Arg									
												450				455				460				
Arg	His	Glu	Asp	Glu	Met	Lys	Glu	Leu	Asp	Ala	Arg	Tyr	Ser	Ser	Ser									
465													470				475				480			
Lys	Arg	Ala	Leu	Leu	Glu	Glu	Ile	Asp	Gln	Asn	Gln	Val	Ala	Gly	Asn									
												485				490				495				
Arg	Thr	Pro	Thr	His	Leu	Arg	Lys	Asn	Ser	Glu	Asn	Gly	Leu	Val	Lys									
												500				505				510				
Lys	Phe	Ala	Thr	Pro	Thr	Thr	Pro	Asn	Arg	Arg	Leu	Asn	Leu	Asn	Glu									
												515				520				525				
Ala	Thr	Met	Asp	Ser	Gly	Arg	Ser	Asp	Arg	Thr	Val	Asp	Thr	Ile	Gly									
												530				535				540				
Tyr	Gln	Lys	Arg	Met	Asp	Leu	Ala	Thr	Glu	Ile	Glu	Glu	Leu	Gln	Asn									
545													550				555				560			
Lys	Leu	Gln	Met	Ser	Glu	Met	Gln	Asn	Arg	His	Leu	Gln	Asn	Gln	Leu									
												565				570				575				
Glu	Gln	Leu	Lys	Pro	Val	Arg	Asp	Leu	Trp	Gln	Asp	Glu	Ser	Pro	Ser									
												580				585				590				
Leu	Arg	Arg	Met	Gln	Leu	Leu	Glu	Arg	Glu	Asn	Gly	Arg	Leu	His	Asp									
												595				600				605				
Gln	Leu	Asp	Asp	Ser	Ala	Lys	Lys	Val	Ser	Ala	Leu	Glu	Arg	Ser	Ile									
												610				615				620				
Arg	Ser	Gly	Glu	Leu	Ser	Leu	Arg	Asp	Val	Gln	Ala	Lys	Ser	His	Glu									
625													630				635				640			
Glu	Leu	Tyr	Asp	Leu	Ile	Asn	Ser	Gln	Glu	Gln	Ser	Arg	Arg	Ser	Leu									
												645				650				655				
Leu	Lys	Val	His	Asn	Glu	Ala	Met	Thr	Asp	Phe	Thr	Glu	Ala	Lys	Ala									
												660				665				670				
Gln	Phe	Glu	Lys	Leu	Lys	Arg	Ala	Lys	Ala	Thr	Leu	Glu	Val	Glu	Leu									
												675				680				685				
Arg	Asp	Ala	Leu	Ser	Glu	Ala	Gln	Glu	Leu	Lys	Val	Ala	Arg	Glu	Gln									
												690				695				700				
Asp	Ala	Val	Ser	Arg	Asn	Gln	Leu	Leu	Glu	Glu	Phe	Ser	Asp	Leu	Gln									
705													710				715				720			
Ile	Arg	Leu	Asp	Ala	Glu	Thr	Ser	Lys	Ser	Ala	Asp	Leu	Ala	Ser	Ser									
												725				730				735				
Leu	Ser	Leu	Tyr	Lys	Ser	Arg																		



Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.52	0.50	0	1	-0.02	3.0	0.99
Marital Status	0.68	0.47	0	1	0.10	3.1	0.99
Education	12.5	2.1	9	16	-0.10	3.3	0.98
Income	15000	8000	5000	35000	0.20	3.4	0.97
Occupation	1.2	0.8	0	2	-0.05	3.0	0.99
Health Status	0.75	0.43	0	1	0.05	3.1	0.99
Stress Level	3.5	1.2	1	5	0.10	3.2	0.98
Life Satisfaction	4.2	1.0	1	5	-0.05	3.1	0.99
Resilience	2.8	0.9	1	4	0.05	3.2	0.98
Optimism	3.8	1.1	1	5	-0.02	3.0	0.99
Emotional Stability	3.2	0.8	1	4	0.05	3.1	0.99
Self-Esteem	3.5	0.9	1	4	-0.05	3.2	0.98
Life Purpose	3.0	1.0	1	4	0.10	3.3	0.97
Gratitude	3.8	1.1	1	5	-0.02	3.0	0.99
Forgiveness	3.5	1.0	1	4	0.05	3.1	0.99
Empathy	3.2	0.9	1	4	-0.05	3.2	0.98
Resilience	2.8	0.9	1	4	0.05	3.2	0.98
Optimism	3.8	1.1	1	5	-0.02	3.0	0.99
Emotional Stability	3.2	0.8	1	4	0.05	3.1	0.99
Self-Esteem	3.5	0.9	1	4	-0.05	3.2	0.98
Life Purpose	3.0	1.0	1	4	0.10	3.3	0.97
Gratitude	3.8	1.1	1	5	-0.02	3.0	0.99
Forgiveness	3.5	1.0	1	4	0.05	3.1	0.99
Empathy	3.2	0.9	1	4	-0.05	3.2	0.98
Resilience	2.8	0.9	1	4	0.05	3.2	0.98
Optimism	3.8	1.1	1	5	-0.02	3.0	0.99
Emotional Stability	3.2	0.8	1	4	0.05	3.1	0.99
Self-Esteem	3.5	0.9	1	4	-0.05	3.2	0.98
Life Purpose	3.0	1.0	1	4	0.10	3.3	0.97
Gratitude	3.8	1.1	1	5	-0.02	3.0	0.99
Forgiveness	3.5	1.0	1	4	0.05	3.1	0.99
Empathy	3.2	0.9	1	4	-0.05	3.2	0.98
Resilience	2.8	0.9	1	4	0.05	3.2	0.98
Optimism	3.8	1.1	1	5	-0.02	3.0	0.99
Emotional Stability	3.2	0.8	1	4	0.05	3.1	0.99
Self-Esteem	3.5	0.9	1	4	-0.05	3.2	0.98
Life Purpose	3.0	1.0	1	4	0.10	3.3	0.97
Gratitude	3.8	1.1	1	5	-0.02	3.0	0.99
Forgiveness	3.5	1.0	1	4	0.05	3.1	0.99
Empathy	3.2	0.9	1	4	-0.05	3.2	0.98
Resilience	2.8	0.9	1	4	0.05	3.2	0.98
Optimism	3.8	1.1	1	5	-0.02	3.0	0.99
Emotional Stability	3.2	0.8	1	4	0.05	3.1	0.99
Self-Esteem	3.5	0.9	1	4	-0.05	3.2	0.98
Life Purpose	3.0	1.0	1	4	0.10	3.3	0.97
Gratitude	3.8	1.1	1	5	-0.02	3.0	0.99
Forgiveness	3.5	1.0	1	4	0.05	3.1	0.99
Empathy	3.2	0.9	1	4	-0.05	3.2	0.98
Resilience	2.8	0.9	1	4	0.05	3.2	0.98
Optimism	3.8	1.1	1	5	-0.02	3.0	0.99
Emotional Stability	3.2	0.8	1	4	0.05	3.1	0.99
Self-Esteem							

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<210> 41969
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50),(56),(64)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 41969
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Tyr Ser Arg Ile Asp Pro Leu Ser Tyr Gln Leu Ile Val Thr Lys Cys

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## 18672

20 25 30  
 Cys Gly Val Leu Ser Ala Glu Pro Arg Pro Ala Leu Glu Ile Glu Ser  
 35 40 45  
 Cys Xaa His Tyr Phe Ser Arg Xaa Arg Ala Gly Pro Glu Thr Ser Xaa  
 50 55 60  
 Cys Gly  
 65

<210> 41970  
 <211> 937  
 <212> PRT  
 <213> A.fumigatus

<400> 41970  
 Ser Cys Gly Ala Leu Gln Tyr Leu Thr Leu Glu Arg Arg Gly Glu Ser  
 1 5 10 15  
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 20 25 30  
 Ala Val Ala Thr Thr Asp Thr Pro Tyr Ala Arg Ser Gly Ser Lys Gln  
 35 40 45  
 Leu Ser Thr Leu Ser Gln Gln Ile Leu Arg Ala Asn Pro Ile Leu Glu  
 50 55 60  
 Ala Phe Gly Asn Ala Gln Thr Val Arg Asn Asn Asn Ser Ser Arg Phe  
 65 70 75 80  
 Gly Lys Phe Ile Arg Ile Glu Phe Thr Arg Ser Gly Gln Ile Ser Gly  
 85 90 95  
 Ala Ser Ile Asp Trp Tyr Leu Leu Glu Lys Ser Arg Val Val Lys Pro  
 100 105 110  
 Asn Ser His Glu Arg Asn Tyr His Ile Phe Tyr Gln Leu Gln Gly  
 115 120 125  
 Ala Asp Pro Lys Leu Arg Glu Ser Leu Leu Leu Thr Asp Leu His Ile  
 130 135 140  
 Glu Asp Phe Ala Tyr Thr Arg Asp Gly Asn Asp Ser Ile Ala Gly Val  
 145 150 155 160  
 Ser Asp Val Asp Glu Trp Asn Ser Leu Ile Glu Ala Phe His Val Met  
 165 170 175  
 Lys Phe Ser Glu Glu Asp Gln Met Cys Ile Leu Arg Thr Val Ala Ala  
 180 185 190  
 Val Leu His Leu Gly Asn Ile Thr Ile Val Lys Glu Ser Leu Arg Ala  
 195 200 205  
 Asp Gln Ala Ala Leu Gly Pro Asp Ser Leu Asn Ser Val Glu Arg Ala  
 210 215 220  
 Cys Gln Leu Leu Gly Ile Glu Pro Glu Pro Phe Val Lys Gly Leu Leu  
 225 230 235 240  
 His Pro Arg Val Lys Ala Gly Arg Glu Trp Val Glu Lys Ala Gln Thr  
 245 250 255  
 Pro Glu Gln Val Arg Leu Ala Leu Asp Ala Leu Ala Lys Gly Ile Tyr  
 260 265 270  
 Glu Arg Gly Phe Gly Asp Leu Val Asn Arg Ile Asn Asn Arg Leu Asp  
 275 280 285  
 Arg Ser Thr Met Ala Gly Asp Asp Ser Phe Phe Ile Gly Val Leu Asp  
 290 295 300  
 Ile Ala Gly Phe Glu Ile Phe Lys Asn Asn Ser Phe Glu Gln Leu Cys  
 305 310 315 320  
 Ile Asn Tyr Thr Asn Glu Lys Leu Gln Gln Phe Phe Asn His His Met  
 325 330 335

Phe Val Leu Glu Gln Glu Tyr Ala Arg Glu Gln Ile Glu Trp Gln  
 340 345 350  
 Phe Ile Asp Phe Gly Lys Asp Leu Gln Pro Thr Ile Asp Leu Ile Glu  
 355 360 365  
 Leu Thr Asn Pro Ile Gly Ile Phe Ser Cys Leu Asp Glu Asp Ser Val  
 370 375 380  
 Met Pro Lys Ala Thr Asp Arg Ser Phe Thr Asp Lys Leu His Ser Leu  
 385 390 395 400  
 Trp Asp Arg Lys Ser Pro Lys Tyr Arg Ala Ser Arg Leu Ser Gln Gly  
 405 410 415  
 Phe Val Leu Thr His Tyr Ala Ala Glu Val Glu Tyr Asp Thr Glu Gly  
 420 425 430  
 Trp Leu Glu Lys Asn Lys Asp Pro Leu Asn Asp Asn Val Thr Arg Leu  
 435 440 445  
 Leu Ala Arg Ser Thr Asp Lys His Val Ala Cys Leu Phe Ser Asp Cys  
 450 455 460  
 Gly Asp Pro Asp Glu Asp Asn Glu Leu Pro Lys Ser Arg Val Lys Lys  
 465 470 475 480  
 Gly Leu Phe Arg Thr Val Ala Gln Arg His Lys Glu Gln Leu Ser Ser  
 485 490 495  
 Leu Met Asn Gln Leu His Gln Thr His Pro His Phe Val Arg Cys Ile  
 500 505 510  
 Ile Pro Asn His Lys Lys Arg Pro Lys Met Leu Asn Ala Pro Leu Val  
 515 520 525  
 Leu Asp Gln Leu Arg Cys Asn Gly Val Leu Glu Gly Ile Arg Ile Ala  
 530 535 540  
 Arg Thr Gly Phe Pro Asn Arg Leu Ser Phe Ile Glu Phe Arg Gln Arg  
 545 550 555 560  
 Tyr Glu Val Leu Cys Pro Asn Met Pro Lys Gly Tyr Met Asp Gly Gln  
 565 570 575  
 Ser Val Ala His Asn Met Leu Gln Lys Leu Gly Leu Asp Pro Ala Trp  
 580 585 590  
 Tyr Arg Val Gly Arg Thr Lys Val Phe Phe Arg Ala Gly Val Leu Ala  
 595 600 605  
 Glu Leu Glu Glu Gln Arg Asp Gln Leu Ile Arg Thr Ile Met Thr Gln  
 610 615 620  
 Phe Gln Ser Ala Ala Arg Gly Phe Ile Gln Arg Arg Ile Ser Asn Lys  
 625 630 635 640  
 Arg Leu Tyr Arg Ala Glu Ala Thr Arg Ile Ile Gln His Asn Phe Gln  
 645 650 655  
 Val Tyr Leu Asp Met Lys Arg Asn Pro Trp Trp Arg Leu Phe Ser Arg  
 660 665 670  
 Met Lys Pro Leu Leu Gly Glu Thr Arg Thr Ala Asn Glu Val Lys Lys  
 675 680 685  
 Arg Asp Glu Lys Ile Lys Glu Leu Glu Ala Lys Ile Lys Gln Asp Ile  
 690 695 700  
 Ala Glu Arg Gln Lys Leu Asp Glu Glu Arg Arg Arg Thr Glu Ile Glu  
 705 710 715 720  
 Ile Gln Lys Ile Gln His Thr Leu Glu Ser Glu Arg Ala Leu Ala Leu  
 725 730 735  
 Asp Lys Glu Glu Ile Phe Lys Arg Leu Gln Leu Arg Glu Ile Glu Leu  
 740 745 750  
 Thr Glu Lys Leu Ala Gly Ala Ile Ala Asp Gln Glu Ser Leu Glu Asp  
 755 760 765  
 Gln Leu Asp Thr Leu Ile Ala Ala Lys Lys Lys Ala Asp Glu Gln Leu  
 770 775 780

## 18674

Ser Gln Arg Ile Thr Gln Leu Glu Gln Ala Gly Glu Ile Ile Glu Arg  
785 790 795 800  
Leu Glu Ala Glu Lys Arg Asp Leu Gln Ser Arg Leu Asp Val Leu Asp  
805 810 815  
Arg Gln Leu Glu Glu Ala Arg Ser Ser Val Ala Glu Gln Glu Ala Arg  
820 825 830  
Val Lys Glu Leu Gly Gln Glu Ile Lys Met Leu Gln Ser His Leu Ser  
835 840 845  
Leu Lys Asp Arg Lys Ile Gln Asp Leu Glu Ala Lys Leu Leu Lys Thr  
850 855 860  
Asp Gln Asp Leu Asp Ile Lys Leu Ala Arg Thr Ser Lys Asp Leu Glu  
865 870 875 880  
Leu Ser Lys Lys Gln Ile Lys Asp Leu Val Glu Glu Asn Arg Ser Ile  
885 890 895  
Arg Gln Gln Ile Ser Asp Leu Ser Ser Thr Ser Thr Gly Tyr Glu Glu  
900 905 910  
Met Leu Lys Arg Lys Arg Ser Glu Ile Ala Val Leu Arg Asn Asp Thr  
915 920 925  
Lys Lys His Gln Glu Glu Lys Glu Pro  
930 935

&lt;210&gt; 41971

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41971

Thr Tyr Ser Gly Leu Phe Leu Val Thr Ile Asn Pro Tyr Cys Pro Leu  
1 5 10 15  
Pro Ile Tyr Thr Asn Glu Tyr Val Lys Met Tyr Lys Gly Arg Ser Arg  
20 25 30  
Glu Glu Thr Arg Pro His Ile Phe Ala Met Ala Asp Glu Ala Phe Arg  
35 40 45  
Asn Leu Val Glu Glu Gly Glu Asn Gln Ser Ile Leu Val Thr Tyr Ile  
50 55 60  
Pro Pro His Glu Ala Val Glu His Cys Asn Ile  
65 70 75

&lt;210&gt; 41972

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (69), (76)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41972

Asn Ala Ser Pro Lys Ile Leu Thr Pro Gln Ile Lys Gln Leu Glu Thr  
1 5 10 15  
His Leu Glu Glu Gln Glu Asn Lys His Ser Ser Glu Gln Arg Ser Leu  
20 25 30  
Arg Asn Val Asp Arg Thr Val Lys Asp Leu Gln Ser Gln Leu Glu Arg  
35 40 45  
Arg Asp Lys Leu Asn Ala Gln Leu Glu Glu Asp Val Asn Val Phe Thr

[illegible]

<400> 41975															
Phe	Cys	Thr	Ala	Tyr	Asp	Pro	Pro	Gly	Ser	Gly	Asn	Pro	Asp	Pro	Phe
1				5					10					15	
Met	Ser	Asn	Gly	Ala	Xaa	Gly	Ala	Ser	Ser	His	Glu	Asp	Thr	Ser	Phe
			20					25					30		
Ser	Thr	Thr	Xaa	Arg	Cys	Phe	Trp	Ala	Arg	Thr	Xaa	Ala	Gly	Lys	Ile
		35					40					45			
Val	Xaa	Ala	Ala	Phe	Asp	Phe	Lys	Arg	Arg	Ala	Arg	Leu	Cys	Ala	
	50					55					60				

<210> 41976  
 <211> 229  
 <212> PRT  
 <213> A.fumigatus

<400> 41976  
 His Pro Thr Thr Phe Arg Tyr Asn Glu Leu Val Arg Glu Gly Ile Asn  
 1 5 10 15  
 Pro Ala Val Leu Arg Gln Leu Tyr Glu Glu Val Gly Ile Arg Val Leu  
 20 25 30  
 Thr Pro Gln Leu Glu Gly Val Ser Pro Ala Ile Asn Pro Thr Lys  
 35 40 45  
 Pro Val Asp Val Pro Gly Lys Pro Ala Gly Ala Gly Leu Asp Ser Ala  
 50 55 60  
 Ser Ser Ser Ser Val Asp Asn Gly Pro Ala Pro Val Ala Leu Asp Arg  
 65 70 75 80  
 Ser Lys Gly Glu Thr Glu Thr Pro Val Ala Ala Ala Ala Asn Ala  
 85 90 95  
 Pro Ala Pro Ala Pro Thr Ser Thr Ile Gln His Ser Thr Thr Ala Lys  
 100 105 110  
 Pro Leu Glu Arg Lys Glu Val Ile Ala Arg Met Leu Ala Ala Lys Ala  
 115 120 125  
 Ala Lys Thr Ser Gly Met Pro Ser Thr Pro Gln Thr Asp Ser Ala Lys  
 130 135 140  
 Glu Ala Leu Ser Ser Glu Ser Ser Val Ser Ala Leu Val Gly Lys Asp  
 145 150 155 160  
 Thr Pro Ala Ser Ser Gly Arg Glu Thr Pro Pro Lys Glu Lys Asp Ile  
 165 170 175  
 Arg Thr Arg Glu Lys Asn Lys Ala Lys Pro Glu Leu Ala Arg Gln Arg  
 180 185 190  
 Ile Glu Gln Leu Lys Lys Gln Gly Leu Val Arg Ser Gln Gln Lys Ala  
 195 200 205  
 Gln Ile Asp Pro Met Arg Arg Asp Glu Met Ser Ser Pro Arg Gly Trp  
 210 215 220  
 Lys Val Arg Ala Gly  
 225

<210> 41977  
 <211> 226  
 <212> PRT  
 <213> A.fumigatus

<400> 41977  
 Arg Gln Asn Leu Leu Gln Arg Gln Arg Arg Asp Gly Ala Ala Gly Ile  
 1 5 10 15  
 Pro Lys Pro Asp Asp Ser Thr Leu Pro Leu Asp His Leu Gln Thr Ser  
 20 25 30  
 Phe Pro Gly Ile Leu Ser Asp Gly Ile Ile Asp Asp Ile His Thr Pro  
 35 40 45  
 Ala Ala Ser Asp Leu Leu His Leu Leu His Pro Val Leu Pro Leu Phe  
 50 55 60  
 Thr Ala Val Val Asn Asn Met Ile Arg Thr Lys Ala Leu Asn Gln Leu  
 65 70 75 80  
 Asp Leu Leu Arg Thr Thr Arg Ser Ala Asp Asp Met Arg Ala Asp Arg  
 85 90 95  
 Leu Glu Asp Leu Arg His Glu Lys Ala Gly Thr Thr Ser Gly Ser Met

## 18677

	100		105		110										
Gln	Lys	Asn	Pro	Val	Ala	Leu	Leu	His	Gly	Val	Gly	Leu	Leu	Arg	Gln
	115							120				125			
Arg	Gln	Asp	Ser	Gln	Ser	Ala	Gln	Glu	Arg	Ser	His	Asn	Ile	Leu	Ile
	130					135					140				
Arg	Asn	Ala	Val	Gly	Asp	Phe	Asp	Cys	Leu	Gly	Arg	Arg	Asp	Gly	Ser
145				150						155					160
Val	Leu	Arg	Ile	Ser	Ala	Ser	Ala	Glu	Pro	Gly	Asp	Ala	Val	Thr	His
			165						170					175	
Leu	Glu	Val	Val	Val	Val	Trp	Ser	Gly	Pro	Gln	Gly	Asp	Asp	Gly	Ala
		180						185				190			
Gly	Ala	Phe	Ala	Thr	Gln	Asn	Phe	Arg	Leu	Trp	Gly	Gly	Val	Glu	Pro
	195					200						205			
Cys	Thr	Glu	Ile	Gly	Val	Asp	Val	Ile	Asp	Ser	Gly	Asp	Val	Val	Leu
	210					215					220				
Asp	Glu														
225															

&lt;210&gt; 41978

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41978

Gln	Glu	Cys	Tyr	Gly	Leu	Leu	Pro	Asn	Leu	Leu	Thr	Arg	Gly	Asn	Thr
1				5					10					15	
Asn	Val	Val	Thr	Leu	Gln	Gly	Thr	Phe	Asp	Asn	Gly	Leu	Ser	Lys	Ser
			20					25					30		
Asn	Glu	Ile	Ser	Ala	Ser	Tyr	Ala	Trp	Ser	Phe	Pro	His	Pro	Gly	Leu
		35					40					45			
Ile	Asn	Asp	Pro	Phe	Phe	Ser	Gly	Gln	Gln	Ser	Ser	Met	Thr	Ala	Leu
	50					55					60				
Lys	Arg	Gly													
65															

&lt;210&gt; 41979

&lt;211&gt; 517

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (379)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 41979

Glu	Lys	Val	Leu	Ser	Ala	Leu	Leu	Leu	Pro	Trp	Lys	Ser	Pro	His	Ile
1				5					10					15	
Tyr	Leu	Gly	Leu	Ile	Ala	Ala	Asn	Met	Pro	Arg	Phe	Gly	Arg	Lys	Arg
			20					25					30		
Ser	Gln	Trp	Pro	Pro	Pro	Pro	Met	Val	Glu	Asp	Glu	Ala	Ile	Ser	Leu
		35					40					45			
Ser	Arg	Glu	Leu	His	Gly	Met	Ser	Ile	Leu	Gly	Glu	Lys	Pro	Gly	Val
	50					55				60					
Glu	Gly	Val	Arg	Ala	Arg	Gly	Thr	Ile	Asp	Gln	Tyr	Pro	Val	Ile	Leu
65					70					75					80

Asp Ala Pro Ile Ser Glu Ser Ala Lys Pro Lys Gln Tyr Gly Leu Asp  
 85 90 95  
 Glu Cys Ser Arg Glu Ile Ser Ser Ser Asp Asp Ser Ala Gly Pro Ala  
 100 105 110  
 Thr Pro Pro Glu Arg Phe Val Gln Asp Pro Leu Ile Arg Val Ala Asp  
 115 120 125  
 Asp Ser Gln Glu Phe His Leu Thr Ala Pro Thr Val Pro Val Thr Leu  
 130 135 140  
 Pro Val Lys Glu Thr Arg Pro Gln Thr Lys Pro Arg Lys Glu Asp Arg  
 145 150 155 160  
 Gln Pro Pro Arg Ile Phe Gln Asp Thr Ser Ser Ser Arg Gln Gly Thr  
 165 170 175  
 Glu Pro Ser Gln Thr Ile Pro Lys Pro Gln Ser Arg Thr Gly Lys Thr  
 180 185 190  
 Ser Ile Asp Val Lys Ala Thr Thr Gln Ile Pro Thr Arg Asn Pro Glu  
 195 200 205  
 Arg Val Ser Val Pro Val Arg Asn Gly Gln Gly Ser Leu Gly Met Pro  
 210 215 220  
 Val Glu Lys Thr Thr Ser Ala Ala Val Pro Lys Arg Ser Gly Ser Val  
 225 230 235 240  
 Arg Asp Gly Arg Arg Gln Ser Pro Gly Glu Thr Gln Gln Pro Arg Ser  
 245 250 255  
 Ser Ala Gly Tyr Val Ser Ala Ser Ala Ala Asn Lys Ala Pro Met Asp  
 260 265 270  
 Pro Gly Asn Ala His Gln Glu Pro Pro Ser Gln Thr Ser Lys Arg Ala  
 275 280 285  
 His Ala Val Pro Ser Met Val Pro Pro Thr Arg Ser Gly Leu Ala Glu  
 290 295 300  
 Arg Leu Glu Glu Lys Leu Arg Gln Arg Gln Lys Val Arg Glu Ser Gly  
 305 310 315 320  
 Ser Ser Ser Gln Pro Ser Glu Leu Pro Leu Gly Arg Pro Thr Gly Pro  
 325 330 335  
 Thr Glu Pro Ser Ser Glu Pro Pro Arg Ala Cys Arg Cys Asn Ala  
 340 345 350  
 Pro Pro Glu Thr Val Pro Gly Ala Thr Ser Arg Gly Thr Arg Phe Arg  
 355 360 365  
 Ala Leu Ser Thr Pro Ala Lys Pro Ala Pro Xaa Ala Pro Arg Ser Asp  
 370 375 380  
 Glu Val Asp Pro Phe Pro Ala Ser Leu Arg Thr Ala Thr Ser Glu Pro  
 385 390 395 400  
 Val Pro Pro Val Ser Ser Gln Ser Thr Thr Lys Arg Thr Val Ser Phe  
 405 410 415  
 Tyr Gly Glu Gln Glu His Gly Gln Glu Arg Glu Lys Ser Arg Ser Ser  
 420 425 430  
 Arg Arg Gln Ser Pro Ser Lys Ala Val Val Arg Gln Pro Ser Pro Glu  
 435 440 445  
 Glu Ala Gly Pro Cys Leu Leu Pro Cys Pro Arg Ser Val Pro Val Thr  
 450 455 460  
 Gly Tyr Gln Asp Trp Tyr Thr Ile Lys Gly Leu Glu His Leu Asp Ile  
 465 470 475 480  
 Cys Pro Ser Cys Thr Lys Gln Met Arg Asn Ser Arg Phe Gln Asp Leu  
 485 490 495  
 Phe Ile Pro Ser Leu Pro Val Pro Arg Val Val Phe Thr Thr Gly Leu  
 500 505 510  
 Glu Gly Thr Ala Leu  
 515



18679

<210> 41980  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

<400> 41980  
 Pro Gly Val Gln Leu Ala Cys Ala Lys Ser Met Arg Arg Arg Ser Cys  
 1 5 10 15  
 Thr Leu Gly Gly Ser Ser Ser Ser Ser Ser Ser Ser Ser Lys Ser Ile Pro  
 20 25 30  
 Pro Asn Cys Ala Val Ser Gly Pro Arg Phe Ile Leu Ile Ala Cys Cys  
 35 40 45  
 Gly Ile Pro Ser Cys Pro Thr Arg Arg Leu Thr Thr Ser Lys Glu Pro  
 50 55 60  
 Ser Pro Cys Arg Ala Lys Ser Lys Ser Ser Ser Ser Ser Ser Ala Ser  
 65 70 75 80  
 Ser Gly Asp Leu Ser Leu Gly Phe Phe Ser Ser Ser Ser Ala Cys Ser  
 85 90 95  
 Ile Ala Ser Gly Ser Pro Ser  
 100

<210> 41981  
 <211> 303  
 <212> PRT  
 <213> A.fumigatus

<400> 41981  
 Arg Leu Asn Arg Thr Ser Tyr Phe Pro Tyr Tyr Phe Asn Pro Glu Thr  
 1 5 10 15  
 Glu Asp Met Val Lys Leu Ala Thr Val Thr Ile Trp Asn Phe Leu Thr  
 20 25 30  
 Tyr Ile Leu Tyr His Asp Val Ala Pro Glu Tyr Lys Ala Asn Ile Glu  
 35 40 45  
 Glu Ala Arg Lys Ser Cys Asp Ile Ala Gly Lys Glu Leu Trp Lys Asn  
 50 55 60  
 Gln Gln Phe Thr Ser Lys Gly Pro Gly Asp Phe Asn Thr Ala Cys Ser  
 65 70 75 80  
 Thr Leu Phe Gly Gly Val Phe Phe Asp Leu Tyr Val Glu Asn Asn Gln  
 85 90 95  
 Trp Asn Asn Ser Lys Asp Asp Thr Val Arg Met Thr Asn Gly Ile Ala  
 100 105 110  
 Arg Lys Val Val Lys Phe Ala Leu Ala Gly Ala Gly Ile Asp Arg Gln  
 115 120 125  
 Val Val Gln Phe Gln Glu Leu Ala Asn Glu Asp Ala Leu Arg Ala Met  
 130 135 140  
 Arg Val Gln Asp Ile Asp Gly Phe Glu Val Thr Ala Ile Ile Phe Pro  
 145 150 155 160  
 Asp Gly Glu Thr Lys Glu Phe Tyr Gln Val His Ala Pro Asp Leu His  
 165 170 175  
 Pro Val Gly Arg Met Leu Ala Lys Ala Tyr Arg Asp Pro Gly Lys Pro  
 180 185 190  
 Asp Ile Asp Leu Ser Pro Glu Glu Arg Leu Gln Trp Glu Lys Gly Gly  
 195 200 205  
 Ala Pro Ala Leu Glu Phe Asp Phe Phe Leu Glu Glu Thr Leu Leu Lys  
 210 215 220

## 18680

Phe Cys Tyr Pro Gly Met Lys Val Ile Thr Ala Val Trp Glu Leu Asn  
 225 230 235 240  
 Cys Gly Phe His Tyr Phe Asp Glu Ile Ser Thr Ala Tyr Cys Ser Ile  
 245 250 255  
 Tyr Thr Val Leu Ala Asn Asp Leu Met Ile Gly Trp Lys Lys Pro Lys  
 260 265 270  
 Asp Leu Arg Val Gly Asp Asp Arg Glu Ala Asp Glu Thr Phe Asp Glu  
 275 280 285  
 Glu Gly Lys Gly Ser Lys Arg Lys Glu Thr Glu Gly Pro Ser Cys  
 290 295 300

&lt;210&gt; 41982

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41982

Pro Ser Arg Ser Cys Thr Ile Ile Phe Arg Cys Leu Leu Ser Val Asp  
 1 5 10 15  
 Met Phe Glu Ala Ser Pro Leu Ile Phe Thr Val Gly His Gln Ala Arg  
 20 25 30  
 Pro Asp Ile Cys Thr Trp Lys Phe Asp Ser Leu Pro Ile Asn Ala Gln  
 35 40 45  
 Leu Leu Ser Leu Cys Ser Asp Arg Ala Ala Lys Met Lys His Thr Ala  
 50 55 60  
 Gln Leu Gly Pro Leu Arg Tyr Leu Tyr Thr Lys Leu Ser Ala Ala Gly  
 65 70 75 80  
 Ser Cys

&lt;210&gt; 41983

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41983

Leu Arg Leu Thr Ser Leu Thr Ile Leu Ser Ser His Arg Met His Leu  
 1 5 10 15  
 Ser Arg Thr Phe Val Pro Arg Leu Ser Asn Ser Leu Ala Ala Thr Ser  
 20 25 30  
 Pro Ala Leu Val Arg Leu Ser Gly Val Arg Cys His Leu Gln Pro Ser  
 35 40 45  
 Phe Arg Pro Thr Ala Ser Leu Arg Ser Ser Ser Gln Pro His Thr Met  
 50 55 60  
 Ser Ile Pro Thr Thr Met Lys Ala Val Leu Ile Glu Lys Thr Gly Gly  
 65 70 75 80  
 Pro Glu Val Leu Gly Phe Lys Thr Asp His Pro Val Pro Thr Pro Gln  
 85 90 95  
 Glu Gly Gln Leu Leu Val Lys Asn Asn Ile Ser Gly Ile Asn Tyr Ile  
 100 105 110  
 Asp Thr Tyr Phe Arg Thr Gly Leu Tyr Pro Ala Pro Lys Pro Glu Val  
 115 120 125  
 Leu Gly Arg Glu Gly Ala Gly Thr Val Val Ala Leu Gly Pro Gly Pro  
 130 135 140  
 Asn His Tyr Asn Phe Gln Val Gly Asp Arg Val Ala Trp Leu Ser Thr  
 145 150 155 160

## 18681

Gly Gly Tyr Ala Glu Tyr Thr Ala Val Pro Ala Ala Lys Ala Val Lys  
 165 170 175  
 Ile Pro Asp Gly Ile Ser Asp Glu Asp Val Met Ala Ser Phe Leu Ser  
 180 185 190  
 Gly Leu Thr Val Leu Ser Leu Ala Lys Glu Thr Tyr Ala Val Gln Lys  
 195 200 205  
 Gly Asp Trp Val Leu Leu His Ala Ala Ala Gly Gly Ala Gly Phe Leu  
 210 215 220  
 Met Thr Gln Ile Leu Lys Ser Ile Gly Ala His Val Ile Gly Thr Ala  
 225 230 235 240  
 Gly Gly Pro Glu Lys Val Glu Leu Val Lys Gly Leu Gly Ala Asp His  
 245 250 255  
 Val Ile Asp Tyr Arg Ser Glu Glu Gly Lys Asp Trp Val Lys Gln Val  
 260 265 270  
 Lys Glu Ile Thr Gly Gly Arg Gly Val Asp Val Val Tyr Asp Ser Val  
 275 280 285  
 Gly Lys Asp Thr Trp Glu Gly Ser Leu Glu Val Val Lys Arg Lys Gly  
 290 295 300  
 Thr Ile Val Trp Phe Gly Asn Ala Ser Gly Pro Val Pro Pro Leu Pro  
 305 310 315 320  
 Leu Lys

&lt;210&gt; 41984

&lt;211&gt; 462

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41984

Val Ser Ile Arg Ser Arg Leu Thr Phe Leu Ala His Val Ile Ile Ser  
 1 5 10 15  
 Gln Pro Leu Glu Arg Leu Tyr Tyr Pro Ala Leu Ser Ile Gln Ser Leu  
 20 25 30  
 Ser Ala Gln Tyr Ala Ser Cys Ala Tyr Thr Gly Ser His Asp Trp Ser  
 35 40 45  
 Asn Thr Phe His Tyr Ser Asp Gly Val Arg Cys Thr Thr Ser Gly Ser  
 50 55 60  
 Phe Ile Ala Lys Pro Cys Thr Pro Gln Glu Val Ala Phe Tyr Glu Ser  
 65 70 75 80  
 Ser Ala Phe His Pro Ala Phe Arg Asp Phe Ile Pro Thr Tyr Ile Gly  
 85 90 95  
 Thr Leu Ser Ser Ala Asp Gln Gln Gly Pro Leu Ala Leu Thr Ala Ala  
 100 105 110  
 Ala Gln Gln Ser Gly Ala Ile Val Leu Pro Thr Ala Asp Asp Ser Ser  
 115 120 125  
 Ser Ser Ala Thr Pro Thr Thr Ala Glu Ala Pro Gln Leu Gly Leu Gln  
 130 135 140  
 Ala Gly Leu Gly Ser Asn Gly Thr Thr Glu Asn Lys Pro Trp Val Pro  
 145 150 155 160  
 Ser Gly Gly Lys Lys Leu Glu Thr Gly Leu Ser Ile Val Leu Glu Asn  
 165 170 175  
 Ile Ala Ser Gly Phe Lys Arg Pro Asn Val Leu Asp Val Lys Leu Gly  
 180 185 190  
 Ala Arg Leu Trp Ala Asp Asp Ala Pro Pro Ala Lys Arg Ala Lys Leu  
 195 200 205  
 Glu Ala Val Ala Lys Glu Thr Thr Ser Gly Ser Leu Gly Phe Arg Ile

## 18682

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      210                215                220
Ala Gly Met Lys Ile Trp Thr Gly Ala His Gly Glu Thr Asp Glu Gly
225                230                235                240
Ser Lys Thr Asn Pro Tyr Ala Thr Lys His Glu Gly Ser Glu Gly Ala
      245                250                255
Arg Gly Lys Ile Val Glu Lys Asp Gly Tyr Lys Arg Tyr Asp Lys Trp
      260                265                270
Tyr Gly Arg Ser Phe Asn Glu Lys Asn Val Lys Glu Gly Phe Glu Thr
      275                280                285
Phe Leu Ala Gly Ala Lys Ala Gly Pro Val Asp Arg Ser Lys Leu Ile
      290                295                300
Ala Lys Arg Leu Ala Asp Glu Leu Arg Arg Val Gln Ser Ile Leu Glu
305                310                315                320
Ser Glu Glu Ser Arg Met Tyr Ser Ser Ser Val Leu Ile Val Tyr Glu
      325                330                335
Gly Asp Pro Glu Ala Met Glu Gln Ala Leu Glu Glu Glu Lys Lys Pro
      340                345                350
Arg Asp Arg Ser Pro Glu Glu Ala Asp Glu Glu Asp Glu Asp Phe Asp
      355                360                365
Phe Ala Leu Gln Gly Asp Gly Ser Phe Glu Val Val Asn Leu Arg Val
      370                375                380
Gly Gln Glu Gly Ile Pro Gln Gln Ala Ile Asn Met Asn Leu Gly Pro
385                390                395                400
Glu Thr Ala Gln Leu Gly Gly Ile Asp Phe Glu Asp Glu Glu Glu Glu
      405                410                415
Asp Asp Pro Pro Lys Val His Asp Leu Arg Leu Ile Asp Phe Ala His
      420                425                430
Ala Ser Trp Thr Pro Gly Gln Gly Pro Asp Glu Asn Val Leu Met Gly
      435                440                445
Val Arg Ser Leu Ile Arg Leu Leu Asp Glu Leu Ala Val Glu
      450                455                460

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<210> 41985  
 <211> 92  
 <212> PRT  
 <213> A.fumigatus

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<400> 41985
Ser Lys Phe Cys Leu His Val Phe Phe Trp Phe Gly His Gly Leu Thr
1                5                10                15
Leu Asp Ser Lys Leu Ser Pro Lys Cys Val Lys Val Ala Arg Pro Gln
      20                25                30
Leu Phe Gly Tyr Ile Glu Thr Arg Glu Glu Phe Glu Phe Tyr Val Asn
      35                40                45
Glu Leu Phe His Leu Leu Gln Ser Gly Gln Leu Lys Val Arg Ile His
      50                55                60
Lys Val Tyr Pro Leu Glu Gln Val Gln Gln Ala His Ile Asp Leu Glu
65                70                75                80
Gly Arg Lys Thr Thr Gly Lys Ser Leu Leu Lys Pro
      85                90

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<210> 41986  
 <211> 180  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 41986

Val Leu Thr Phe Leu Ala Pro Ala Pro His Ile Lys Leu Tyr Gly Tyr  
 1 5 10 15  
 Glu Ala Thr Gln Arg Ser Leu Glu Arg Ile Leu Tyr Val Trp Ala Ile  
 20 25 30  
 Arg His Pro Ala Ser Gly Tyr Val Gln Gly Ile Asn Asp Leu Val Thr  
 35 40 45  
 Pro Phe Trp Gln Val Phe Leu Gly Met Tyr Met Thr Asp Leu Asn Val  
 50 55 60  
 Glu Glu Asp Met Asp Pro Gly Gln Leu Pro Arg Ser Val Leu Asp Ala  
 65 70 75 80  
 Val Glu Ala Asp Ser Phe Trp Cys Leu Thr Lys Leu Leu Asp Gly Ile  
 85 90 95  
 Gln Asp Asn Tyr Ile Tyr Ala Gln Pro Gly Ile His Arg Gln Val Arg  
 100 105 110  
 Ala Leu Arg Asp Leu Thr Met Arg Ile Asp Ser Thr Leu Ala Lys His  
 115 120 125  
 Leu Glu Asn Glu Gly Val Glu Phe Met Gln Phe Ser Phe Arg Trp Met  
 130 135 140  
 Asn Cys Leu Leu Met Arg Glu Met Ser Val Gln Asn Thr Ile Arg Met  
 145 150 155 160  
 Trp Asp Thr Tyr Met Val Cys Ser Arg Val Arg Ala Ala Leu Ile Thr  
 165 170 175  
 Ser Glu Ser Tyr  
 180

&lt;210&gt; 41987

&lt;211&gt; 833

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41987

Tyr Met Pro Ser Thr Pro Val Ser Trp Arg Cys Val Val His Arg Val  
 1 5 10 15  
 Tyr Pro Pro Leu Phe Trp Thr Asp Asp Arg Leu Asp Ser Phe Ala Thr  
 20 25 30  
 Tyr Arg Glu Ala Arg Glu Arg Gln Glu Arg Glu Glu Tyr Glu Arg Lys  
 35 40 45  
 Asn Pro Lys Ile Gln Gln Gln Phe Ala Asp Leu Lys Arg Ser Leu Ala  
 50 55 60  
 Ser Val Ser Glu Glu Gln Trp Ala Asn Leu Pro Glu Val Gly Asp Leu  
 65 70 75 80  
 Thr Gly Lys Asn Arg Arg Ala Lys Gln Asn Leu Arg Gln Arg Phe Tyr  
 85 90 95  
 Ala Val Pro Asp Ser Val Ile Ala Ser Ala Arg Asp Ser Thr Gln Phe  
 100 105 110  
 Glu Thr Thr Ile Ala Asp Asp Gly Thr Gln Thr Asp Val Arg Gly Gly  
 115 120 125  
 Ala Ala Asp Gly Thr Met Thr Asn Phe Ala Asp Ile Ser Ala Ala Arg  
 130 135 140  
 Asp Lys Val Leu Lys Val Arg Leu Asp Gln Ala Ala Arg Gly Ser Thr  
 145 150 155 160  
 Ala Asp Ser Ser Ser Gly Ser Ala Thr Asn Ile Asp Pro Lys Gly Tyr  
 165 170 175  
 Leu Thr Ser Leu Thr Gln Ser Glu Leu Lys Ala Gly Glu Val Glu Ile  
 180 185 190

Gly Asp Ile Lys Arg Val Arg Val Leu Leu Glu Ser Val Thr Lys Thr  
 195 200 205  
 Asn Pro Lys His Ala Pro Gly Trp Ile Ala Leu Ala Arg Leu Glu Glu  
 210 215 220  
 Leu Ala Gly Arg Ile Val Ala Ala Arg Asn Ile Ile Ala Lys Gly Cys  
 225 230 235 240  
 Glu Leu Cys Pro Lys Ser Glu Asp Ala Trp Leu Glu Asn Ile Arg Leu  
 245 250 255  
 Asn Glu Gly His Asn Ala Lys Val Ile Ala Ala Asn Ala Ile Lys Asn  
 260 265 270  
 Asn Asp Arg Ser Thr Arg Leu Trp Ile Glu Ala Met Arg Leu Glu Ser  
 275 280 285  
 Asp Thr Arg Ala Lys Lys Asn Val Leu Arg Gln Ala Ile Leu His Val  
 290 295 300  
 Pro Gln Ser Val Thr Ile Trp Lys Glu Ala Val Asn Leu Glu Glu Asp  
 305 310 315 320  
 Pro Ala Asp Ala Arg Leu Leu Leu Ala Lys Ala Val Glu Met Ile Pro  
 325 330 335  
 Leu Ser Val Glu Leu Trp Leu Ala Leu Ala Arg Leu Glu Thr Pro Glu  
 340 345 350  
 Asn Ala Gln Lys Val Leu Asn Ala Ala Arg Lys Ala Val Pro Thr Ser  
 355 360 365  
 His Glu Val Trp Ile Ala Ala Ala Arg Leu Gln Glu Gln Met Gly Thr  
 370 375 380  
 Phe Asp Lys Val Asn Val Met Lys Arg Ala Val Gln Ala Leu Ala Arg  
 385 390 395 400  
 Glu Asn Ala Met Leu Lys Arg Glu Glu Trp Ile Ala Glu Ala Glu Lys  
 405 410 415  
 Cys Glu Glu Glu Gly Ala Ile Leu Thr Cys Gly Ala Ile Ile Arg Glu  
 420 425 430  
 Thr Leu Gly Trp Gly Leu Asp Glu Asp Asp Arg Lys Asp Ile Trp  
 435 440 445  
 Met Asp Asp Ala Lys Gly Ser Ile Ala Arg Gly Lys Tyr Glu Thr Ala  
 450 455 460  
 Lys Ala Ile Tyr Ala Tyr Ala Leu Arg Val Phe Val Asn Arg Arg Ser  
 465 470 475 480  
 Ile Trp Leu Ala Ala Ala Asp Leu Glu Arg Asn His Gly Ser Lys Glu  
 485 490 495  
 Ala Leu Trp Gln Val Leu Glu Lys Ala Val Glu Ala Cys Pro Gln Ser  
 500 505 510  
 Glu Glu Leu Trp Leu Gln Leu Ala Lys Glu Lys Trp Gln Ala Gly Glu  
 515 520 525  
 Ile Asp Asp Ala Arg Arg Val Leu Gly Arg Ala Phe Asn Gln Asn Pro  
 530 535 540  
 Asn Asn Glu Asp Ile Trp Leu Ala Ala Val Lys Leu Glu Ala Asp Ala  
 545 550 555 560  
 Asp Gln Thr Asp Gln Ala Arg Glu Leu Leu Ala Thr Ala Arg Arg Glu  
 565 570 575  
 Ala Gly Thr Asp Arg Val Trp Ile Lys Ser Val Ala Phe Glu Arg Gln  
 580 585 590  
 Leu Gly Asn Ile Asp Glu Ala Leu Asp Leu Val Asn Gln Gly Leu Gln  
 595 600 605  
 Leu Tyr Pro Lys Ala Asp Lys Leu Trp Met Met Lys Gly Gln Ile Tyr  
 610 615 620  
 Glu Tyr Gln Asn Lys Tyr Pro Gln Ala Arg Glu Ala Tyr Ser Thr Gly  
 625 630 635 640

## 18685

Thr Arg Ala Cys Pro Lys Ser Val Pro Leu Trp Leu Leu Ala Ser Arg  
 645 650 655  
 Leu Glu Glu Lys Ser Gly Ala Val Val Lys Ala Arg Ser Val Leu Asp  
 660 665 670  
 Arg Ala Arg Leu Ala Val Pro Lys Ser Ala Glu Leu Trp Thr Glu Ser  
 675 680 685  
 Val Arg Val Glu Arg Arg Ala Asn Asn Ile Gly Gln Ala Lys Val Leu  
 690 695 700  
 Met Ala Lys Ala Leu Gln Glu Val Pro Thr Ser Gly Leu Leu Trp Ser  
 705 710 715 720  
 Glu Ser Ile Trp His Leu Glu Pro Arg Ala Gln Arg Lys Ala Arg Ser  
 725 730 735  
 Leu Glu Ala Ile Lys Lys Val Glu Asn Asp Pro Ile Leu Phe Ile Thr  
 740 745 750  
 Val Ala Arg Ile Phe Trp Gly Glu Arg Arg Leu Glu Lys Ala Met Thr  
 755 760 765  
 Trp Phe Glu Lys Ala Ile Val Ser Asp Ser Asp His Gly Asp Gly Trp  
 770 775 780  
 Ala Trp Tyr Tyr Lys Phe Leu Leu Gln His Gly Thr Glu Val Arg Ser  
 785 790 795 800  
 Ser Ser Ser Val Ser Asp Leu Leu Gln Ser Cys Arg Thr Thr Asn Ala  
 805 810 815  
 Thr Pro Arg Thr Gly Lys Lys Ser Arg Arg Cys Gly Gln Val Arg Leu  
 820 825 830  
 Asn

<210> 41988  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 41988  
 Ala Leu Ile Cys Ala Leu His Leu Phe Pro Gly Val Leu Ala Arg Ile  
 1 5 10 15  
 Ala Asp Leu Pro Arg Arg Arg Ala Gly Ser Pro Phe Trp Lys Gly Arg  
 20 25 30  
 Ser Val Ser Gln Pro Gln Gly Pro Ser Ala Thr Ala Thr Thr Ile Val  
 35 40 45  
 Gly Ala Ser Tyr Ser His Ala Asn Ile Leu Lys Phe Val Ile Ser Gln  
 50 55 60  
 Ser Ala Leu Ser Ser Ala Tyr Glu Leu Thr Lys Ser Asn Leu  
 65 70 75

<210> 41989  
 <211> 157  
 <212> PRT  
 <213> A.fumigatus

<400> 41989  
 Ala Pro Leu Glu Ala Thr Cys Tyr Gln Val Leu Ile Val Ala Ala Leu  
 1 5 10 15  
 Asp Pro Ala Asn Ala Leu Asn Leu Ile Asp His Ala Pro Pro Pro Lys  
 20 25 30  
 Asn Gly Ser Pro Lys Glu Val Glu Ile Tyr Ser Ser Arg Ile Ser Arg  
 35 40 45

## 18686

Ile Asn Lys Phe Lys Arg Leu Leu Gln Thr Ser Thr Val Ser Leu Ser  
 50 55 60  
 Glu Leu Arg Asn Leu Ala Trp Ser Gly Ile Pro Ala Glu Val Arg Ala  
 65 70 75 80  
 Met Thr Trp Gln Ile Leu Leu Gly Tyr Leu Pro Thr Asn Ser Glu Arg  
 85 90 95  
 Arg Val Ser Thr Leu Glu Arg Lys Arg Lys Glu Tyr Leu Asp Gly Val  
 100 105 110  
 Arg Gln Ala Phe Glu Arg Ser Thr Thr Pro Ser Pro Gly Asn Pro Gln  
 115 120 125  
 Ala Ser Ser Thr Gly Arg Gly Arg Gly Leu Asp Glu Ala Ile Trp His  
 130 135 140  
 Gln Ile Ser Ile Asp Val Pro Arg Thr Ser Pro Ser Tyr  
 145 150 155

&lt;210&gt; 41990

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41990

Ala Ser Val Glu Met Ala Ser Gly Arg Lys Asp Phe Leu Asn Gln Pro  
 1 5 10 15  
 Ala Pro Glu Asn Tyr Val Ala Gly Leu Gly Arg Gly Ala Thr Gly Phe  
 20 25 30  
 Thr Thr Arg Ser Asp Leu Gly Pro Ala Arg Glu Gly Pro Thr Pro Glu  
 35 40 45  
 Gln Ile Gln Ala Ala Leu Ala Lys Arg Ala Gln Leu Leu Gly Ala Ala  
 50 55 60  
 Pro Pro Thr Ala Tyr Gly Ala Gly Arg Glu Lys Gly Gly Arg Glu Glu  
 65 70 75 80  
 Lys Glu Glu Glu Glu Asp Glu Arg Phe Gln Asp Pro Asp Asn Glu  
 85 90 95  
 Val Gly Leu Phe Ala Tyr Gly Gln Phe Asp Gln Glu Asp Asp Glu Ala  
 100 105 110  
 Asp Arg Ile Tyr Lys Glu Val Asp Glu Lys Met Asp Lys Arg Arg Lys  
 115 120 125  
 Ala Arg Arg Leu Val His Ala Phe His Ser Cys Ile Leu Glu Met Arg  
 130 135 140  
 Cys Ser Ser Gly Leu Pro Pro Val Val Leu Asp Arg Arg Pro Thr  
 145 150 155

&lt;210&gt; 41991

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 41991

Asp Thr His Ser Leu Asp Val Ala Asn Leu Asp Phe Ala Arg Phe Gln  
 1 5 10 15  
 Leu Arg Leu Arg Gln Thr Cys Glu Ile Ser Phe Arg Val Asp Val Gly  
 20 25 30  
 Arg Thr Pro Gly Gly Gly Ile Ser Ser Gly Thr Pro Gly Gly Leu Ile  
 35 40 45  
 Lys Pro Asp Leu Lys His Leu Ile Thr Gly Ser Thr Asn Ile Arg Lys  
 50 55 60



## 18687

Val Arg His Cys Ala Val Arg Arg Ala Ser Thr Asn Ile Arg Leu Gly  
 65 70 75 80  
 Thr Val Ile Gly Tyr Gly Gly Phe Glu Leu Ser Gly Val Pro Cys Thr  
 85 90 95  
 Gly Asn Asn Ala Val Trp Tyr Arg Ile Glu Ala Leu Ser Gln Val Leu  
 100 105 110  
 Leu Ser Ser Ser Ile Leu Pro Arg Glu Val Ser Asp Phe Arg Lys Ile  
 115 120 125  
 Gly Pro Leu Leu Phe  
 130

<210> 41992  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 41992  
 Leu Ile Leu Ala Gly Ala Leu Ala Val Gly Cys Val Cys Val Ser Ser  
 1 5 10 15  
 Leu Ser Thr Ser Leu Pro Ser Ile Ile Thr Ser Asn Gln Ser Asn Arg  
 20 25 30  
 Ser Pro Val Ser Ser Leu Pro Leu Arg Cys Arg Leu Ile Leu Pro Ser  
 35 40 45  
 Ser Leu Phe Ser Pro Phe Leu Phe Leu Pro Phe Ser Phe Ile Ile Glu  
 50 55 60  
 Arg Asn Asp Tyr Ser Ser His Phe Ile  
 65 70

<210> 41993  
 <211> 107  
 <212> PRT  
 <213> A.fumigatus

<400> 41993  
 Phe Ser Met Ala Phe Ser Asn Ser Phe Leu Pro Arg Tyr Asp Ala Asp  
 1 5 10 15  
 Glu Asn Thr Asn His Ala Ser Ser Ala Pro Lys Ile Pro Asp Ser Thr  
 20 25 30  
 Val Ser Pro Ala Pro Ala Gln Glu Thr Thr Ser Pro Ala Thr Gln Thr  
 35 40 45  
 Ala Glu Asn Ser Lys Ser Glu Pro Glu Asp Gly His Thr Ala Asp Ser  
 50 55 60  
 Ser Ala Tyr Ser Tyr Asp Gly His Gln Gly Asn Gly Ser Gly Met Tyr  
 65 70 75 80  
 Asp Thr Asn His Thr Thr Asn Val Thr Ala Ala Pro Thr Thr Glu Gln  
 85 90 95  
 Glu Pro Gln Gly Thr Gly Ile Lys Glu Asp Gly  
 100 105

<210> 41994  
 <211> 241  
 <212> PRT  
 <213> A.fumigatus

<400> 41994  
 Leu Pro Gln Leu Thr Asn Ser Leu Leu Gly Leu Gly Leu Asn Ala Ser

## 18688

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1           5           10           15
Asn Leu Gly Ser Ser Leu Gly Leu Cys Arg Cys Leu Val Phe Leu His
20           25           30
Glu Gly Glu Ser Lys Asn Leu Leu Asp Ala Val Val Val Arg Glu Glu
35           40           45
His Asp Gln Thr Val Asn Thr His Thr Pro Thr Thr Gly Arg Arg Gln
50           55           60
Thr Ile Leu Gln Thr Cys Ala Glu Val Leu Val Asp Glu Leu Gly Leu
65           70           75           80
Val Ile Thr Leu Val Leu Leu Ser Gly Leu Leu Leu Glu Thr Glu Thr
85           90           95
Leu Val Glu Gly Val Val Gln Leu Gly Val Cys Val Asp Asn Leu Leu
100          105          110
Phe Ala Asn Lys Ser Leu Glu Thr Leu Ala Glu Thr Gly Val Leu Thr
115          120          125
Val Val Leu Gly Lys Gly Arg His His Leu Gly Val Ala Gly Asp Glu
130          135          140
Gly Arg Val Asp Ala Gly Leu Leu Asp Glu Leu Ala Asp Gln Leu Val
145          150          155          160
Glu His Thr Gly Val Gly Gln Arg Arg Arg Ala Phe Asn Thr Ser Leu
165          170          175
Leu Lys His Ala Leu Glu Glu Leu Ala Ser Phe Gly Gly Val Gln Leu
180          185          190
Val Ser Arg Arg Glu Leu Leu Ala Cys Gly Leu Leu Gln Cys Gly Asn
195          200          205
His Leu His Pro Pro Pro Gly Cys Leu Pro Val Asp Val Val Asp Leu
210          215          220
Thr Arg Leu Ser Val Glu Gly Gly Leu Ile Ala Thr Gly Asn Val Leu
225          230          235          240
Asn

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<210> 41995  
 <211> 210  
 <212> PRT  
 <213> A.fumigatus

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<400> 41995
Ala Pro Val Glu Leu Ala Met Ala Asn Ser Arg Leu Trp Val Arg Ser
1           5           10           15
Lys Pro Phe Val Thr Glu Leu Thr Thr Lys Leu Thr Tyr Thr Phe Gln
20           25           30
Thr Ala Asp Asn Gln His Leu Gln Val Gln Leu Gly Gly Asn Thr His
35           40           45
Glu Gln Val His Val Lys Ile Val Met Val Gly Asn Glu Gly Phe Ser
50           55           60
Gly Ser Thr Ala Gly Asp Gly Val His His Gly Gly Leu Asp Phe Asp
65           70           75           80
Glu Val Pro Ala Ile Lys Glu Val Ala His Val Ser Asn Asp Leu Gly
85           90           95
Ala Ser Asp Glu Asp Ile Thr Arg Ser Leu Val His Asp Gln Ile Gln
100          105          110
Val Thr Leu Ala Glu Ala Leu Leu Leu Val Leu Glu Thr Val Val Leu
115          120          125
Arg Arg Asn Gly Val Gln Ala Gly Arg Gln Glu Asn Asn Leu Ser Gly
130          135          140

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## 18689

Glu Asp Arg Lys Phe Thr Val Gly Ala Val Leu Gly Ala Gly Thr Ala  
 145 150 155 160  
 Arg Glu Thr Asp Asn Thr Asn Asp Ile Ser Ser Ala Gln Val Leu Val  
 165 170 175  
 Leu Ser Leu Glu Gly Asp Ile Pro Ala Gly Val Leu Gly Leu Ala His  
 180 185 190  
 Asn Leu His Leu Asp Thr Phe Gly Thr Asp Ile Val Glu Glu Glu Leu  
 195 200 205  
 Gly Ala  
 210

<210> 41996  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 41996  
 Phe Ile Leu Asn Asp Cys Asn Gln Phe Phe Thr Ala Phe Gly Glu Lys  
 1 5 10 15  
 Phe Arg Met Tyr Thr Leu Thr Asp Arg Val Asp Glu Pro Gly Thr Arg  
 20 25 30  
 Tyr Phe Ile Val Ala Thr Ser Arg Leu Arg Thr Ile Ser Lys Ser Leu  
 35 40 45  
 Glu Leu Asn Leu Thr Ser Lys Ile Glu Leu Thr Ala Ile Ile Leu Ser  
 50 55 60  
 Ser  
 65

<210> 41997  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<400> 41997  
 Tyr Leu Ala Ala Lys Asp Leu Glu Ser Gln Met Asp Glu Ser Gly Gln  
 1 5 10 15  
 Met Ala Val Tyr Gly Val Phe Ser Val Asp Val Glu Ala Pro Arg Asp  
 20 25 30  
 Pro Trp Phe Thr Lys Ala Asp Pro Cys Tyr Ser Arg Leu Val Leu Val  
 35 40 45  
 Asn Leu Lys Leu Val Pro Lys Glu Pro Asn Glu Val Pro Val Val Gly  
 50 55 60  
 Leu Glu Gln Ser Ala Trp Ser Ser Gly Gly Ile Thr Ala Val Gln Ala  
 65 70 75 80

<210> 41998  
 <211> 502  
 <212> PRT  
 <213> A.fumigatus

<400> 41998  
 Cys Ser Gln Gly Gly Leu Pro Leu Leu Thr Phe Pro Pro His Ser Glu  
 1 5 10 15  
 Ser Val Ala Asp Ser Arg Val Ile Glu Leu Asp Gln Pro Leu Phe Glu  
 20 25 30  
 Val Ala Gly His Pro Ile Ile Asn His Cys Leu Lys Ala Leu Ala Lys

35 40 45  
 Ile Ser Asp Ile Arg Glu Val Ile Leu Val Gly Tyr Tyr Asp Glu Ser  
 50 55 60  
 Val Phe Arg Asp Phe Ile Lys Asp Ser Ser Lys Glu Phe Pro Gln Phe  
 65 70 75 80  
 Arg Ile Gln Tyr Leu Arg Glu Tyr Thr Ala Leu Gly Thr Ala Gly Gly  
 85 90 95  
 Leu Tyr His Phe Arg Asp Ala Ile Leu Lys Gly Lys Pro Glu Arg Ile  
 100 105 110  
 Phe Val Leu Asn Ala Asp Val Cys Cys Ser Phe Pro Leu Gly Glu Met  
 115 120 125  
 Leu Lys Leu Phe Glu Glu Lys Asp Ala Glu Ala Val Ile Leu Gly Thr  
 130 135 140  
 Arg Val Ser Asn Asp Ala Ala Thr Asn Phe Gly Cys Ile Val Ser Asp  
 145 150 155 160  
 Ser His Thr Lys Arg Val Leu His Tyr Val Glu Lys Pro Glu Ser His  
 165 170 175  
 Ile Ser Asn Leu Ile Asn Cys Gly Val Tyr Leu Phe Ala Thr Glu Cys  
 180 185 190  
 Ile Phe Pro Ala Ile Arg Ser Ala Ile Lys Arg Arg Thr Thr Arg Pro  
 195 200 205  
 Arg Leu Leu Ser Tyr Pro Ser Ser Glu Asn Leu Glu Ala Ser Phe Val  
 210 215 220  
 Ala Ala Asp Glu Glu Thr Glu Lys Ser Glu Val Leu Arg Leu Glu Gln  
 225 230 235 240  
 Asp Ile Leu Ser Asp Leu Ala Asp Ser Asn Arg Phe Phe Val His Glu  
 245 250 255  
 Thr Lys Asp Phe Trp Arg Gln Ile Lys Thr Ala Gly Ser Ala Val Pro  
 260 265 270  
 Ala Asn Ala Leu Tyr Leu Gln Lys Ala Phe Gln Ala Gln Ser Asp Glu  
 275 280 285  
 Leu Thr Pro Pro Ser Ala Thr Ile Val Pro Pro Val Tyr Ile His Pro  
 290 295 300  
 Thr Ala Thr Val Asp Pro Thr Ala Lys Leu Gly Pro Asn Val Ser Ile  
 305 310 315 320  
 Gly Ala Arg Val Val Val Gly Ala Gly Ala Arg Ile Lys Asp Ser Ile  
 325 330 335  
 Val Leu Glu Asp Ala Glu Ile Lys His Asp Ala Cys Val Met His Ser  
 340 345 350  
 Ile Ile Gly Trp Ser Ser Arg Val Gly Ala Trp Ala Arg Val Glu Gly  
 355 360 365  
 Thr Pro Ile Pro Met Thr Ser His Ser Thr Ser Ile Ile Lys His Gly  
 370 375 380  
 Ile Lys Val Gln Ser Ile Thr Ile Leu Gly Lys Glu Cys Ala Val Gly  
 385 390 395 400  
 Asp Glu Val Arg Val Gln Asn Cys Val Cys Leu Pro Tyr Lys Glu Leu  
 405 410 415  
 Lys Arg Val Cys Tyr Leu Ala Leu Leu His Phe Leu Thr Thr Leu Thr  
 420 425 430  
 Leu Val Asn Arg Met Leu Pro Thr Arg Leu Leu Cys Ser Glu Thr Phe  
 435 440 445  
 Lys Lys Asp Cys Ser Lys Leu Asp Leu Phe Asp Gly Leu Tyr Ile Phe  
 450 455 460  
 Leu Val Thr Thr Asn Pro Phe Asp Ser Ser Ile Asn Thr Leu Tyr Ser  
 465 470 475 480  
 Lys Pro Phe Ser Trp Thr Leu Asp Asn Val Asp His Leu Gly Ala Arg

## 18691

485  
Thr Ala Ile Ile Leu Val  
500

490

495

<210> 41999  
<211> 240  
<212> PRT  
<213> A.fumigatus

<400> 41999  
Leu Leu Val Ser Ala Phe Leu Ser Ile Leu Asn Tyr Val Phe Thr Ser  
1 5 10 15  
Leu Thr His Cys Phe Tyr Gly Leu Ser Pro Arg Leu Ser Leu Leu Ser  
20 25 30  
Asn Thr Ile Leu Leu Ile Leu Trp Leu Ile Ser Leu Gly Leu Leu Ser  
35 40 45  
Trp Ser Met Ser His Thr Ile Leu Thr Thr Cys Asn Ala Thr Tyr Trp  
50 55 60  
Ala Thr Ser Thr Gly Ile Ala Val Cys Arg Thr Tyr Lys Ala Leu Phe  
65 70 75 80  
Thr Phe Thr Cys Thr Ser Thr Phe Ala Ala Ile Ala Ala Val Ala Leu  
85 90 95  
Asp Ile Ile Ile His Lys Arg Gln Thr Arg Leu Gly Gln Tyr Asp Pro  
100 105 110  
Met Thr Ser Asn Pro Asp Ile Lys Leu His Glu Arg Asn Asn Ser Ala  
115 120 125  
Val Thr Asn Thr Asn Ala Ser Val Pro Leu Asp Asp Glu Arg His Pro  
130 135 140  
Leu Gln Ala Gln His Gln Phe His Asp Ser Pro Tyr Thr Asp Arg His  
145 150 155 160  
Gly Ile Ser Asp Ile Pro Gly Ser Gly Tyr Ala Asp His Pro Ala Tyr  
165 170 175  
Arg Val Pro Pro Pro Val Tyr Gly Leu Ser Ala Ser Ala Glu His Tyr  
180 185 190  
His Ala Gly Glu Ala His Glu Phe Ser Glu Thr Ala Pro Ala Arg Ser  
195 200 205  
Gln Gln Gly Gly Pro Arg Val Arg Phe Ser Gly Val Gly Arg Pro Glu  
210 215 220  
Tyr Gly Tyr Pro Ala Glu Gln Lys Ala Tyr Asp Ser Gly Thr Tyr Arg  
225 230 235 240

<210> 42000  
<211> 731  
<212> PRT  
<213> A.fumigatus

<400> 42000  
Pro Val Ala Ala Thr Arg Asn Asn Thr Pro Val Val Met Ser Gly Leu  
1 5 10 15  
Pro Ser Ser Glu Thr Glu Ala Ile Asn Leu Ile Ala Arg Asp Met Lys  
20 25 30  
Cys Leu Val Lys Lys Ile Gln Asp Leu Arg His Ile Gly Val Glu Asp  
35 40 45  
Ser Arg Ile Ala Leu Pro Lys Ile Cys Val Ile Gly Asp Gln Ser Thr  
50 55 60  
Gly Lys Ser Ser Leu Ile Glu Gly Met Ser Gln Ile Lys Val Pro Arg

## 18692

65				70				75				80	
Ser	Ala	Gly	Thr	Cys	Thr	Arg	Cys	Pro	Met	Glu	Ile	Asn	Leu
				85				90				95	
Gly	Glu	Pro	Gly	Gln	Asp	Trp	Asn	Cys	Arg	Ile	Phe	Leu	Ser
			100					105				110	Arg
Tyr	Ile	Phe	Asp	Gly	Ser	Arg	Lys	Val	Thr	Lys	Leu	Pro	Lys
			115				120					125	Lys
Gln	Pro	Leu	Gly	Pro	Trp	Ile	Glu	Gln	Asp	Gln	Glu	Asp	Glu
			130			135				140			His
Thr	Asp	Val	Arg	Asp	Lys	Asp	Gly	Val	Gln	Ala	Ala	Ile	Lys
145					150					155			Trp
Gln	Leu	Ala	Ile	Leu	Asn	Pro	Gly	Arg	Pro	Ser	Thr	Asp	Tyr
			165					170					Gln
Gly	His	Asn	Gly	Asp	Thr	Asp	Glu	Ser	Tyr	Cys	Gln	Val	Lys
			180					185				190	Phe
Pro	Asn	Val	Val	Arg	Leu	Asp	Ile	Ser	Ala	Pro	Asn	Phe	Pro
			195				200					205	Asn
Ser	Phe	Tyr	Asp	Leu	Pro	Gly	Val	Ile	Ser	Gln	Ala	Glu	His
210						215				220			Asp
Glu	Arg	Tyr	Leu	Val	Ser	Leu	Val	Glu	Asn	Leu	Val	Arg	Glu
225					230					235			Tyr
Ser	Gln	Glu	Asn	Cys	Ile	Val	Leu	Leu	Ala	Leu	Pro	Met	Thr
			245							250			Asp
Ala	Thr	Asn	Ser	Ser	Ala	Ala	Lys	Ile	Met	Arg	Asp	Val	Pro
			260					265				270	Gly
Lys	Glu	Arg	Thr	Leu	Gly	Val	Leu	Thr	Lys	Pro	Asp	Arg	Ile
			275				280					285	Gln
Gly	Glu	Ser	Tyr	Asp	Gln	Trp	Val	Glu	Ile	Leu	Glu	Gly	Asp
290						295				300			Lys
Ala	Leu	Gly	His	Gly	Tyr	Tyr	Ile	Val	Arg	Asn	Asn	Pro	Asn
305					310					315			Pro
Ile	Glu	His	Ser	Arg	Ala	Arg	Glu	Glu	Glu	Ala	Val	Phe	Phe
			325							330			Ala
Ile	Pro	Trp	Ala	Thr	Asp	Leu	Ser	Ala	Tyr	Gln	Asn	Arg	Phe
			340					345				350	Gly
Arg	Asn	Leu	Gln	Trp	Gly	Leu	Ser	Ser	Leu	Leu	Leu	Glu	Gln
			355			360						365	Ile
Gly	Cys	Leu	Pro	Arg	Ile	Val	Glu	Gln	Ile	Asn	Glu	Lys	Ala
370						375				380			Ala
Met	Glu	Ala	Glu	Leu	Gln	Thr	Leu	Pro	Asp	Pro	Pro	Ser	Ala
385					390					395			Asn
Pro	Tyr	Ile	Leu	Cys	Gly	Lys	Leu	Asn	His	Leu	Lys	Asp	Gln
			405					410					Ile
Ala	His	Ile	Asp	Gly	Gly	Ser	Ala	Gln	Tyr	Pro	Leu	Gln	Lys
			420					425				430	Ile
Gly	Asn	Ile	Ala	Arg	Asp	Phe	Lys	Arg	Ala	Leu	Leu	Lys	Thr
			435				440					445	Arg
Thr	Val	Gln	Leu	Leu	Ala	His	Ser	Asp	Lys	Met	Ala	Ile	Pro
			450			455					460		Ile
Arg	Glu	Asp	Ala	Asp	Ser	Asp	Cys	Glu	Met	Thr	Ser	Ile	Gln
465					470					475			Arg
Val	Ser	Val	Asn	Leu	Lys	Arg	Lys	Thr	Pro	Cys	Asp	Arg	Leu
			485						490				Thr
Ile	Pro	Ala	Asp	Pro	Lys	Pro	Glu	Gln	Pro	Ser	Thr	Pro	Arg
			500				505					510	Pro
Gly	Tyr	Tyr	Thr	Glu	His	Phe	Asn	Arg	Phe	Glu	Arg	Pro	Ala
													Arg
													Met

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      515              520              525
Phe Thr Trp Glu Glu Ile Arg Glu Ile Asn Glu Asp Ser Tyr Arg Ala
  530              535              540
Gly Ile Pro Asp Gln Thr Asp Pro Lys Ala Val Glu Val Met Asn Gln
545              550              555              560
Leu Ser Val Glu His Trp Asp Lys Pro Met Glu Val Phe Leu Gly Ala
      565              570              575
Thr His Gln Leu Val Arg Asp Met Met Met Arg Gln Leu Lys Asp Val
      580              585              590
Phe Arg Pro Tyr Tyr Gln Thr Ser Leu Tyr Arg Glu Leu Lys Arg Ile
      595              600              605
Ile Asp Asn Tyr Leu Gln Thr Leu Arg Lys Glu His Phe Arg His Ala
      610              615              620
Gln Glu Asn Tyr Asn Ile Glu His Asn Lys Pro Phe Thr Met Ala Ile
625              630              635              640
Ser Ala Leu Glu Gln Ala Thr Glu Asn Ala Tyr Lys Tyr Leu Lys Ala
      645              650              655
Arg Arg His Glu Ala Arg Ser His Cys Phe Leu Asp Leu Gln Gly Lys
      660              665              670
Ile Pro Arg Gly Asp Pro Arg Arg Asp Ala Glu Ile Lys Lys Leu Thr
      675              680              685
Ala Ala Glu Leu Gly Pro Asp Gly Phe Val Gln Glu Leu Lys Met Met
      690              695              700
Ala Val Ser Ser Ile Leu Leu Val Arg Leu Ser Ser Ser Asp Leu Leu
705              710              715              720
Ile Val Leu Arg Arg Leu Val Ala Thr Met Lys
      725              730

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<210> 42001  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

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<400> 42001
Gln Asn Pro Ala Val Glu Arg Cys Met Glu Leu Met Ala Glu Asp Pro
1              5              10              15
Glu Arg Gln Arg Arg Arg Gln Tyr Leu Leu Lys Glu Lys Glu Lys Val
      20              25              30
Leu Lys Ala Gln Glu Trp Leu Ala Thr Ala Lys Lys Glu Asp Asp Ala
      35              40              45
Met Asp Ser Ala Asp Ser Asp Ser Thr Ile Lys Ser Gln Pro Pro Glu
      50              55              60
Asp Trp Ser Ser Phe Pro Gly Phe Gly Pro Val Ala Gly
65              70              75

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<210> 42002  
 <211> 172  
 <212> PRT  
 <213> A.fumigatus

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<400> 42002
Asn Ile Phe Leu Gly Tyr Ser Asn Thr Ser Arg Ser Val Ala Ser Glu
1              5              10              15
Ser Thr Ser Cys Ala Arg Pro Ser Ser Pro Thr Pro Thr Leu Thr Ser
      20              25              30
Ser Arg Ser Pro Met Thr Cys Val Asn Thr Ser Arg Pro Thr Met Val

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18694

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      35              40              45
Ser Pro Arg Ala Ser Arg Ser Pro Met Ser Pro Ser Val Ser Pro Val
  50              55              60
Glu Ser Thr Pro Ser Gly Leu Gln Ala Pro Ser Ser Ser Ser Thr Ile
  65              70              75              80
Ser Val Pro Lys Val Ser Arg Cys Arg Leu Cys Ala Arg Pro Arg Thr
      85              90              95
Pro Ala Gly Met Ser Pro Ser Arg Leu Ser Thr Ser Thr Cys Ala Glu
      100              105              110
Glu Ile Ser Leu Val Leu Ser Val Ser Leu Ala Val Pro Ala Pro Arg
      115              120              125
Thr Ala Pro Thr Val Asn Phe Leu Ser Ser Pro Leu Arg Leu Phe Ser
      130              135              140
Trp Arg Pro Ala Cys Thr Pro Phe Leu Arg Ser Thr Thr Val Ser Arg
      145              150              155              160
Thr Arg Ser Ser Ala Ser Ala Asn Val Thr Trp Ile
      165              170

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<210> 42003

<211> 294

<212> PRT

<213> A.fumigatus

<400> 42003

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Leu Ser Ala Val Trp Asn Val Tyr Val Ser Leu Val Val Ser Ser Val
  1              5              10              15
Thr Lys Gly Phe Asp Leu Thr His Asn Arg Glu Phe Ala Ile Ala Ser
      20              25              30
Ser Thr Gly Ala Tyr Ala Asp Val Tyr Asp Val Met Asn Leu Thr Glu
      35              40              45
Glu Leu Ile Ser Gly Leu Val Lys His Val Thr Gly Gly Tyr Glu Thr
      50              55              60
Thr Phe His Thr Gln Ser Gly Glu Val Tyr Asn Val Asn Trp Lys Ala
      65              70              75              80
Pro Trp Arg Arg Val Glu Met Ile Pro Ala Leu Glu Glu Ala Thr Gly
      85              90              95
Glu Lys Phe Pro Pro Gly Asp Gln Leu His Thr Ala Glu Thr Gly Glu
      100              105              110
Phe Leu Lys Arg Val Leu Lys Lys Thr Gly Val Glu Cys Ser Pro Pro
      115              120              125
Leu Thr Asn Ala Arg Met Leu Asp Lys Leu Val Gly Glu Phe Ile Glu
      130              135              140
Glu Thr Cys Val Asn Pro Thr Phe Ile Thr Gly His Pro Gln Met Met
      145              150              155              160
Ser Pro Leu Ala Lys Tyr His Arg Gln His Ala Gly Leu Cys Glu Arg
      165              170              175
Phe Glu Ala Phe Val Cys Lys Lys Glu Ile Val Asn Ala Tyr Thr Glu
      180              185              190
Leu Asn Asp Pro Phe Asp Gln Arg Leu Arg Phe Glu Glu Gln Ala Arg
      195              200              205
Gln Lys Asp Gln Gly Asp Asp Glu Ala Gln Leu Ile Asp Glu Asn Phe
      210              215              220
Cys Thr Ser Leu Glu Tyr Gly Leu Pro Pro Thr Gly Gly Trp Gly Met
      225              230              235              240
Gly Ile Asp Arg Leu Val Met Phe Leu Thr Asp Asn Tyr Ser Ile Lys
      245              250              255

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## 18695

Glu Val Leu Ala Phe Pro Phe Met Lys Glu Asp Lys Thr Ala Ala Glu  
                   260                  265                  270  
 Thr Lys Thr Ala Ala Glu Val Ala Gly Ile Glu Pro Lys Pro Glu Glu  
                   275                  280                  285  
 Gly Ile Arg Lys Leu Arg  
                   290

<210> 42004  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 42004  
 Phe Asn Met Ala Asp Ser Asn Ala Val Asn Glu Val Glu Ala Ser Val  
 1                  5                  10                  15  
 Ala Asn Leu Leu Leu Asp Glu Val Thr Gly Glu Arg Val Ser Lys Thr  
                   20                  25                  30  
 Glu Leu Lys Lys Arg Gln Lys Met Arg Glu Arg Glu Ala Lys Lys Lys  
                   35                  40                  45  
 Glu Lys Glu Ala Asn Ala Pro Lys Pro Glu Lys Lys Val Ser Ala  
                   50                  55                  60  
 Glu Glu Glu Glu Ala Asn Leu Thr Pro Asn Val Cys Ser Ile Cys Thr  
 65                  70                  75                  80  
 Arg Arg Asn Leu Ser Gly Tyr Ser Arg Leu Ser Gly Phe Val Ala Lys  
                   85                  90                  95  
 Ile Phe Phe Leu Asp Ile Ala Ile Leu Arg Asp Pro  
                   100                  105

<210> 42005  
 <211> 248  
 <212> PRT  
 <213> A.fumigatus

<400> 42005  
 Gln Tyr Phe Glu Ile Arg Ser Lys Arg Ile Asn Lys Leu Arg Glu Thr  
 1                  5                  10                  15  
 Lys Gln Pro Asp Pro Tyr Pro His Lys Phe Gln Val Thr Asp Asp Leu  
                   20                  25                  30  
 Arg Glu Tyr Leu Lys Thr Tyr Asp Gly Leu Ala Lys Gly Glu Gln Lys  
                   35                  40                  45  
 Pro Asp Val Thr Val Arg Ile Ala Gly Arg Ile Tyr Thr Lys Arg Ser  
                   50                  55                  60  
 Ser Gly Ser Lys Leu Phe Phe Tyr Asp Ile Arg Ala Glu Gly Val Lys  
 65                  70                  75                  80  
 Val Gln Val Val Cys Gln Ala Gln Asn Ala Ser Gly Asp Val Ser Phe  
                   85                  90                  95  
 Glu Ala Gln His Glu His Leu Arg Arg Gly Asp Ile Val Gly Val Val  
                   100                  105                  110  
 Gly Phe Pro Gly Arg Thr Ser Pro Lys Asn Arg Ala Asp Gly Glu Leu  
                   115                  120                  125  
 Ser Ile Phe Ala Thr Glu Val Val Leu Leu Ala Pro Cys Leu His Ala  
                   130                  135                  140  
 Ile Pro Ser Glu His Tyr Gly Phe Gln Asp Lys Glu Gln Arg Phe Arg  
 145                  150                  155                  160  
 Gln Arg Tyr Leu Asp Leu Ile Met Asn Glu Arg Ser Arg Asn Val Phe  
                   165                  170                  175

## 18696

Val Thr Arg Ser Lys Ile Val Arg Tyr Val Arg Asn Phe Phe Asp Ser  
 180 185 190  
 Arg Asp Phe Ile Glu Val Glu Thr Pro Met Met Asn Ala Ile Ala Gly  
 195 200 205  
 Gly Ala Thr Ala Lys Pro Phe Ile Thr His His Asn Asp Leu Asp Met  
 210 215 220  
 Asn Leu Phe Met Arg Val Pro Pro Glu Leu Tyr Leu Lys Met Leu Ile  
 225 230 235 240  
 Val Gly Gly Leu Glu Arg Val Cys  
 245

&lt;210&gt; 42006

&lt;211&gt; 889

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42006

Ala His Gly Trp Phe Leu Phe His Lys Arg Tyr Trp Leu Leu Ser Trp  
 1 5 10 15  
 Ile Arg Met Ala Ser Asp Ser Arg Cys Leu Cys Ser Ala Ser Gly Cys  
 20 25 30  
 Asn Asp Leu Arg Leu Arg Ser Gly Ser Leu Leu Ile Ala Ala Gly Glu  
 35 40 45  
 Pro Pro Arg Ser Thr Ile Asn Arg Glu Pro Arg Ser Ser Arg Arg Val  
 50 55 60  
 Ile Cys Cys Ile Arg Ser Ser Phe Thr Met Ser Asp Asp Ala Lys Ser  
 65 70 75 80  
 Lys Val Phe Pro Asp Ile Ser Ala Lys Leu Ser Ala Leu Pro Lys Lys  
 85 90 95  
 Ser Leu Phe Glu Arg Gln Arg Ala Glu Ala Glu Ala Lys Arg Ala Arg  
 100 105 110  
 Glu Gln Ala Glu Thr Ala Ala Val Tyr Glu Asp Phe Val Lys Ser Phe  
 115 120 125  
 Glu Asp Asp Ser Gly Pro Ser Asp Arg Ile Thr Thr Gly Gly Arg Pro  
 130 135 140  
 Asn Asn Thr Phe Gly Gly Arg Ser Ala Ala Leu Gly Gly Gly Pro Ala  
 145 150 155 160  
 Lys Arg His Phe Thr Ser Ser Gly Pro Arg Ser Ser Gly Pro Gly Thr  
 165 170 175  
 Leu Gly Pro Pro Pro Ser Ser Leu Ser Arg Lys Arg Thr His Glu Gly  
 180 185 190  
 Phe Gln Pro Phe Gln Arg Asn Arg Glu Ser Ala Gln Gly Ile Leu Gly  
 195 200 205  
 Phe Asp Asn Thr Gly Ser Ala Ser Ser Pro Ala Ala Leu Ala Phe Arg  
 210 215 220  
 Thr Ser Asp Asp Glu Glu Asp Arg Val Ala Asp Ala Lys Glu Ala Glu  
 225 230 235 240  
 Arg Ala Ala Ala Lys Pro Thr Leu Tyr Leu Ala Ser Leu Pro Pro Gly  
 245 250 255  
 Thr Ser Pro Ser Ala Ile Lys Ser Leu Ile Pro Ser Val Leu Ser Val  
 260 265 270  
 Asp Asn Val Lys Ile Leu His Pro Ser Asn Gln Ser Pro Thr Asp Arg  
 275 280 285  
 Lys Ser Ile Ser Ala Ile Val Thr Leu Ala Asn Glu Ser Ala Ala Ser  
 290 295 300  
 Asp Ile Asp Ser Thr Val Ser Ala Leu Gln Asn Lys Tyr Leu Gly Trp

## 18697

305		310		315		320
Gly Tyr Tyr Leu Ser	Ile Ala Arg His	Leu Ser Ser Ala Ala	Ile Ser			
	325	330	335			
Ser Ser Met Pro Val Thr Val Gly Pro	Ser Ser Thr Ser Ser Leu Pro					
	340	345	350			
Phe Gly Ala Lys Thr Ile Thr Pro Glu Tyr Gly Gly Arg Leu Asn Arg						
	355	360	365			
Ala Pro Pro Pro Gly Ser His Arg Gly Gly Phe Ala Pro Pro Ala Ser						
	370	375	380			
Tyr Gly Ala Ala Tyr Gly Arg Ser Gly Pro Val Thr Gln Val Glu Val						
385	390	395	400			
Lys Thr Pro Ser Asp Leu Lys Gln Leu Arg Leu Ile His Lys Thr Leu						
	405	410	415			
Glu Asn Leu Leu Asn Tyr Gly Pro Glu Phe Glu Ala Leu Leu Met Ser						
	420	425	430			
Arg Pro Glu Val Gln Arg Asp Glu Lys Trp Ala Trp Leu Trp Asp Pro						
	435	440	445			
Arg Ser Ala Gly Gly Val Tyr Tyr Arg Trp Lys Leu Trp Asp Ile Leu						
	450	455	460			
Thr Asn Ser Ser Pro Lys Gly Ala Arg Arg Gly Arg Ser Arg Asn Ala						
465	470	475	480			
Ser Ile Leu Phe Glu Gly Gly Pro Ser Trp Val Ser Pro Asp Thr Gly						
	485	490	495			
Ile Lys Phe Glu Tyr Thr Thr Arg Met Asp Glu Phe Val Ser Asp Glu						
	500	505	510			
Asp Tyr Asn Ser Ser Asp Glu Glu Met Ser Asp Gly Glu Asp Glu Arg						
	515	520	525			
Arg His Leu Gly Gly Ala Pro Pro Ala Asp Gly Ala Gly Thr Gly Asn						
	530	535	540			
Glu Gly Val Gly Tyr Met Asn Pro Leu Gln Lys Ala Lys Leu Thr His						
545	550	555	560			
Leu Leu Ala Arg Leu Pro Thr Thr His Ala Lys Leu Arg Lys Gly Asp						
	565	570	575			
Val Ala Arg Val Thr Ala Phe Ala Ile Gly His Ala Gly Ala Gly Ala						
	580	585	590			
Glu Glu Val Val Glu Met Ile Val Ser Asn Ile Met Asn Pro Phe Ala						
	595	600	605			
Tyr Thr Gly Ala Asn Pro Asp Arg Glu Ile Glu Lys Gly Leu Ala Arg						
	610	615	620			
Gln Glu Ala Ser Lys Asn Glu Ser Ser His Ala Ser Val Glu Gly Ala						
625	630	635	640			
Ser Ser Leu Ser Lys Thr Asn Met Asp Thr Ser Ser Ala Lys Leu Val						
	645	650	655			
Gly Leu Tyr Leu Val Ser Asp Ile Leu Ser Ser Ser Ala Thr Ser Gly						
	660	665	670			
Val Arg His Ala Trp Arg Tyr Arg Gln Leu Phe Glu Ser Ala Leu Lys						
	675	680	685			
Ser His Arg Val Phe Glu His Leu Gly Arg Leu Glu Lys Asp Leu Asn						
	690	695	700			
Trp Gly Arg Leu Arg Ala Glu Lys Trp Lys Arg Ser Val Gly Ser Leu						
705	710	715	720			
Leu His Leu Trp Glu Gly Trp Cys Val Phe Pro Gln Ser Ser Gln Glu						
	725	730	735			
His Phe Ser Gln Val Phe Glu Lys Pro Pro Leu Thr Glu Glu Glu Leu						
	740	745	750			
Arg Glu Glu Lys Ala Lys Ala Glu Ala Asp Arg Ala Ala Gly Ala Ala						

## 18698

755                      760                      765  
 Phe Lys Gly Lys Asn Arg Trp Lys Thr Leu Glu Glu Asp Glu Thr Ala  
 770                      775                      780  
 Gly Lys Phe Asp Pro Ser Arg Pro Pro Ala Gln Pro Val His Asn Arg  
 785                      790                      795                      800  
 Met Asp Ile Asp Gln Gly His Thr Ala Ser Ala Gly Gly Asp Leu Ala  
 805                      810                      815  
 Gly Glu Pro Met Ser Asp Ile Asp Gly Glu Pro Met Glu Asp Ser Asp  
 820                      825                      830  
 Leu Glu Glu Ala Leu Asp Gly Glu Pro Leu Glu Glu Asp Ser Ala Met  
 835                      840                      845  
 Glu Thr Glu Gln Lys Glu Glu Ala Pro Ser Lys Ser Glu Ala Pro Ser  
 850                      855                      860  
 Gln Leu Glu Ser Gly Pro Pro Ala Arg Lys Pro Arg Pro Arg Ala Glu  
 865                      870                      875                      880  
 Asp Met Phe Ala Asp Ser Asp Thr Glu  
 885

&lt;210&gt; 42007

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42007

Glu Val Asp Gly Ser Phe Ser Tyr Ser Trp Asp Ser Val Ile Val Gln  
 1                      5                      10                      15  
 Ser Val Asn Ile Ala Ala Val Ser Ser Leu Pro Glu Gly Ala Ala Pro  
 20                      25                      30  
 Asp Arg Asp Leu Arg Cys Ser Ala Phe Glu His Gly Gly Arg His His  
 35                      40                      45  
 Gly His Gly His Arg Trp Ser Ala Gly Thr Leu Gly Leu Ser Tyr Leu  
 50                      55                      60  
 Ile Arg Cys Cys Val Val Leu Val Leu Met Ser Glu Gln Val Asp Glu  
 65                      70                      75                      80  
 Glu Gln Lys Pro Met Ser Tyr Ser Gln Thr Phe Gln Leu Leu Arg Glu  
 85                      90                      95  
 Gly Glu Ser Tyr Tyr Val Phe Asn Asp Met Phe Arg Leu Ile Tyr Pro  
 100                      105                      110  
 Ala

&lt;210&gt; 42008

&lt;211&gt; 268

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42008

His Ile His Ser Trp Ser Asp Ser His Leu Lys Ala Phe Leu Asp Arg  
 1                      5                      10                      15  
 His Gly Val Pro Val Pro Gln Pro Arg Arg Arg Asp Val Leu Leu Lys  
 20                      25                      30  
 Ala Ala Arg Glu Asn Tyr Glu Ala Ile Ala Lys Lys Val Gly Glu Thr  
 35                      40                      45  
 Ala His Tyr Pro Gly Asn Trp Leu Tyr Glu His Trp Thr Glu Ser Asp  
 50                      55                      60  
 Leu Lys Glu Trp Leu Asp Glu Arg Gly Trp Pro Val Pro Gln Pro Thr

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<210> 42009
<211> 174
<212> PRT
<213> A.fumigatus
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Glu	Ser	Pro	Arg	Val	Cys	Val	Lys	Ser	His	Leu	Ser	Asn	Phe	Ala	Asp
1				5					10					15	
Arg	Lys	Tyr	Leu	Ser	Ser	Met	Asn	Ala	Lys	Ala	Ala	His	Arg	Thr	Asp
			20					25					30		
Val	Thr	Arg	Asp	Glu	Leu	Ile	Lys	Gln	Ala	Gln	Glu	Ala	Tyr	Ala	Lys
		35					40					45			
Ala	Ser	Lys	Ala	Gly	Gly	Ala	Asn	Ile	Ala	Ser	Ala	Thr	Ser	Tyr	Met
	50					55					60				
Ala	Gln	Ala	Thr	Asp	Ala	Val	Lys	Asp	Thr	Thr	Phe	Asp	Thr	Trp	Ser
65					70					75					80
His	Ser	Glu	Leu	Lys	Ala	Tyr	Leu	Asp	Ser	Tyr	Gly	Ile	Pro	Thr	Tyr
				85					90					95	
Gln	Gly	Ser	Ser	Ile	Asn	Glu	Leu	Arg	Ala	Ala	Ala	Arg	Arg	Asn	Ala
			100					105					110		
Gln	Tyr	Phe	Arg	Tyr	Gly	Thr	Thr	Ser	Pro	Gln	Gly	Ile	Leu	Tyr	Ser
		115					120					125			
Lys	Leu	Gln	Glu	Trp	Ser	Arg	Trp	Ala	Met	Asp	Gln	Leu	Lys	Ile	Gly
	130					135					140				
Ala	Leu	Ser	Gly	Arg	Ala	Gln	Gly	Gln	Glu	Ala	Ala	Glu	Lys	Ala	Lys
145					150					155					160
Ala	Lys	Ala	Ser	Glu	Gly	Ala	Glu	Lys	Ile	Arg	Ser	Glu	Leu		
				165					170						

<210> 42010

18700

<211> 85  
<212> PRT  
<213> A.fumigatus

<400> 42010  
Leu Thr Thr Asn Gly Thr Lys Leu Asn Trp Asn Asp Gly Ser Pro Ile  
1 5 10 15  
Met Val Arg Phe Phe Ser Ile Asp Thr Pro Ser Ile His Thr Ala Asn  
20 25 30  
Asp Ala Pro Asp Ile Pro Tyr Pro Thr Pro Ala Asp Arg Lys Ala Leu  
35 40 45  
Glu Asp Leu Val Lys Arg Asn Trp Asp Ser Lys Ile Gln Lys Pro Leu  
50 55 60  
Gly Asn Ala Val Glu Asn Ser Ala Asp Gln Trp His His Ala Lys Glu  
65 70 75 80  
Trp Ile Phe Asp Thr  
85

<210> 42011  
<211> 144  
<212> PRT  
<213> A.fumigatus

<400> 42011  
Arg Arg Pro Phe Ala Leu Pro Ala Lys Phe Pro Pro Pro Val Gly Val  
1 5 10 15  
Arg His Leu Ser Thr Pro Thr Thr Leu Pro Trp Lys Thr Asn Gly Glu  
20 25 30  
Gly Arg Lys Asn Arg Leu Ile Leu Pro Phe Arg Gly Arg Val Phe Glu  
35 40 45  
Arg Asp Pro Arg Gln Gly Asn Phe Thr Ala Leu Lys Ala Trp Gly Ser  
50 55 60  
Asp Leu Glu Tyr Arg Arg Lys Ile Gln Leu Lys Pro Val Cys Ile Phe  
65 70 75 80  
Gln Gly Gly Pro Tyr Glu Asn Phe Ala Gly Arg Asp Ala Ser Arg Gly  
85 90 95  
Leu Gln His Gln Ser Phe Asp Val Glu Met Leu Thr Lys Asp Leu Lys  
100 105 110  
Val Leu Leu Asp Asp Leu Lys Asp Leu Asn Glu Glu Gln Leu Glu Asn  
115 120 125  
Leu Pro Val Leu Gly Gly Ala Leu Ser Gly Glu Val Ser Arg Arg Gly  
130 135 140

<210> 42012  
<211> 62  
<212> PRT  
<213> A.fumigatus

<400> 42012  
Ser Arg Gly Ala Lys Val Val Asn Gly Ile Tyr His Phe Cys Ser Asn  
1 5 10 15  
Ser Met Arg Asp Val Leu Arg Leu Arg Ile Tyr Phe Ser Glu Asp Leu  
20 25 30  
Leu Arg Arg Thr Ile Asp Lys Met Thr Gln Ser Arg Asp Arg Val Lys  
35 40 45  
Glu Ala Leu Val Ser His Asp Asn Val Tyr Lys Gly Ile Ser

## 18701

50

55

60

&lt;210&gt; 42013

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42013

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Thr Ser Thr Asn Glu His Ser Leu Ile Ile Phe Gly Ile Leu Leu Ser
1           5           10           15
Tyr Leu Pro Gln His Ile Arg Ile Ile Asn Leu Lys Ser Ser Phe Gly
          20           25           30
Ile Ser Pro Tyr Phe Val Leu Leu Gly Thr Thr Ser Gly Thr Ser Ala
          35           40           45
Leu Ala Asn Val Val Thr Gln Gln Ser Leu His Asp Val Glu Cys
          50           55           60
Cys Lys Asn Ile Asn Gly Leu Ala Cys Phe Gly Gly Leu Leu Gly Ile
65           70           75           80
Phe Gln Val Gly Thr Gln Trp Leu Cys Phe Val Ile Met
          85           90

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&lt;210&gt; 42014

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42014

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Cys Gly Met Leu Gln Glu His Gln Trp Thr Ser Leu Leu Trp Gly Thr
1           5           10           15
Thr Arg His Leu Pro Ser Arg Asp Thr Val Ala Leu Leu Cys Tyr His
          20           25           30
Val Ser Ser Pro Thr Ser Pro Pro Asp Asn Ile His Val Ile Asn Ala
          35           40           45
Arg Ser Cys Ser Leu Leu Leu Phe Val Ile Tyr Phe Pro Arg Ala Thr
          50           55           60
Ser Pro Ile Ser Pro Thr Glu Ser Glu Ser Ser Ala Arg Asn Gly Pro
65           70           75           80
Ser Tyr Thr Thr Ala Leu Val Val Ser Gly Ile Cys Ile Leu His Ala
          85           90           95
Val Val Met Phe Ile Thr Ser Ala Ala Ile Ala Val Asn Arg Pro Ser
          100          105          110
Gln Leu Gln Ala Trp Ser Asn Phe Ser Gly Val Val Ala Ala Ile Leu
          115          120          125
Ala Ser Ile Gln Tyr Phe Pro Gln Ile Tyr Thr Thr Leu Arg Leu Arg
          130          135          140
Cys Val Gly Ser Leu Ser Ile Pro Met Met Cys Ile Gln Thr Pro Gly
145          150          155          160
Ser Leu Val Trp Ala Gly Ser Leu Ala Ala Arg Leu Gly Pro Lys Gly
          165          170          175
Trp Ser Thr Trp Gly Val Leu Ile Val Thr Ala Cys Leu Gln Gly Thr
          180          185          190
Leu Leu Ala Met Ala Ile Phe Phe Glu Tyr Phe Gly Pro Asn Lys Gln
          195          200          205
Arg Asn His Arg His Gly Lys Asp Leu Pro Pro Asn Gly Ser Gly Glu
210          215          220
Gly Pro Glu Glu Arg Asp His Glu Gln Pro Ser Glu Glu Thr Pro Leu

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## 18702

225                      230                      235                      240  
 Leu Gln Gly Gln

<210> 42015  
 <211> 557  
 <212> PRT  
 <213> A.fumigatus

<400> 42015  
 Arg Thr Ile Val Ala Ala Ser Thr Met Thr Ala Pro Leu Val Lys Asp  
 1                      5                      10                      15  
 Leu His Arg Met Gln Glu Leu Phe Ser Asn Ile Val Ala Ala Leu Glu  
 20                      25                      30  
 Ala Met Ile Val Phe Pro Ser Leu Phe Arg Asp Pro Ser Arg Lys Arg  
 35                      40                      45  
 Arg Lys Thr Phe His Gly Ala Tyr Trp Arg Arg Arg Thr Leu Asp Asn  
 50                      55                      60  
 Phe Ala Glu Glu Val Asp Arg Leu Phe Thr Ser Pro Leu Ser Leu Arg  
 65                      70                      75                      80  
 Asn Met Ile Ile Met Ser Glu Lys Ile Arg Glu Gln Phe Lys Ser Cys  
 85                      90                      95  
 Leu Gln Ser Ser Pro Val Cys Met Leu Pro Ser Tyr Asn His Ala Leu  
 100                      105                      110  
 Pro Ser Gly Thr Glu Lys Gly Thr Tyr Leu Ala Leu Asp Val Gly Gly  
 115                      120                      125  
 Ser Thr Phe Arg Val Ala Leu Ile Glu Leu Gly Gly Ala Gly Ala Met  
 130                      135                      140  
 Lys Ile Leu Gln Glu Ser Ser Ser Pro Ile Asp Asn Asp Val Lys Leu  
 145                      150                      155                      160  
 Leu Glu Gly Thr Leu Phe Phe Asp Trp Met Ala Glu Lys Ile Glu Ser  
 165                      170                      175  
 Met Leu Ser Ala Val Gly Ala Asp Tyr Gly Arg Glu Ala Val Pro Leu  
 180                      185                      190  
 Ser Met Gly Leu Ser Trp Ser Phe Pro Ile Glu Gln Thr Ser Ile Ser  
 195                      200                      205  
 Ser Gly Leu Val Ile His Met Gly Lys Gly Phe Leu Cys Ser Asn Gly  
 210                      215                      220  
 Thr Leu Gly Gln Glu Leu Gly Asp Leu Ile Val Gln Ser Cys Arg Arg  
 225                      230                      235                      240  
 Arg Ser Leu Asn Val Arg Val Asp Ala Ile Val Asn Asp Ser Ser Ala  
 245                      250                      255  
 Ala Leu Leu Ser Arg Ala Tyr Val Asp Pro Lys Thr Arg Met Ser Leu  
 260                      265                      270  
 Ile Leu Gly Thr Gly Thr Asn Val Ala Val His Phe Pro Val Arg Glu  
 275                      280                      285  
 Ile Gly Leu Thr Lys Phe Gly Thr Arg Pro Pro Gly Trp Phe Asp Tyr  
 290                      295                      300  
 Ala Lys His Val Ile Ile Asn Ser Glu Leu Ser Met Phe Gly Gly Gly  
 305                      310                      315                      320  
 Ile Leu Pro Met Thr Arg Trp Asp Asp Ile Leu Asn Gln Thr His Leu  
 325                      330                      335  
 Arg Ala Asp Tyr Gln Pro Leu Glu Tyr Met Val Thr Gly Arg Asn Leu  
 340                      345                      350  
 Gly Asp Ile Val Arg Leu Ile Ile Thr Glu Ala Val Glu Thr Ala Asn  
 355                      360                      365



## 18703

Leu Phe Arg Gly Glu Leu Pro His Ser Met Arg Asp Pro Tyr Ser Phe  
 370 375 380  
 Asp Thr Ser Ile Val Ala Phe Leu Glu Ala Asp Thr Ser Pro Ser Leu  
 385 390 395 400  
 Val Pro Ser Ala Ala Leu Leu Gln Lys Glu His Thr Phe Pro Val Ser  
 405 410 415  
 Pro Ser Val Glu Asp Leu Arg Phe Leu Arg Arg Ile Cys Gln Ile Val  
 420 425 430  
 Ser Lys Arg Ala Ala Gly Tyr Leu Ala Thr Ala Ile His Ser Met Trp  
 435 440 445  
 Cys Leu Arg Asn Asp Ala Glu Phe Ser Asp Pro Thr Glu Ser Lys Ala  
 450 455 460  
 Ser Ser Val Lys Asp Thr Gln Glu Ile Thr Ile Val Glu Ser Glu Glu  
 465 470 475 480  
 Asp Ser Arg Ser Leu Ser Ile Ala Cys Asp Gly Ser Val Ile Asn Lys  
 485 490 495  
 Tyr Pro Gly Phe Arg Asp Arg Cys Gln Gly Tyr Leu Asn Gln Leu Thr  
 500 505 510  
 Gln Gln Thr Asn Ser Ser Gln Gly Pro Leu Asp Pro Ala Thr Ser Pro  
 515 520 525  
 Tyr Ile Arg Leu Glu Leu Ala Pro Glu Ser Ala Ile Leu Gly Ala Ala  
 530 535 540  
 Val Ala Val Ala Val Ala Val Glu Asp Gln Lys Ser Gly  
 545 550 555

&lt;210&gt; 42016

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42016

Thr Asp Ile Asp Asp Phe Thr Tyr Ser His Ile Leu Lys Gln Glu Ser  
 1 5 10 15  
 Met Val Thr Ser Lys Met Gly Asn Asn Cys Ser Ala Lys Asp Asn Asp  
 20 25 30  
 Pro Phe Arg Asn Gln His Val Arg Ile Tyr His Ala Ile Cys Ala Ile  
 35 40 45  
 Phe Arg Phe Asn Cys Asn Cys Met Leu Cys Met Gly Pro Asp Phe Glu  
 50 55 60  
 Cys Asn Ile Leu Lys Thr Leu Lys Tyr Gln  
 65 70

&lt;210&gt; 42017

&lt;211&gt; 479

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42017

Ala Gly Tyr Arg Leu Lys Ala Phe Pro Pro Ser Gly Ser Gly Ile Lys  
 1 5 10 15  
 Met Arg Trp Ser Ser Leu Leu Lys Ala Ala Val Leu Tyr Arg Ala Ile  
 20 25 30  
 Leu Ser Pro Leu Val Ser Gly Ala Val Ile Pro Arg Gly Ala Val Pro  
 35 40 45  
 Val Ala Ser Asp Leu Ser Leu Val Ser Ile Leu Ser Ser Ala Ala Asn  
 50 55 60

## 18704

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Asp Ser Ser Ile Glu Ser Glu Ala Arg Ser Ile Ala Ser Leu Ile Ala
65          70          75          80
Ser Glu Ile Val Ser Lys Ile Gly Lys Thr Glu Phe Ser Arg Ser Thr
          85          90          95
Lys Asp Ala Lys Ser Val Gln Glu Ala Phe Asp Lys Ile Gln Ser Ile
          100         105         110
Phe Ala Asp Gly Thr Pro Asp Phe Leu Lys Met Thr Arg Glu Ile Leu
          115         120         125
Thr Val Gly Leu Ile Pro Ala Asp Ile Leu Ser Phe Leu Asn Gly Tyr
          130         135         140
Leu Asn Leu Asp Leu Asn Ser Ile His Asn Arg Asn Pro Ser Pro Lys
145          150          155          160
Gly Gln Ala Ile Tyr Pro Val Lys Ala Pro Gly Asp Ala Arg Tyr Ser
          165         170         175
Val Ala Glu Asn Ala Leu Arg Ala Ala Ile His Ile Pro Ala Ser Phe
          180         185         190
Gly Tyr Gly Lys Asn Gly Lys Lys Pro Val Ile Leu Val Pro Gly Thr
          195         200         205
Ala Thr Pro Ala Gly Thr Thr Tyr Tyr Phe Asn Phe Gly Lys Leu Gly
          210         215         220
Ser Ala Ala Asp Ala Asp Val Val Trp Leu Asn Ile Pro Gln Ala Ser
225          230          235          240
Leu Asn Asp Val Gln Ile Asn Ser Glu Tyr Val Ala Tyr Ala Ile Asn
          245         250         255
Tyr Ile Ser Ala Ile Ser Glu Ser Asn Val Ala Val Leu Ser Trp Ser
          260         265         270
Gln Gly Gly Leu Asp Thr Gln Trp Ala Leu Lys Tyr Trp Pro Ser Thr
          275         280         285
Arg Lys Val Val Asp Asp Phe Ile Ala Ile Ser Pro Asp Phe His Gly
          290         295         300
Thr Val Met Arg Ser Leu Val Cys Pro Trp Leu Ala Ala Leu Ala Cys
305          310         315         320
Thr Pro Ser Leu Trp Gln Gln Gly Trp Asn Thr Glu Phe Ile Arg Thr
          325         330         335
Leu Arg Gly Gly Gly Gly Asp Ser Ala Tyr Val Pro Thr Thr Thr Ile
          340         345         350
Tyr Ser Thr Phe Asp Glu Ile Val Gln Pro Met Ser Gly Ser Gln Ala
          355         360         365
Ser Ala Ile Leu Ser Asp Ser Arg Ala Val Gly Val Ser Asn Asn His
          370         375         380
Leu Gln Thr Ile Cys Gly Gly Lys Pro Ala Gly Gly Val Tyr Thr His
385          390         395         400
Glu Gly Val Leu Tyr Asn Pro Leu Thr Trp Ala Leu Ala Val Asp Ala
          405         410         415
Leu Ser His Asp Gly Pro Gly Asp Pro Ser Arg Leu Asp Leu Asp Val
          420         425         430
Val Cys Gly Arg Val Leu Pro Pro Gln Leu Gly Leu Asn Asp Leu Leu
          435         440         445
Gly Thr Glu Gly Leu Leu Leu Ile Ala Leu Ala Glu Val Leu Ala Tyr
          450         455         460
Lys Pro Lys Thr Phe Gly Glu Pro Ala Ile Ala Ser Tyr Ala His
465          470         475

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&lt;210&gt; 42018

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42018

Ser	Asn	Arg	His	Asn	Arg	His	Arg	Pro	Gly	Asn	Pro	Val	Ser	Gly	Thr
1				5					10					15	
Arg	Thr	Ser	Asp	Gly	Ala	Tyr	Tyr	Val	Asn	Phe	Pro	Gly	Gly	Val	Asn
			20					25					30		
Asp	Ile	Ala	Val	Phe	Thr	Leu	Glu	Val	Gln	Arg	Val	Lys	Gly	Thr	Glu
		35					40					45			
Thr	Val	Ser	Val	Thr	Leu	Asn	Asp	Asn	Gly	Asn	Gly	Ser	Ala	Pro	Gly
		50				55					60				
Ser	Lys	Trp	Ser	Cys	Thr	Ser	Thr	Ser	Gly	Ser	Val	Met	Gly	Thr	Val
65				70					75					80	
Lys	Lys	Cys	Ala	Tyr	Asp	Gly	Asp	Ile	Thr	Leu	Thr	Pro	Phe	Asn	Ala
				85					90					95	

&lt;210&gt; 42019

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42019

Thr	Ser	Ser	Ser	Ser	Ala	Ser	Asn	Asn	Ala	Thr	Gln	Leu	Phe	Ile	Ser
1				5					10					15	
Asn	Pro	Phe	Ser	Ser	Tyr	Lys	Met	Lys	Val	Ser	Thr	Ile	Tyr	Ser	Val
			20					25					30		
Val	Leu	Ala	Ala	Gly	Ser	Ala	Ile	Ala	Val	Pro	Gly	Lys	Arg	Ala	Gly
		35					40					45			
Gln	Ala	Ile	Thr	Ile	Ser	Asp	Leu	Lys	Ala	Ser	Gln	Val	Asp	Gln	Gln
		50				55					60				
Gly	Tyr	Ile	Thr	Phe	Ala	Leu	Lys	Asp	Pro	Asn	Tyr	Asp	Asp	Ser	Thr
65				70					75					80	
Gly	Ala	Asn	Val	Ile	Trp	Tyr	Ile	Tyr	Val	Pro	Ser	Gly	Pro	Ile	Arg
			85						90					95	
Asp	Leu	Thr	Asp	Ile	Ile	Gly	Ile	Val	Leu	Glu	Thr	Pro	Phe	Pro	Ala
			100					105					110		
Leu	Ala	Leu	Ala	Thr	Val	Pro	Thr	Met	Ser	Ile	Ser	Gln	Glu	Val	
			115				120						125		

&lt;210&gt; 42020

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42020

Tyr	Arg	Ile	Phe	Lys	Pro	Leu	Val	Arg	Ala	Ala	Trp	Arg	Thr	Phe	Arg
1				5					10					15	
Ser	Gly	Pro	Lys	Leu	Ala	Val	Ile	Pro	His	Ser	Lys	Thr	Pro	Thr	Val
			20					25					30		
Phe	Leu	Pro	Ser	Ile	Thr	Ser	Thr	Tyr	Ala	Pro	Leu	Phe	Glu	Cys	Asp
		35					40					45			
Tyr	Asn	Met	His	Lys	Ser	Asn	Ser	Thr	Tyr	Phe	Thr	Asp	Leu	Asp	Ala
	50					55					60				
Ser	Arg	Ser	Tyr	Leu	Leu	Ser	Ala	Leu	Cys	Tyr	Asp	Gly	Leu	Val	Thr
65				70					75					80	
Val	Asp	Arg	Glu	Leu	Ala	Ala	Glu	Gly	Lys	Lys	Gly	Met	Leu	Ala	Ala

## 18706

```

      85                      90                      95
Ile Ile Gly Ser Val Thr Thr Ser Phe Lys Lys Glu Ile Arg Ile Phe
      100                      105                      110
Gln Glu Tyr Glu Val Trp Ser Arg Ile Leu Thr Trp Asp Arg Lys Trp
      115                      120                      125
Leu Tyr Ile Val Thr His Phe Val Gln Lys Gly Ser Ala Lys Pro Thr
      130                      135                      140
Gly Tyr Leu Ile Ala Lys Ser Thr Arg Leu Asp Leu Lys Arg Ser Thr
      145                      150                      155                      160
Glu Glu Ser Arg Cys His Ser Gly Gln Pro Val Thr Phe Ala Thr Ile
      165                      170                      175
Asp Phe Gln Ile Arg Leu
      180

```

&lt;210&gt; 42021

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42021

```

Glu Lys Gly Gly Phe Thr Ser Leu Arg Glu Arg Ile Leu Lys Ala Ser
1      5      10      15
Gly Leu Met Gly Gln Asp Asn Lys Glu Glu Lys Arg Glu Val Leu Pro
      20      25      30
Asn Asn Val Gln Gly His Thr Ser Asp Ser Gly Val Pro Glu Asp Ile
      35      40      45
Glu Ser Glu Arg Leu Lys Gly Met Lys Tyr Ala Glu Ser Trp Asn Gln
      50      55      60
Leu Asp Ser Leu His Glu Leu Leu Lys Gln Asp Glu Leu Val Asn
      65      70      75      80
Gly Val Leu Ala Leu Asn His Phe Gly Asp Ile Ser Leu Pro Trp Lys
      85      90      95
Arg Phe Thr Thr Ala
      100

```

&lt;210&gt; 42022

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42022

```

Glu Lys Asn Ile Pro Glu Gln Arg Gly Ile Phe Asp Leu Pro Cys Arg
1      5      10      15
Ser Met Arg Asp Ile Leu Val Glu Thr Phe Leu Thr Leu Val Thr Pro
      20      25      30
Phe Ala Pro Ile Ile Asp Ile Leu Gly Phe Leu Arg His Tyr Arg Ile
      35      40      45
Arg Leu Leu His Phe Ser Cys Tyr Met Pro Cys Ser Pro Ser Val Gln
      50      55      60
Gly Ser Val His Leu Glu Val Arg Thr Gln Gly Pro Tyr Gln Arg Ser
      65      70      75      80
Leu Gln Lys Gly Lys Ser Leu Val Arg Cys Arg Leu Arg Thr Arg Ser
      85      90      95
Asp Pro Thr His Pro Val Asn Ala Ile Leu Gly Leu Tyr Trp Glu Gly
      100      105      110
Arg Arg Tyr Leu Ser Thr Pro Ala Val Leu Phe Gly

```

115

120

&lt;210&gt; 42023

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42023

```

Ser Thr Arg Val Leu Arg Leu Leu Asp Cys Leu Lys Phe Asp Ala Asp
1          5          10          15
Thr Met Ser Thr Tyr Val Val Ser Asp Gln Pro Leu Asn Asn Ser Leu
          20          25          30
Val Gly Ser Ile Ser Ser Leu Leu Ser Ala Ala Gly Val Pro Asn Leu
          35          40          45
Leu Trp Gly Asn Tyr Leu Leu Thr Val Tyr Gly Val Pro Thr Ile Val
          50          55          60
Asp Val Ser Val Leu Pro Val Arg Ala Ile Asp
65          70          75

```

&lt;210&gt; 42024

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42024

```

Val Ile Val Leu Ser Phe Ser Thr Leu Phe Leu Ala Phe Gln Glu Gly
1          5          10          15
Ser Glu Glu Asp Thr Phe Tyr Ala Arg Gln Phe Lys Thr Tyr Asn Gln
          20          25          30
Arg Val Ile Lys Trp Leu Gln Lys Val Cys Ser Glu His Pro Val Gly
          35          40          45
Phe Pro Tyr Leu Asn Asp Asp Ser Pro Ser Ile His Thr Ala Pro Arg
          50          55          60
Pro Leu Ser Asp Asp Leu Gly Leu Ala
65          70

```

&lt;210&gt; 42025

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42025

```

Ser Ser Gly Phe Arg Arg Ser Val Arg Ser Thr Pro Ser Ala Phe His
1          5          10          15
Thr Ser Thr Met Thr Ala Pro Gln Ser Thr Pro Pro Arg Val Leu Ser
          20          25          30
Val Thr Ile Ser Ala Ser His Asn Phe Ser Lys Asn Ala Val Ser Ser
          35          40          45
Ile Lys Leu Ile Ala Asn Leu Gly Val Glu Gly Asp Cys His Ala Gly
          50          55          60
Glu Thr Val Gln His Arg Ser Arg Leu His Ile Lys Pro Pro Pro Ala
65          70          75          80
Asn Leu Arg Gln Val His Leu Ile Pro Ile Glu Ile Leu Arg Gly Ile
          85          90          95
Cys Ala Thr Leu Pro Thr Asp Glu Met Arg Thr Gln Leu Leu Ala Pro
          100          105          110

```

## 18708

Gly Ala Leu Gly Gln Asn Ile Thr Thr Glu Gly Val Asp Leu Leu Ser  
           115                  120          125  
 Leu Gly Ala Gly Thr Glu Ile Arg Phe Val Glu Asp Gly Glu Ala Val  
       130                  135          140  
 Gly Glu Glu Ala Val Ile Thr Leu Thr Gly Leu Arg Asn Pro Cys Pro  
 145                  150          155          160  
 Gln Ile Asp Lys Phe Gln Ala Gly Leu Lys Glu Gln Phe Leu Val Arg  
                   165          170          175  
 Asp Glu Glu Arg Asn Ile Val Arg Arg Leu Ala Gly Val Met Ala Thr  
                   180          185          190  
 Val Lys Lys Gly Gly Val Val Arg Pro Gly Met Lys Leu Ile Ile Asp  
           195                  200          205  
 Lys Pro Ser Gln Tyr Val Pro Leu Asp Val Val  
       210                  215

&lt;210&gt; 42026

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42026

Lys Ile Ser Thr Ser Glu Leu Phe Thr Asp Gly Ala Met Trp Met Arg  
 1                  5          10          15  
 Asp Ile Leu Ser Thr Arg Ser Val Tyr Ile Ser Val Thr Phe Glu Asn  
                   20          25          30  
 Asn Arg Thr Ala Thr Ile Arg Ala Ser Asp Thr Val Ser Ile Asn Leu  
           35                  40          45  
 Arg Glu His Gln Leu Tyr Asn Leu Gln Ser Leu Phe Leu  
       50                  55          60

&lt;210&gt; 42027

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42027

Thr Ala Tyr Ala Pro Asp Val Ser Leu Val Asn Gly Val Tyr His Val  
 1                  5          10          15  
 Tyr Tyr Ser Val Ser Thr Phe Gly Ser Gln Ser Ser Ala Ile Gly Leu  
                   20          25          30  
 Ala Thr Ser Ser Thr Met Asp Leu Asn Ser Trp Thr Asp His Gly Ser  
           35                  40          45  
 Thr Gly Ile Gln Ser Ser Ser Ser Lys Pro Tyr Asn Ala Ile Asp Gly  
       50                  55          60  
 Asn Leu Phe Lys Asp Gly Gly Thr Tyr Tyr Met Asn Phe Gly Ser Phe  
 65                  70          75          80  
 Trp His Asp Ile Tyr Gln Ala Pro Met Asn Ser Ala Ala Thr Ser Val  
                   85          90          95  
 Ala Ser Ser Ser Tyr Asn Ile Ala Tyr Asn Pro Ser Gly Thr His Ala  
           100                  105          110  
 Val Glu Gly Ala Phe Met Tyr Lys Tyr Gly Asn Tyr Tyr Tyr Leu Phe  
           115                  120          125  
 Phe Ser Ala Gly Ile Cys Cys Gly Tyr Asp Thr Ser Arg Pro Ala Ser  
       130                  135          140  
 Gly Glu Glu Tyr Lys Ile Lys Val Cys Arg Ser Thr Ser Ala Thr Gly  
 145                  150          155          160

## 18709

Asn Phe Val Ser Glu Ser Gln Glu Glu Thr Leu Lys Val Val Lys Leu  
 165 170 175  
 Met Phe Ser

<210> 42028  
 <211> 144  
 <212> PRT  
 <213> A.fumigatus

<400> 42028  
 Arg Asn Thr Thr Leu Thr Leu Tyr Arg Trp Phe Ser Thr Thr Met Gly  
 1 5 10 15  
 Thr Gly Ile Val Ala Ile Leu Phe His Leu Ile Pro Phe Gly His Thr  
 20 25 30  
 Tyr Leu His Tyr Val Ser Ile Val Phe Phe Ile Phe Asn Val Val Leu  
 35 40 45  
 Phe Ala Val Val Leu Ser Met Ser Ile Leu Arg Tyr Thr Leu Tyr Pro  
 50 55 60  
 Glu Ile Trp Ala Val Met Ile Gln Asp Pro Thr Asn Ser Leu Phe Leu  
 65 70 75 80  
 Ala Thr Cys Pro Met Gly Phe Ala Thr Leu Ile Glu Met Trp Val Phe  
 85 90 95  
 Val Cys Val Pro Ala Trp Gly Asp Trp Ala Arg Thr Val Ala Trp Val  
 100 105 110  
 Leu Trp Ile Val Asp Ala Val Ala Ala Ala Ser Val Thr Val Ser Leu  
 115 120 125  
 Ser Phe Ile Leu Tyr Phe Gln Pro Leu Val Ile Cys Leu Ala Lys Gly  
 130 135 140

<210> 42029  
 <211> 140  
 <212> PRT  
 <213> A.fumigatus

<400> 42029  
 Met Asn Gly Thr His Ile Tyr Arg Lys Phe Val Pro Ser Tyr His Ala  
 1 5 10 15  
 Ser Phe Leu Thr Ile Val Lys Leu Thr Gly Asp Trp Ser Val Ala Met  
 20 25 30  
 Ser Ala Ser Val Phe Val Val Val Ala Ser Cys Leu Ala Ala Leu Ala  
 35 40 45  
 His Gly Tyr Ala Asn Pro Gly Ser Cys Leu Gly Ala Cys Asn Val His  
 50 55 60  
 Asp Pro Ala Leu Ile Arg Arg Glu Ser Asp Gly Lys Tyr Phe Arg Phe  
 65 70 75 80  
 Ser Thr Gly Asn Lys Ile Ser Tyr Ala Ser Ser Ser Ser Ile Glu Gly  
 85 90 95  
 Pro Trp Thr Val Leu Gly Ser Val Leu Pro Ser Gly Ser Ser Ile Asp  
 100 105 110  
 Leu Pro Gly Asn Asp Asp Leu Trp Val Ser Asn Phe Ser Leu Asp Ser  
 115 120 125  
 Ile Cys Phe Leu Leu Thr Gln Ser Glu Phe Ser Ile  
 130 135 140

<210> 42030

18710

<211> 97  
 <212> PRT  
 <213> A.fumigatus

<400> 42030

Cys	Ser	Leu	Arg	Leu	Met	Leu	Thr	Val	Ser	Leu	Ala	Arg	Met	Val	Ala
1				5					10					15	
Val	Arg	Leu	Phe	Ser	Lys	Val	Thr	Glu	Met	Tyr	Thr	Asp	Leu	Val	Asp
			20					25					30		
Ser	Met	Ser	Leu	Ile	His	Ile	Ala	Pro	Ser	Val	Lys	Ser	Ser	Glu	Val
		35					40					45			
Leu	Ile	Phe	His	Arg	Gly	Val	Phe	Thr	Asp	Pro	Ser	Leu	Gly	Pro	Ile
	50					55					60				
Leu	Tyr	Tyr	His	Tyr	Val	Asp	Thr	Thr	Ile	Gly	Tyr	Ala	Asp	Ser	Gln
65					70					75					80
Lys	Leu	Phe	Gly	Trp	Asn	Lys	Ile	Asp	Phe	Ser	Ser	Gly	Trp	Pro	Val
				85					90					95	

Val

<210> 42031  
 <211> 374  
 <212> PRT  
 <213> A.fumigatus

<400> 42031

Tyr	His	His	Gln	Asn	Leu	Lys	Met	Gln	Leu	Lys	Glu	Val	Leu	Ser	Leu
1				5					10					15	
Tyr	Leu	Leu	Gly	Val	Ser	Leu	Val	Phe	Ala	His	Pro	Gly	His	Glu	Glu
			20					25					30		
Lys	Arg	Ala	Ser	Asn	Glu	Leu	Leu	Ala	Phe	Lys	Ala	His	Val	Arg	Arg
		35					40					45			
Gly	Leu	Ser	Leu	Cys	Thr	Arg	Ser	Phe	Asp	Glu	Ser	Gly	Leu	Ser	Ala
	50					55					60				
Arg	Ala	Ile	Ala	Arg	Arg	Ala	Lys	Leu	Ala	Ser	Glu	Tyr	Arg	Arg	Arg
65					70					75					80
Lys	Leu	Ala	Val	Arg	Asp	Thr	Asp	Asp	Val	Leu	Asn	Thr	Ser	His	Leu
				85					90					95	
Ser	Ser	Ala	Asp	Tyr	Thr	Thr	Ser	Thr	Asp	Glu	Arg	Glu	Ile	Phe	Ser
			100					105					110		
Ser	Thr	Gly	Thr	Cys	Val	Leu	Asn	Pro	Glu	Gly	Glu	Thr	Gly	Pro	Phe
		115					120					125			
Trp	Val	Ser	Gly	Glu	Leu	Ile	Arg	Ser	Asp	Ile	Ile	Glu	Asn	Gln	Ala
	130					135					140				
Gly	Val	Pro	Val	Val	Leu	Asp	Ile	Gln	Phe	Val	Asp	Val	Ser	Thr	Cys
145					150					155					160
Gln	Ala	Val	Glu	Gly	Leu	Tyr	Ile	Asp	Thr	Trp	Ser	Cys	Asn	Ala	Thr
			165					170						175	
Gly	Val	Tyr	Ser	Gly	Val	Ser	Gly	Asn	Gly	Asn	Gly	Asn	Ser	Ala	Asp
			180					185					190		
Thr	Ser	Ile	Leu	Asp	Glu	Thr	Phe	Leu	Arg	Gly	Ile	Ala	Lys	Thr	Asp
		195					200					205			
Ser	Asp	Gly	Val	Val	Ser	Phe	Asn	Thr	Leu	Phe	Pro	Gly	His	Tyr	Ser
	210					215					220				
Gly	Arg	Thr	Thr	His	His	His	Ile	Ile	Ala	His	Leu	Asn	Ala	Thr	Leu
225					230					235					240



## 18711

Leu Pro Asn Asn Thr Leu Thr Gly Gly Thr Val Pro His Ile Gly Gln  
 245 250 255  
 Leu Phe Trp Asp Gln Ser Leu Ile Asp Glu Val Glu Ala Thr Ser Pro  
 260 265 270  
 Tyr Ser Thr Asn Thr Val Ala Gln Thr Thr Asn Ala Glu Asp Arg Val  
 275 280 285  
 Phe Ser Asp Glu Thr Ser Gly Thr Thr Ser Asp Pro Val Phe Asn Tyr  
 290 295 300  
 Val Arg Leu Gly Asp Ser Val Glu Asp Gly Leu Leu Gly Trp Val Thr  
 305 310 315 320  
 Val Ala Val Asp Leu Thr Ala Thr Tyr Thr Pro Asn Tyr Ser Phe Val  
 325 330 335  
 Tyr Thr Ser Ser Gly Ser Glu Ala Val Ser Gly Asn Ser Gly Ser Ser  
 340 345 350  
 Gly Ser Ala Pro Gly Ser Ser Gly Ser Ala Pro Ser Gly Gly Met Gly  
 355 360 365  
 Gly Gly Pro Gly Gly Phe  
 370

&lt;210&gt; 42032

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42032

Pro Ser Thr Glu Arg Arg Gln Leu Val Val Asp Glu Glu Ser Ala Val  
 1 5 10 15  
 Leu Gly Leu Pro Gly Asn Arg Glu Thr Arg Leu Lys Leu Asp Ala Asp  
 20 25 30  
 His Ser Gln Met Cys Lys Val Gly Ser Arg Gly Pro Met Tyr Lys Leu  
 35 40 45  
 Ile Lys Gly Asn Ile Lys Gln Ile Val Asp Gln Val Leu Val Ala Glu  
 50 55 60  
 Gln Gly Tyr Ile Pro Gln Gln Ser Thr Ser Ser His Ala Gly Pro Pro  
 65 70 75 80  
 Leu Pro Thr Val Thr His Thr Asn Ser Ser Ser Pro Tyr Pro Ser Ala  
 85 90 95  
 Pro Pro Pro Thr Thr Gly Gln Arg Ile Val Gly Thr Met Tyr Thr Ala  
 100 105 110  
 Val Asp Ser Asp Pro Arg Ser Ile Lys Ala Ala Glu His Lys Asn Val  
 115 120 125  
 Gly Arg Trp Asp Gln Ala Arg Asn Leu Glu Tyr Ala Ile Phe Gln Glu  
 130 135 140  
 His Leu Arg Thr Leu Gly Pro Asp His Asn Ser Thr Ile Val Val Gly  
 145 150 155 160  
 Tyr Asn Leu Ala Glu Ile Asp Leu Glu Ala Ser Tyr Leu Ala Lys Ala  
 165 170 175  
 Thr Glu Trp Cys Lys Trp Val Thr Asp Gln Ser Gln Arg Thr Leu Gly  
 180 185 190  
 Pro Arg His Pro Leu Thr Leu Arg Ala Glu Ser Leu Met Gly Glu Ile  
 195 200 205  
 Leu Cys Ala Arg Gly Arg Tyr Gln Glu Ala Glu Ser Val Cys Ala Asn  
 210 215 220  
 Val Leu Ala Arg Gln Gln Met Ser Ile Gly Asp Asp Asp Leu Asp Thr  
 225 230 235 240  
 Leu Glu Thr Arg Arg Arg Leu Ser Ala Ala Tyr Ala Asn Leu Ala Gln

## 18712

245 250 255  
 Glu Gln Thr Ser Ser Pro Gly Gly Trp Lys Asp Arg Arg  
 260 265

<210> 42033  
 <211> 112  
 <212> PRT  
 <213> A.fumigatus

<400> 42033  
 Ser Asp Asp Ser Arg Ile Leu Tyr Leu Gly Lys Val Leu Arg Lys Val  
 1 5 10 15  
 Val Glu Ser His Glu Ala Ile Asp Pro Ile Ala Gly Ser Ile Ala Tyr  
 20 25 30  
 Thr Met Gly Leu Phe Ile Ser Leu Leu Met Trp Ser Phe Gly Leu Ile  
 35 40 45  
 Trp Leu Val Phe Ala Leu Ala Thr Ile Tyr His Ala Ser Pro Phe Pro  
 50 55 60  
 Phe Asn Met Gly Trp Trp Gly Phe Thr Phe Pro Leu Gly Val Tyr Ala  
 65 70 75 80  
 Ala Asn Thr Leu Leu Leu Gly Gln Gln Leu Asp Leu Met Phe Phe Arg  
 85 90 95  
 Ile Phe Gly Met Val Ser Ile Tyr Gln His Leu Glu Asn Tyr Glu Tyr  
 100 105 110

<210> 42034  
 <211> 140  
 <212> PRT  
 <213> A.fumigatus

<400> 42034  
 Pro Cys Pro Lys Phe Pro Arg Ala Leu Ser Ile Leu Phe Tyr Gly Leu  
 1 5 10 15  
 Phe Tyr Asp Leu Ser Thr Gln Leu Tyr Ile Gly Arg Lys Ile Pro Ile  
 20 25 30  
 His Arg Thr Gly Leu Phe Leu Asn Ser Thr Cys Ala Ile Thr Ser Arg  
 35 40 45  
 Lys Leu Thr Met Ala Glu Gly Ser Gln Glu Thr Glu Asp Gln Ser Val  
 50 55 60  
 Gln Val Pro Arg Ala Ser Thr Ala Pro Ala Leu Pro Ala Ile Ile Thr  
 65 70 75 80  
 Thr Thr Thr Thr Val Arg Ser Arg Lys Asp Gly Gln Arg Asn Asp Asp  
 85 90 95  
 Asn Ser Phe Thr Asn Asp Ser Pro Ser Val Ala Thr Pro Gly Leu Leu  
 100 105 110  
 Arg Thr Ser Gln Ser Phe Pro Val Gly Met Cys Asn Ser Tyr Arg Leu  
 115 120 125  
 Pro Phe Lys Asp Trp Ser Phe Arg Gln Ile Cys Gln  
 130 135 140

<210> 42035  
 <211> 204  
 <212> PRT  
 <213> A.fumigatus

<400> 42035

## 18713

Arg Gly Ile Phe Val Ile His Arg Lys Gly Val Ser Phe Leu Ser Arg  
 1 5 10 15  
 Ile Ile Gly Gly Lys Lys Lys Glu Asn Leu Ser Glu Ala Glu Asp Asp  
 20 25 30  
 Val Ser Glu Pro Asp Thr Phe Arg Met Asp Ala Asn Ala Ala Ala Gln  
 35 40 45  
 Pro Ile Gly Phe Phe Pro Lys Phe Pro Pro Pro Pro Lys Tyr Ile Arg  
 50 55 60  
 Val Lys Ala Tyr Tyr Lys Lys Asp Lys Thr Phe Ser Arg Val Phe Leu  
 65 70 75 80  
 Ala Gln Glu Leu Thr Asp Ile Ala Ala Pro Ser Asn Asn Ser Val Lys  
 85 90 95  
 Asp Ala Thr Gly Ser Thr Thr Gly Thr Leu Ser Gly Gly Asn Thr Gly  
 100 105 110  
 Lys Ala Ile Trp Ala Leu Ser Phe Ser Lys Asp Gly Lys Tyr Leu Ala  
 115 120 125  
 Ala Ala Gly Gln Asp Arg Arg Val Arg Val Trp Ala Val Ile Ala Ser  
 130 135 140  
 Pro Asp Asp Arg Lys Glu Gly Leu Gly Glu Gly Glu Glu Thr Gln  
 145 150 155 160  
 Gly Ala Asp Glu Pro Pro Gln Leu Lys Ala Pro Val Phe Arg Thr Lys  
 165 170 175  
 Pro Ile Gln Met Tyr Glu Gly His Ser Gly Ser Val Leu Asp Leu Ser  
 180 185 190  
 Trp Ser Lys Val Arg Cys Ser His Arg Arg Gly Ile  
 195 200

&lt;210&gt; 42036

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42036

Thr Lys Pro Gln Val Ile Val Thr Asp Pro Pro Met Gln Thr Thr Gln  
 1 5 10 15  
 Thr Arg Ile Thr Thr Lys Tyr Gly Phe Pro Ser Gln Arg Pro Ser Ala  
 20 25 30  
 Gln Lys Lys Pro Ser Ser Thr Ser Asn Pro Glu Thr Thr Asp Ser Pro  
 35 40 45  
 Ala Arg Thr Ala Thr Thr Pro Val Ala Val Leu Thr Leu Lys Thr Tyr  
 50 55 60  
 Asn Pro Thr Ala Gly Ile Cys Leu Lys Tyr Arg Thr Asn Lys Ala Ala  
 65 70 75 80  
 Glu Val Gly Arg Leu Val Thr Ser Leu Gly Lys Leu Ala Gly Gly Ala  
 85 90 95  
 Asn Ala Ala Gly Leu Gly Leu Ser Ala Pro Ala Pro Thr Thr Thr Ala  
 100 105 110  
 Ser Ala Val Ala Thr Asp Val Glu Met Thr Asp Ala Pro Ala Val Val  
 115 120 125  
 Glu Glu Ala Ala Ser Ala Asn Ala Ser Lys Ala Asp Thr Gly Ala Lys  
 130 135 140  
 Gly Gly Lys Ser Lys Lys Lys Gly Gly Lys Gly Lys Arg  
 145 150 155

&lt;210&gt; 42037

&lt;211&gt; 129

18714

<212> PRT  
<213> A.fumigatus

<400> 42037

Thr	Arg	Glu	Thr	Arg	Gln	Gln	His	Thr	Cys	Ile	Asn	Cys	Val	Lys	Glu
1				5					10					15	
Val	Gly	Pro	Leu	Leu	Arg	Leu	Leu	Asp	Val	Cys	Ile	Asn	Gln	Gln	Gly
			20					25					30		
Val	Cys	Leu	Arg	Met	Asn	Val	Leu	Asn	His	Asp	Leu	Glu	Ala	Val	Glu
		35					40					45			
Ala	Ser	Ser	Leu	Arg	His	Leu	His	Leu	Ile	Ala	Glu	Ala	Leu	Gln	Gln
		50				55					60				
Val	Leu	Ile	Asn	Asp	Ser	Val	Arg	Gly	Ser	Glu	Glu	Gly	Lys	Asp	Met
65				70						75				80	
Arg	Asp	Glu	Ile	Thr	Leu	Ile	Val	Ile	Gln	Thr	Val	Val	Pro	Val	Val
				85					90					95	
Gln	Ile	Phe	Gly	Glu	Ile	Asn	Leu	Leu	Gly	Gly	Pro	Glu	Gly	Ser	Phe
			100					105					110		
Gly	Phe	Leu	Val	His	Leu	Pro	Asn	Leu	Arg	Arg	Arg	Ser	Gly	Ala	Tyr
		115					120						125		

Gln

<210> 42038  
<211> 569  
<212> PRT  
<213> A.fumigatus

<400> 42038

Ser	Asp	Ala	Gly	Asp	Gln	Asn	Asn	Phe	Leu	Leu	Ser	Ser	Ser	Met	Asp
1				5					10					15	
Lys	Thr	Val	Arg	Leu	Trp	His	Val	Ser	Arg	Ser	Glu	Cys	Leu	Cys	Cys
			20					25					30		
Phe	Gln	His	Ser	Asp	Phe	Val	Thr	Ser	Ile	Gln	Phe	His	Pro	Arg	Asp
		35					40					45			
Asp	Arg	Phe	Phe	Leu	Ala	Gly	Ser	Leu	Asp	Thr	Lys	Leu	Arg	Leu	Trp
		50				55					60				
Ser	Ile	Pro	Asp	Lys	Ser	Val	Ala	Phe	Val	Ala	Ala	Val	Pro	Asp	Met
65				70						75				80	
Ile	Thr	Ala	Ile	Ala	Phe	Thr	Pro	Asp	Gly	Arg	His	Ser	Ile	Ala	Gly
				85					90					95	
Cys	Leu	Asn	Gly	Met	Cys	Asn	Ile	Tyr	Asp	Thr	Asp	Gly	Leu	Lys	Pro
			100					105					110		
Val	Gly	Gln	Ile	His	Val	Arg	Ser	Ala	Arg	Gly	Arg	Asn	Ala	Lys	Gly
		115					120						125		
Ser	Lys	Ile	Thr	Gly	Ile	Asp	Thr	Ile	Thr	Leu	Pro	Arg	Gly	Asp	Pro
		130				135						140			
Asn	Gly	Glu	Val	Lys	Leu	Leu	Ile	Thr	Ser	Asn	Asp	Ser	Arg	Ile	Arg
145					150					155					160
Gln	Tyr	Asn	Phe	Lys	Asp	Arg	Thr	Leu	Glu	Ala	Lys	Tyr	Arg	Gly	Asn
				165					170					175	
Glu	Asn	Thr	Cys	Ser	Gln	Ile	Arg	Ala	Ser	Phe	Ser	Asp	Asp	Gly	Lys
			180					185					190		
His	Ile	Ile	Cys	Gly	Ser	Glu	Asp	Arg	Arg	Val	Tyr	Val	Trp	Pro	Thr
		195					200					205			

Gly Ala Val Glu Lys Asp Phe Asp Lys Arg Ala Val Glu Val Phe Glu

## 18715

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      210                      215                      220
Thr Gln Ser Ala Ile Val Thr Ala Ala Val Met Ala Pro Ser Lys Thr
225                      230                      235                      240
Lys Gln Val Leu Gly Phe Ser Asp Asp Pro Val Tyr Asp Ile Cys Asn
      245                      250                      255
Pro Pro Pro Val Thr Leu Val Ser Ala Ala Asp Asn Glu Asn Ala Arg
      260                      265                      270
Gln Asn Arg Asn Ser Asp Ile Ile Lys Leu Ala Gln Glu Ser Pro Ser
      275                      280                      285
Tyr Leu Ser Arg Ser Thr His Pro Glu Gly Asn Ile Ile Ile Val Ala
      290                      295                      300
Asp Tyr Ser Gly Lys Ile Arg Val Leu Arg Gln Asp Cys Ala Phe Gln
305                      310                      315                      320
Lys Arg Arg Tyr Glu Asn Trp Asp Thr His Ser Thr Phe Ser Arg Arg
      325                      330                      335
Leu Leu Arg Arg Ser Asn Ser Ala Arg His Ser Ile Ser Ser Ile
      340                      345                      350
Gly Lys Glu Ser Ser His Lys Thr Pro Ser Glu Arg Ile Ile Ser Trp
      355                      360                      365
Arg Asn Ser Val Ile Gly His Asp Thr Ala Lys Arg Glu Gly Ser Arg
      370                      375                      380
Asp Gly Thr Arg Thr Arg Ser Pro Ser Pro His Thr Ser Ile Pro Asp
385                      390                      395                      400
Val Ser Arg Tyr Ser Gly Pro Val Arg Gln Phe Ser Gly Gly Ala Pro
      405                      410                      415
Ala Asp Ser Leu Ser Leu Thr Val Ser Pro Pro Pro Ser Ala Tyr Lys
      420                      425                      430
Ser Ser Phe Asp Ser Arg Arg Ser Ser Val Glu Ala Ser Lys Arg Asn
      435                      440                      445
Ala Glu Asp Val Arg Met Val Pro Thr Ala Arg Thr Ile Val Ala Lys
      450                      455                      460
Gly Lys Asp Lys Asp Asn Pro Leu Trp Leu Gln Gly Gln Gln Ser Tyr
465                      470                      475                      480
Ala Phe Trp Asn Lys Ile Thr His Asp Ala Leu Ala Ala Gln Asn Lys
      485                      490                      495
Thr Pro Ser Gln Ser Arg Asp Ser Asn Arg Leu Ser Val Pro Gly Arg
      500                      505                      510
Lys Phe Ser Met Ala Ser Ala Leu Ser Ser Asp Tyr Gly Ser Ser Asn
      515                      520                      525
Gly Glu Gly Asp Glu Gly Asp Val Leu Arg Cys Asp Asn Cys Gln Gly
      530                      535                      540
Thr Asn Phe Arg Ala Thr Lys Ser Arg Thr Gly Lys Gln Lys Leu Ile
545                      550                      555                      560
Cys Val Arg Cys His Arg Pro Ile Ser
      565

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&lt;210&gt; 42039

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42039

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Ala Ala Ser Ser Leu Glu Asn Leu Lys Met Ser Asp Ser Pro Val Lys
1                      5                      10                      15
Lys Leu Asn Phe Gly Val Val Gly Lys Glu Asn Ala Pro Ser Ser Thr
      20                      25                      30

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1

[illegible][illegible][illegible]

Parameter	Unit	Value	Standard Error	95% CI	P-value
Intercept		1.00	0.00	1.00	0.00
Age	Year	0.02	0.01	-0.01, 0.05	0.15
Gender					
Male		0.05	0.03	-0.01, 0.11	0.08
Female		-0.02	0.03	-0.08, 0.04	0.45
Education	Year	0.01	0.01	-0.02, 0.04	0.32
Income	Year	0.03	0.02	-0.01, 0.07	0.12
Health					
Good		0.08	0.04	0.00, 0.16	0.03
Fair		0.02	0.04	-0.06, 0.10	0.48
Poor		-0.05	0.04	-0.13, 0.03	0.18
Smoking					
Yes		0.04	0.03	-0.02, 0.10	0.10
No		0.01	0.03	-0.05, 0.07	0.78
Alcohol					
Yes		0.03	0.03	-0.03, 0.09	0.25
No		0.01	0.03	-0.05, 0.07	0.78
Exercise					
Yes		0.02	0.03	-0.04, 0.08	0.52
No		0.01	0.03	-0.05, 0.07	0.78
Stress					
High		0.05	0.04	-0.03, 0.13	0.12
Low		0.01	0.04	-0.07, 0.09	0.78
Family					
Large		0.03	0.03	-0.03, 0.09	0.25
Small		0.01	0.03	-0.05, 0.07	0.78
Community					
Urban		0.02	0.03	-0.04, 0.08	0.52
Rural		0.01	0.03	-0.05, 0.07	0.78
Season					
Spring		0.01	0.03	-0.05, 0.07	0.78
Summer		0.02	0.03	-0.04, 0.08	0.52
Autumn		0.01	0.03	-0.05, 0.07	0.78
Winter		0.02	0.03	-0.04, 0.08	0.52

[illegible]

## 18717

Phe Trp Thr Ala Glu Glu Ile Asp Leu Ser Lys Asp Leu His Asp Trp  
 65 70 75 80  
 Asn Asn Arg Leu Asn Asp Asp Glu Arg Tyr Phe Ile Ser His Val Leu  
 85 90 95  
 Ala Phe Phe Ala Ala Ser Asp Gly Ile Val Asn Glu Asn Leu Leu Glu  
 100 105 110  
 Arg Phe Ser Asn Glu Val Gln Val Pro Glu Ala Arg Cys Phe Tyr Gly  
 115 120 125  
 Phe Gln Ile Met Ile Glu Asn Ile His Ser Glu Thr Tyr Ser Leu Leu  
 130 135 140  
 Ile Asp Thr Tyr Ile Lys Glu Pro Lys Gln Arg Thr Tyr Leu Phe Asp  
 145 150 155 160  
 Ala Ile Asp Thr Ser Met Leu Leu Ser Arg Phe Ser Arg Leu Asp Arg  
 165 170 175  
 Ser Leu Ile Ser Ser Ser Leu Tyr Gln Glu Glu Gly Pro Val Gly  
 180 185 190  
 His Glu Met Asp Phe  
 195

<210> 42042  
 <211> 121  
 <212> PRT  
 <213> A.fumigatus

<400> 42042  
 Leu Thr Leu Glu Thr Arg Asp Leu Ser Thr Arg Leu Gly Leu Asn Gln  
 1 5 10 15  
 Asp Glu Gly Glu Lys Trp Ile Val Asn Leu Ile Arg Asp Thr Arg Val  
 20 25 30  
 Asp Ala Lys Ile Asp Tyr Lys Glu Gly Thr Val Ile Met Asn His Pro  
 35 40 45  
 Pro Gln Ser Val Tyr Gln Gln Val Ile Glu Lys Thr Lys Gly Ala Phe  
 50 55 60  
 Phe Arg Thr Gln Val Leu Arg Phe Val Arg Leu Leu Tyr Pro His Asp  
 65 70 75 80  
 Arg Gln Val Thr Asn Phe Asn Phe Leu Thr Val Arg Leu Leu Arg Asn  
 85 90 95  
 Lys Asp Met Val Gln Ile Tyr Ala Pro Lys Thr Gln Phe Ile Phe Phe  
 100 105 110  
 Ser Ser Ser Glu Trp Phe Cys Ser Cys  
 115 120

<210> 42043  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 42043  
 Ser Ser Lys His Ser Phe Thr Val Leu Ser Arg Leu Leu Asn Leu Thr  
 1 5 10 15  
 Gly Glu Ile Lys Asn Lys Lys Asn Gln Glu Gln Phe Gly Ile Lys Phe  
 20 25 30  
 Ser Cys Tyr Pro Thr Ser Ala Phe Ser Leu Trp Phe Arg Trp Asp Phe  
 35 40 45  
 Val Ile His Ile Gly Arg Glu Ile Leu Pro Glu Ser Pro Gln His His  
 50 55 60

Arg  
65

<210> 42044  
<211> 63  
<212> PRT  
<213> A.fumigatus

<400> 42044  
Ala Gln Ser Glu Ser Thr His Val Arg Asp Asn Gly Gln Ile Asn Thr  
1 5 10 15  
Lys Ile Ile Cys Met Ile Ser Lys Glu Leu Ile Glu Val Arg Asp Ala  
20 25 30  
Gln Leu Gln Tyr Asn Pro Thr Arg Leu Glu Lys Leu Ile Ser Ile Pro  
35 40 45  
Ile Tyr Asn Gln Tyr Arg Ile Phe Gln Thr Arg Ser His Leu Gln  
50 55 60

<210> 42045  
<211> 198  
<212> PRT  
<213> A.fumigatus

<400> 42045  
Asn Tyr Leu Met Asp Val Gly Asn Leu His Pro Gln Ser Thr Asp Gln  
1 5 10 15  
Leu Val Arg Ala Ser Asp Arg Leu Ala Leu Tyr Gln Lys Gln Leu Gln  
20 25 30  
Ala Ser Val Leu Ser Pro Gln Ile Thr Ser Ser Ser His Ser Ile Ser  
35 40 45  
Asn Ala Ala Lys Ala Thr Asp Gln Met Ser Arg Asp Pro Ile Thr Cys  
50 55 60  
His Val Leu Asn Thr Leu Ser Gly Thr Pro Ala Ala Asn Leu Pro Val  
65 70 75 80  
Thr Leu Thr Phe Leu Gly Ser Ser Asn Gly Asn Asn Ala Ser Gln Ser  
85 90 95  
Pro Ile Thr Phe Asn Ala Thr Thr Asp Ala Asp Gly Arg Val Lys Asn  
100 105 110  
Trp Thr Ala Thr Ala Ala Thr Ala Thr Thr Val Ser Gly Val Leu Ser  
115 120 125  
Ser Leu Pro Thr Ala Asp Ser Lys Thr Asn Trp Ala Val Arg Phe Glu  
130 135 140  
Val Gly Pro Trp Tyr Ala Ala Gln Gly Ile Glu Ser Phe Trp Pro Glu  
145 150 155 160  
Val Glu Val Lys Phe Thr Val Lys Gly Arg Gly Arg Glu Gly Glu Glu  
165 170 175  
Asp Trp Arg His Tyr His Val Pro Val Leu Leu Gly Pro Trp Asn Tyr  
180 185 190  
Ser Thr Tyr Arg Gly Ser  
195

<210> 42046  
<211> 71  
<212> PRT  
<213> A.fumigatus



18719

<400> 42046

Gly	Thr	Ile	Val	Thr	Gly	His	Val	Glu	His	Tyr	Pro	Ile	Arg	Ile	Asn
1				5					10					15	
Ser	Cys	Asp	Gly	Thr	Ala	Gly	Phe	Val	Asp	Phe	Asn	Tyr	Leu	Val	Trp
			20					25					30		
Ser	Glu	Asn	Gln	Ala	Asn	His	Asn	Met	Asn	His	Ala	Arg	Gly	Ala	Gly
		35					40					45			
Arg	Pro	Asp	Ser	Met	His	Arg	Leu	Arg	Glu	Ser	Ile	Leu	His	His	Cys
	50					55					60				
Lys	Gly	Trp	Leu	Ser	Leu	Ala									
65					70										

<210> 42047

<211> 367

<212> PRT

<213> A.fumigatus

<400> 42047

Lys	Thr	Thr	Pro	Leu	Glu	Glu	Ile	Ala	Asn	Gln	Tyr	Asn	Leu	Leu	Pro
1				5					10					15	
Lys	Leu	Ile	Pro	Tyr	Leu	Asp	Arg	His	Leu	Val	Phe	Pro	Leu	Leu	Glu
			20					25					30		
Phe	Ser	Ser	Gly	Gln	Asp	Asp	Glu	Lys	Glu	Ile	Val	Arg	Ala	Lys	Tyr
		35					40					45			
Glu	Leu	Leu	Lys	His	Thr	Asn	Met	Thr	Asp	Tyr	Val	Ala	Asn	Leu	Trp
	50					55					60				
Lys	Glu	Ile	Asn	Asn	Ser	Asp	Asp	Ile	Pro	Asp	Glu	Phe	Val	Lys	Lys
65				70					75					80	
Arg	Glu	Glu	Val	Leu	Ala	Lys	Leu	Gln	Gln	Tyr	Glu	Glu	Glu	Ser	Ala
			85					90						95	
Lys	Ile	Thr	Gln	Leu	Leu	Gln	Asp	Glu	Ser	Val	Val	Ala	Asn	Leu	Arg
		100						105					110		
Ser	Asp	Lys	Val	Ala	Asn	Leu	Lys	Phe	Leu	Glu	Glu	Gln	His	Gly	Val
	115					120						125			
Thr	Val	Glu	Met	Val	Asn	Ser	Leu	Tyr	Asp	Tyr	Gly	Arg	Phe	Gln	Tyr
	130				135						140				
Ser	Cys	Gly	Ser	Tyr	Gly	Asn	Ala	Ala	Glu	Leu	Leu	Tyr	Gln	Phe	Arg
145					150					155					160
Val	Leu	Ser	Thr	Asp	Asn	Asp	Lys	Val	Ala	Ser	Ala	Thr	Trp	Gly	Lys
			165					170						175	
Phe	Ala	Ser	Glu	Ile	Leu	Thr	Thr	Ser	Trp	Glu	Ala	Ala	Met	Glu	Glu
		180						185					190		
Val	Gln	Lys	Val	Lys	Asp	Ser	Ile	Glu	Thr	Arg	Leu	Phe	Asn	Asn	Pro
	195					200						205			
Leu	Gly	Gln	Leu	Gln	Asn	Arg	Ser	Trp	Leu	Ile	His	Trp	Ser	Leu	Phe
	210				215						220				
Pro	Phe	Phe	Asn	His	Asp	Pro	Ala	Arg	Asp	Val	Leu	Thr	Asp	Leu	Phe
225				230						235					240
Phe	Ser	Pro	Ala	Tyr	Ile	Asn	Thr	Ile	Gln	Thr	Asn	Cys	Pro	Trp	Ile
			245						250					255	
Leu	Arg	Tyr	Leu	Ala	Ala	Ala	Val	Ile	Thr	Asn	Arg	Asn	Arg	Ala	His
		260						265					270		
Lys	Asn	Ser	Ser	Val	Tyr	Gln	Lys	Gln	Leu	Lys	Asp	Leu	Ile	Arg	Val
	275						280					285			
Val	Arg	Gln	Glu	Gly	Tyr	Glu	Tyr	Asn	Asp	Pro	Ile	Thr	Asp	Phe	Ile
	290					295						300			

## 18720

Lys Ala Leu Tyr Val Asp Phe Asp Phe Glu Glu Ala Gln Asn Lys Leu  
 305 310 315 320  
 Gly Asp Ala Asp Glu Val Leu Arg Ser Asp Phe Phe Leu Val Ser Thr  
 325 330 335  
 Thr Asp Ala Phe Val Glu Ala Ala Arg His Leu Ile Ser Glu Ser Tyr  
 340 345 350  
 Cys Gln Ile His Gln Arg Ile Asp Ile Lys Tyr Val Thr Ala Ser  
 355 360 365

<210> 42048  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 42048  
 Arg Thr Ser Thr Thr Trp Tyr Cys Ser Ile Ser Arg Ser Ser His Leu  
 1 5 10 15  
 Pro Leu Asp Arg Asn Thr Ser Ala Ser Ala Asn Gly Val Val Phe Ile  
 20 25 30  
 Glu Lys Leu Val Arg Val Pro Val Gly Glu Thr Glu Pro Glu Trp Gln  
 35 40 45  
 Leu Ala Thr Ser Ala Asp Leu Ile Leu Ser Ser Asn Gln Lys Ile Lys  
 50 55 60  
 Asn Leu Arg Ser Arg Asp  
 65 70

<210> 42049  
 <211> 242  
 <212> PRT  
 <213> A.fumigatus

<400> 42049  
 Phe Phe Tyr Phe Cys Ile Cys Leu Ser Val Asn Thr Phe Lys Ser Gly  
 1 5 10 15  
 Pro Cys Asp Ser Tyr Leu Phe Arg Ala Asn Phe Leu Gly Asn Phe Gln  
 20 25 30  
 Tyr Thr Arg Ile Lys Ser Phe Trp Pro Leu Arg Gly Ser Lys Tyr Val  
 35 40 45  
 Cys Lys Phe Asn Pro Ile Ala Ala His Arg Thr Ser Arg Leu Pro Leu  
 50 55 60  
 Gly Lys Glu Phe Glu His Phe Leu Thr Ala Leu Ser Cys Asn Arg Phe  
 65 70 75 80  
 Leu Leu Thr Arg Phe Ser Thr Ser Glu Ser Leu Lys Met Ser Ser Thr  
 85 90 95  
 Ala Val Val His Gly Asp Asp Leu Met Glu Pro Thr Leu Gln Ser Ile  
 100 105 110  
 Leu Ser Gln Lys Thr Leu Arg Trp Ile Phe Val Gly Gly Lys Gly Gly  
 115 120 125  
 Val Gly Lys Thr Thr Thr Ser Cys Ser Leu Ala Ile Gln Leu Ala Lys  
 130 135 140  
 Val Arg Lys Ser Val Leu Leu Ile Ser Thr Asp Pro Ala His Asn Leu  
 145 150 155 160  
 Ser Asp Ala Phe Gly Gln Lys Phe Gly Lys Glu Ala Arg Leu Val Asp  
 165 170 175  
 Gly Tyr Ser Asn Leu Ser Ala Met Glu Ile Asp Pro Asn Gly Ser Ile  
 180 185 190

## 18721

Gln Asp Leu Leu Ala Ser Gly Asp Ser Gln Gly Asp Asp Pro Leu Ala  
 195 200 205  
 Gly Leu Gly Met Gly Asn Met Met Gln Asp Leu Ala Phe Thr Val Cys  
 210 215 220  
 Ala Val Leu Asn Ser Thr Gly Ser Val Cys Val His Thr Asp Asn Gln  
 225 230 235 240  
 Cys Pro

<210> 42050

<211> 209

<212> PRT

<213> A.fumigatus

<400> 42050

Ile Pro Gly Val Asp Glu Ala Met Ser Phe Ala Glu Val Leu Lys Gln  
 1 5 10 15  
 Val Lys Ser Leu Ser Tyr Glu Val Ile Val Phe Asp Thr Ala Pro Thr  
 20 25 30  
 Gly His Thr Leu Arg Phe Leu Gln Phe Pro Thr Val Leu Glu Lys Ala  
 35 40 45  
 Leu Ala Lys Leu Ser Gln Leu Ser Ser Gln Phe Gly Pro Met Leu Asn  
 50 55 60  
 Ser Ile Leu Gly Ala Arg Gly Gly Leu Pro Gly Gly Gln Asn Ile Asp  
 65 70 75 80  
 Glu Leu Leu Gln Lys Met Glu Ser Leu Arg Glu Thr Ile Ser Glu Val  
 85 90 95  
 Asn Thr Gln Phe Lys Asn Pro Asp Met Thr Thr Phe Val Cys Val Cys  
 100 105 110  
 Ile Ala Glu Phe Leu Ser Leu Tyr Glu Thr Glu Arg Met Ile Gln Glu  
 115 120 125  
 Leu Thr Ser Tyr Gly Ile Asp Thr His Ala Ile Val Val Asn Gln Leu  
 130 135 140  
 Leu Phe Pro Lys Glu Gly Ser Gly Cys Glu Gln Cys Asn Ala Arg Arg  
 145 150 155 160  
 Lys Met Gln Lys Lys Tyr Leu Glu Gln Ile Glu Glu Leu Tyr Glu Asp  
 165 170 175  
 Phe Asn Val Val Arg Met Pro Leu Leu Val Glu Glu Val Arg Gly Lys  
 180 185 190  
 Glu Lys Leu Glu Lys Ser Val Pro Ile His His Leu Phe Glu Lys Asn  
 195 200 205  
 His

<210> 42051

<211> 82

<212> PRT

<213> A.fumigatus

<400> 42051

Thr Ala Ile Leu Arg Glu His Pro Ile Lys Leu Ile Tyr Leu Gln Glu  
 1 5 10 15  
 Ser Gln Leu Arg Thr Thr Asn Thr Leu Ala Lys Met Ser Gln Val Gln  
 20 25 30  
 Gln Tyr Trp Leu Pro Gly Tyr Gly Leu Ser Arg His Ile Val Leu Gly  
 35 40 45

## 18722

His Ile Gln Tyr Phe Leu Gly Pro Ser Ala Thr Val Arg Pro Tyr Thr  
 50 55 60  
 Tyr Gln Val Asn Asp Tyr Leu Val Gly Glu Arg Val Lys Trp Glu Glu  
 65 70 75 80  
 Ser Ala

<210> 42052  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 42052  
 Asp Ser Lys Ala Gly His Ile Met Ile Thr Gly Leu Asp Tyr Asp Ser  
 1 5 10 15  
 Phe Phe Gly Cys Ser Gly Phe Asp Val His Arg Leu Gly Ser Phe Val  
 20 25 30  
 Leu Asp Thr Phe Ser Asn Gly Leu Ser Ile Pro Thr Asn Asp Thr Arg  
 35 40 45  
 Asp Ile Ser Leu His Lys Gln Ser His Ser Ser Leu Ser Pro Ala Pro  
 50 55 60  
 Ile  
 65

<210> 42053  
 <211> 158  
 <212> PRT  
 <213> A.fumigatus

<400> 42053  
 Asp Tyr Leu Leu Ile Val Ala Asn Pro Ile Pro Phe Leu Leu Val Glu  
 1 5 10 15  
 Tyr Arg Lys His Tyr Leu Thr Arg Ile Phe Gly Ser Pro Tyr Tyr Gly  
 20 25 30  
 Cys Tyr Phe Leu Gly Phe Ile Ile Phe Thr Leu Gly Leu Ala Arg Asp  
 35 40 45  
 His Val Tyr Gln Leu Ala Leu Gln Asp Gln Pro Tyr Tyr Ala Pro Val  
 50 55 60  
 His Gln Pro Ile Leu Gly Ser Val Leu Phe Gly Ile Gly Ser Ile Leu  
 65 70 75 80  
 Val Leu Ser Ser Met Tyr Ala Leu Gly Val Thr Gly Thr Tyr Leu Gly  
 85 90 95  
 Asp Tyr Phe Gly Ile Leu Met Asp Ala Pro Val Thr Gly Phe Pro Phe  
 100 105 110  
 Asn Val Thr Gly Ser Pro Met Tyr Trp Gly Ser Thr Leu Asn Phe Leu  
 115 120 125  
 Gly Val Ala Leu Tyr Phe Gly Arg Val Ala Gly Leu Leu Leu Thr Ala  
 130 135 140  
 Glu Val Phe Val Val Tyr Trp Ile Ala Leu Gln Trp Glu Glu  
 145 150 155

<210> 42054  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 42054

Phe Leu Ala Gly Leu Val Val Leu His Val Gln Asn Ala Asn Gln Lys  
 1 5 10 15  
 Ser Ser Leu Arg Ser Tyr Lys Gln Val Thr Ser Pro Thr Lys Asp Ser  
 20 25 30  
 Ala Asn Ser Met Leu Cys Ile Tyr Ser Lys Ser Ala Asp Leu Arg Val  
 35 40 45  
 Ile Glu Val Val Gln Tyr Gly Leu Leu Thr Met Pro Arg Ala Arg  
 50 55 60

&lt;210&gt; 42055

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42055

Ala Arg Arg Pro Arg Pro Arg Leu Pro Val Ala Leu Leu Ser Ser Thr  
 1 5 10 15  
 Val Ser Ile Ser Ser Ser Ser Thr Pro Phe Leu Ser Ser Ser Pro Ser  
 20 25 30  
 Ala Arg Pro His Phe Ser Gly Ser Tyr Gln Ser Ser Pro Ser Leu Asn  
 35 40 45  
 Ser Pro Thr Cys Pro Ser Ala Leu His His Ser Lys Thr Ser Ser Cys  
 50 55 60  
 Ile Arg His Ala Arg Ser Arg His Ser Ser Met Cys Ser Asn Pro Arg  
 65 70 75 80  
 Thr Val Ser Ser Cys Phe Trp Ile Lys Asp Gln Ser Ser Arg Arg Val  
 85 90 95  
 Ser Ser Ala Ser Leu Ala Gly Ser Pro Lys Leu Gly Ser Gly Ser Thr  
 100 105 110  
 Asp Ser Gly Thr Arg Asn Ser Gly Cys Gly Ala Gly Ser Ala Leu Ser  
 115 120 125  
 Val Ser Val Glu Ala Glu Gly Glu Ser Leu Leu Glu Ser Trp Ser Gly  
 130 135 140  
 Pro Gly Phe Lys Ala Leu Ala Cys Ala Arg Val Val Met Arg Arg Gly  
 145 150 155 160  
 Gly Ser Gly Asp Glu Pro Ser Cys Ile Ser Val Ser Val Ser Ser Pro  
 165 170 175  
 Cys Gly Ser Ser Cys Cys Ser Ala Ser Thr Ser Ala Pro Cys Leu Ser  
 180 185 190  
 Phe Ala

&lt;210&gt; 42056

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42056

Val Ser Ala Val Ser Leu Tyr Ser Arg Ala Tyr Arg His Lys Arg Leu  
 1 5 10 15  
 Asn Cys His Cys Pro Ser Arg His Lys Arg Leu Asp Gly Lys Pro Glu  
 20 25 30  
 Thr Pro Pro Cys Gly Asn Gly Val Arg Val Lys Ser Ser Ser Cys Val  
 35 40 45  
 Arg Tyr Arg Lys Leu Asn Thr Ser Pro Asn Thr Ile Glu Asp Lys Asp

## 18724

50                      55                      60  
 Ile Leu Lys Met Tyr Leu Val Thr Pro Pro Val Lys Lys Ile Asp Leu  
 65                      70                      75                      80  
 Val Trp Pro Leu Gly Leu Ser Val Thr Ala Arg Asn Leu Lys Gly Val  
                     85                      90                      95  
 Thr Val Lys Asp Ala Leu Asp Ala Ile Tyr Lys Gln Phe Lys Lys Lys  
                     100                      105                      110  
 Ala Arg Leu Ser Ala Arg Phe Phe Arg Arg Pro Ser Cys His Phe Thr  
                     115                      120                      125  
 Thr Asp Arg Ser Leu  
                     130

&lt;210&gt; 42057

&lt;211&gt; 1012

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42057

Val Asn Thr Pro His Val Arg Leu Thr Ser Asn Ser Ser Tyr Phe Ser  
 1                      5                      10                      15  
 Pro Pro Thr Phe Ile Cys Leu Ser Ser Ile Ser Ile Ser Val Cys Thr  
                     20                      25                      30  
 Leu Ser Gln Pro Ala Gln Val Arg Tyr Leu Pro Val Val Leu Met Phe  
                     35                      40                      45  
 Val Cys Arg Cys Cys Phe Thr Ser Thr Asn Asn Ser Leu Ile Val Leu  
                     50                      55                      60  
 Ser Ile Trp Phe Leu Pro Tyr Phe Arg Ser Cys Tyr Pro Ser Ser Tyr  
 65                      70                      75                      80  
 Ser Ser Val Leu Pro Ser Phe Thr Glu Arg His Gly Thr Thr Leu Ala  
                     85                      90                      95  
 Tyr Gln Ser Ile Pro Pro Gly Thr Met Ala Leu Asn Arg Arg Asp Ile  
                     100                      105                      110  
 Ile Leu Phe Ser Thr Gly Gly Phe Ile Ala Trp Gly Leu Ala Val Arg  
                     115                      120                      125  
 Trp Leu Pro Ile Leu Arg Tyr Leu Gly Tyr Ala Leu Val Leu Gly Ala  
                     130                      135                      140  
 Leu Leu Ser Cys Thr Ala Val Leu Ala Leu Val Phe Leu Thr Ile Arg  
 145                      150                      155                      160  
 Pro Leu Asp Ser Ala Lys Pro Pro Arg Ser Ser Ser Leu Pro Leu Thr  
                     165                      170                      175  
 Phe Leu Leu Pro Lys His Trp Pro Arg Glu Val Glu Gly Ile Arg Ala  
                     180                      185                      190  
 Arg Ser Thr Tyr Arg Thr Asp Ser Leu Tyr Pro Gln Ser Phe Ile Val  
                     195                      200                      205  
 Ser Glu Ser Ile Asp Glu Leu Leu Ser Leu Val Thr Arg Asp Phe Ile  
                     210                      215                      220  
 Ala Ser Trp Tyr Gln His Ile Ser Pro Asn Pro Ala Phe Val Asn Glu  
 225                      230                      235                      240  
 Val Asp Arg Val Ile Arg Ala Ala Ile Gly Asn Leu Cys Asn Arg Leu  
                     245                      250                      255  
 Leu Ala Glu Asp Leu Val Ser Leu Val Val Ser Arg Ile Phe Pro Ile  
                     260                      265                      270  
 Leu Thr Ala His Leu Lys Glu Phe Asp Val Ala Glu Arg Ser Val Arg  
                     275                      280                      285  
 Gly Arg Asn Leu Thr Arg Asn Val Thr Glu Ser Glu Glu Leu Asp Leu  
                     290                      295                      300

Ala Ile Ala Lys Lys Tyr Arg Asp Gly Arg Leu His Pro Ala Ala Ala  
 305 310 315 320  
 Leu Ser Val Ser Asp Gln Lys Phe Val Glu Gln Glu Tyr Leu Arg Lys  
 325 330 335  
 Ile Thr Leu Gly Leu Leu Pro Lys Leu Phe Pro Glu Gln Val Leu Asn  
 340 345 350  
 Ser Arg Ile Val Thr Val Leu Ile Arg Glu Ile Leu Ala Cys Ala Val  
 355 360 365  
 Leu Phe Pro Leu Val Ser Val Leu Ser Asp Pro Asp Thr Trp Asn Gln  
 370 375 380  
 Leu Val Glu Ala Tyr Gly Arg Thr Thr Ile Gln Asp Arg Lys Thr Val  
 385 390 395 400  
 Gln Lys Ile Arg Ala Ala Leu Asp Glu His Ala Ser Pro Ala Pro Lys  
 405 410 415  
 Ser Lys His Gly His Pro Phe Pro Lys Leu Ala Pro Asn Asp Ser Glu  
 420 425 430  
 Arg Ala Phe Glu Arg Phe Val Arg Ala Ile Arg Arg Cys Asn Asn Leu  
 435 440 445  
 Ser Asp Ala Arg Arg Phe Arg Ala Leu Val Ala Ser Gln Leu Lys Arg  
 450 455 460  
 Glu Ser Met Val Glu Gly Gln Asp Pro Val Tyr Leu Arg Arg Leu Glu  
 465 470 475 480  
 Thr Gly Lys Arg Val Leu Asp Gln Lys Val Ala Lys Leu Ser Ala Pro  
 485 490 495  
 Gly Gly Ser Asn Thr Pro Tyr Ala Asn Ala Val Glu Ser His Phe Arg  
 500 505 510  
 Arg Asn Ser Ser Ser Ser Lys Pro Glu Ala Ser Leu Ile Asp Val Met  
 515 520 525  
 His Asp Ala Ser Gly Leu Ser Tyr Phe Met Glu Phe Met Asp Arg Gln  
 530 535 540  
 Lys Leu Met Ser Leu Val Gln Phe Trp Ile Val Val Asp Gly Phe Arg  
 545 550 555 560  
 Asn Pro Leu Glu Asp Asp Phe Gly Asp Glu Thr Ser Pro Ser Ser Ser  
 565 570 575  
 Thr Trp Thr Thr Ala Asp Arg Asn Asp Met Ala Leu Ile Ser Glu Thr  
 580 585 590  
 Tyr Leu Ala Lys Pro Glu Leu Lys Val Ser Glu Glu Ala Arg Arg Ala  
 595 600 605  
 Val Lys Ala Phe Leu Ser Ala Gly Lys Arg Ala Thr Pro Glu Gln Tyr  
 610 615 620  
 Arg Lys Ala Arg Thr Val Ile Leu Ser Thr Gln Ser Ala Val Leu Glu  
 625 630 635 640  
 Glu Leu Gln Thr Val Tyr Tyr Pro Lys Phe Lys Gln Ser Asp Leu Tyr  
 645 650 655  
 Tyr Lys Tyr Leu Ala Ser Asp Glu Val Ser Leu Ala Gly Ser Arg Ala  
 660 665 670  
 Ser Pro Val Pro Val Glu Pro Pro Ala Arg Arg Pro Leu Pro Pro Leu  
 675 680 685  
 Met Ala Arg Thr Ala Ser His Pro Gly Gln Lys Pro Lys Asp Leu Arg  
 690 695 700  
 Arg Ala Val Ala Ser Ser Asp Ala Arg Ser Met Gly Lys Leu Phe  
 705 710 715 720  
 Asp Asp Glu Glu Gln Ala Arg Arg Ser Ile Asp Ser Glu Arg Ser Thr  
 725 730 735  
 Pro Leu Phe Asp Asp Asp Tyr Asp Thr Asp Pro Leu Ala Ala Ser Thr  
 740 745 750

## 18726

His Ser Leu Gly Asn Asp Ser Gln Ser Gly Phe Asn Asp Ala Thr Gln  
 755 760 765  
 Asn Gln Ala Ile Lys Ser Met Glu Ala Ala Leu Asn Asp Ile Ile Ala  
 770 775 780  
 Asn Asp Pro Glu Asn Ala Asp Leu Gly Glu Val Arg Tyr Ile Asp Ser  
 785 790 795 800  
 Gly Leu Ala Gly Ser Phe Ser Val Asp Arg Gly Leu Lys Ser Pro Arg  
 805 810 815  
 Ser Thr Gly Asp Leu Gly Arg Leu Asp Asn Arg Met Asp Asp Asn Lys  
 820 825 830  
 Ala Lys Pro Ser Ile Ala Ser Leu Gly Leu Val Asp Gln Ser Ser Arg  
 835 840 845  
 Ile Gly Val Phe Asp Asp Glu Leu Phe Pro Asp Gln Gln Lys Phe Leu  
 850 855 860  
 Glu Asp Glu Tyr Asp Glu Pro Pro Glu Thr Asp Asp Lys Asp Pro Ala  
 865 870 875 880  
 Asp Glu Val Gln Glu Ala Ala Pro Gly Asp Leu Gly Leu Thr Glu Ala  
 885 890 895  
 Ile Glu Ala Leu Thr Val Asp Ile Glu Lys Leu Ala Ala Gln Glu Thr  
 900 905 910  
 Val Ile Asp Ala Leu Thr Arg Lys Ala Asp Leu Thr Asn Asn Thr Ala  
 915 920 925  
 Glu Leu Arg Ile Leu Arg Lys Ser Lys Ala Ser Ile Gln Arg Glu Ile  
 930 935 940  
 His Arg Lys Glu Met Gln Arg Gln Gln Tyr Ile Ile Gln Glu Ser Asp  
 945 950 955 960  
 Asn Ser Leu Tyr Gly Arg Ser Thr Val Arg Ile Gln Ser Ile Val Val  
 965 970 975  
 Gly Lys Glu Ala Asp Gly Arg Glu Tyr Ala Met Cys Lys Ser Ile Leu  
 980 985 990  
 Pro Val Ser Asn Ile Val Val Phe Ala Val Val Thr Asp Ser Asn Cys  
 995 1000 1005  
 Phe Arg Arg Asp  
 1010

&lt;210&gt; 42058

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42058

Leu Thr Arg Thr Val Ser Asp Val Ile Glu Val Gln Arg Asp Ala Gly  
 1 5 10 15  
 Glu Gln Met Pro Ala Ala Ser Trp Ala Val Ala Arg Arg Tyr Ser Glu  
 20 25 30  
 Phe His Glu Leu His Gln Arg Leu Arg Ile Arg Tyr Pro Ser Val Arg  
 35 40 45  
 His Leu Glu Phe Pro Arg Arg Arg Met Val Met Lys Leu Gln Lys Glu  
 50 55 60  
 Phe Leu Gln Lys Arg Arg Leu Ala Leu Glu Ala Tyr Leu Arg Asn Leu  
 65 70 75 80  
 Leu Leu Leu Pro Glu Val Cys Gln Thr Arg Asp Leu Arg Ala Phe Leu  
 85 90 95  
 Ser Gln Arg Ala Ile Ile Pro Arg Asp Glu Thr Pro Arg Asp Gly Glu  
 100 105 110  
 Thr Lys Asp Leu Val Thr Arg Ile Tyr Asn Ser Val Ala Asp Gly Met



18727

```

      115              120              125
Asp Asp Phe Leu Gly Asn Phe Gly Val Leu Asp Gln Leu Ser Ala Ala
  130              135              140
Gly Gln Asn Leu Ile Ser Ala Ala Thr Asn His Gln His Ser Pro Val
  145              150              155              160
Ser Asn Ser Gly Leu Ala Thr Glu Asp Ala Val Thr Ala Ala Glu Ala
      165              170              175
Glu Ala Glu Leu Asn Ala Phe Glu Asp Arg Glu Leu Glu Pro Phe Ile
      180              185              190
Lys Pro Ile Cys Asp Leu Phe Leu Glu Ala Phe Glu Leu Asn Lys Gly
      195              200              205
Asn Asn Trp Leu Arg Gly Arg Ala Val Val Val Val Leu His Gln Leu
      210              215              220
Leu Gly Gly Thr Ile Glu Arg Lys Val Arg Glu Gly Val Arg Ser Leu
  225              230              235              240
Val Gln Asp Glu Ser Leu Leu Arg Tyr Leu Ser Met Val Lys Glu Thr
      245              250              255
Met Trp Pro Gly Gly Val Leu Arg Gln Asn Lys Val Arg Thr Ala Ser
      260              265              270
Glu Arg Leu Lys Ser Arg Thr Glu Ala Ser Leu Val Leu Ala Thr Leu
      275              280              285
Ile Pro Asp Val Ala Gly Asn Val Val Gly Arg Ala Asn Ala Gln Gly
      290              295              300
Ala Ala Arg Arg Ile Phe Ala Thr Leu Asn Asn Gln Arg Leu Asn Ser
  305              310              315              320
His Leu Ile Phe Ser Ile Leu Asp Glu Val Val Leu Val Leu Phe Gly
      325              330              335
Gly Ala Lys

```

<210> 42059

<211> 83

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (66)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42059

```

Arg Asp Arg Cys Tyr Ser Gly Arg Leu Glu Lys Asp Ser Gln Thr Ala
  1              5              10              15
Pro Ser Pro Pro Arg Val Thr Met Thr Asp Ser Gln Ser Thr Phe Thr
      20              25              30
Ser Val Leu His Thr Gln Val Ile Thr Pro Ser Asp Ser Phe Asp Val
      35              40              45
Phe Ser Asn Thr Val Tyr Asp Leu Asp Ser Cys Asn Gln Gly Gln Glu
      50              55              60
Lys Xaa Arg Arg Lys Glu Lys Lys Arg Arg Glu Lys Lys Asn Pro Leu
      65              70              75              80
Asp Pro Thr

```

<210> 42060

<211> 504

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42060

```

Ser Phe Val Pro Asp Leu Ala Ser Leu Ile Lys Asp Phe Gly Ile Gln
1          5          10          15
Pro Glu Ile Ala Phe Trp Ile Arg Arg Pro Ser Val Ser Arg Lys Val
          20          25          30
Ala Asp Ala Glu Lys Ala Met Gln Glu Glu Glu Ala Ala Ala Ala Ala
          35          40          45
Ala Arg Ala Arg Glu Ile Glu Ala Ala Pro Ile Lys Ser Glu Asp Asp
          50          55          60
Lys Met Glu Thr Thr Asp Glu Gly Glu Met Asn Gly Pro Ala Asp Glu
65          70          75          80
Ser Ala Glu Asn Ser Met Asp Val Asp Lys Glu Gln Gly Met Thr Asn
          85          90          95
Thr Glu Gly Asp Ser Asn Pro Thr Ser Gly Gln Pro Glu Gln Pro Ala
          100          105          110
Ser Ser Ser Pro Thr Leu Asn Pro Val Met Gln Asp Leu Glu Asp Gln
          115          120          125
Val Lys Ser Ala Leu Thr Pro Glu Thr Trp Gly Val Val Gly Leu His
          130          135          140
Phe Tyr Val Ile Phe Trp Gln Leu Ser Leu Tyr Asp Val His Ile Pro
145          150          155          160
Gln Lys Ala Tyr Glu Asp Glu Ile Glu Arg Gln Lys Lys Lys Val Met
          165          170          175
Ala Ile Asn Ser Asp Arg Ser Asp Ile Ser Met Ala Gly Thr Gln Arg
          180          185          190
Lys Glu Arg Glu Lys Lys Gln Ile Thr Gln Leu Gln Glu Arg Ile Leu
          195          200          205
Glu Glu Asn Lys Ala His Leu Lys Ala Tyr Gly Gln Thr Arg Ala Arg
          210          215          220
Leu Gln Lys Glu Lys Asp Arg Trp Phe Ala Gly Met Arg Gly Lys His
225          230          235          240
Asp Ser Leu Asn Val Ser Leu Leu Glu Gln Cys Phe Leu Pro Arg Leu
          245          250          255
Leu Leu Ser Pro Ile Asp Ala Phe Tyr Cys Phe Lys Met Leu Lys Phe
          260          265          270
Leu His Thr Ser Gly Thr Pro Asn Phe Arg Thr Val Gly Leu Leu Asp
          275          280          285
Gln Leu Phe Arg Glu Gln Arg Leu Thr Ala Leu Ile Phe Gln Cys Thr
          290          295          300
Ser Arg Glu Ala Asp Asn Leu Gly Arg Phe Leu Asn Glu Val Ile Arg
305          310          315          320
Asp Leu Gly Arg Trp His Ala Asp Lys Ala Val Tyr Glu Lys Glu Ala
          325          330          335
Phe Gly Thr Lys Lys Asp Leu Pro Gly Phe Ala Ile Asn Val Asp Pro
          340          345          350
Glu Gly Lys Pro Thr Thr Phe Leu Glu Tyr Glu Asp Phe Arg Arg Leu
          355          360          365
Leu Tyr Lys Trp His Arg Leu Leu Ala Ser Ala Leu Lys Ile Cys Leu
          370          375          380
Asn Gly Gly Glu Tyr Met His Ile Arg Asn Ala Ile Ser Val Leu Lys
385          390          395          400
Ala Val Val Gln His Phe Pro Ala Val Asn Trp Ile Gly Arg Asp Met
          405          410          415

```

Leu Thr Ser Val Asn Asn Leu Ser Gln Asn Asp Glu Arg Asp Asp Val  
                   420                  425                  430  
 Lys Ile Pro Ala Ala Ser Leu Ile Gly Asp Leu Asn Arg Arg Glu Lys  
                   435                  440                  445  
 Lys Trp Met Leu Pro Gln Ala Phe Met Ile Ser Asn Gln Pro Ala Ser  
                   450                  455                  460  
 Lys Gly Pro Ala Pro Ala Ala Gly Lys Pro Gly Thr Pro Gly Thr Pro  
 465                  470                  475                  480  
 Arg Pro Arg Ser Thr Thr Pro Ala Ser Leu Asn Ala Ala Ala Pro Glu  
                   485                  490                  495  
 Phe Lys Pro Pro Pro Ser Ala Glu  
                   500

<210> 42061

<211> 589

<212> PRT

<213> A.fumigatus

<400> 42061

Pro Ser Glu Arg Gly Ser Phe Gln Pro Arg Gly Trp Gln Asn Arg Arg  
 1                  5                  10                  15  
 Pro Asp Glu Asp Glu Leu Pro Glu Pro Ser Asp Gln Lys Val Met Leu  
                   20                  25                  30  
 Leu Lys Ser Leu Leu Ala Ile Gly Ala Leu Pro Glu Ala Leu Phe Ile  
                   35                  40                  45  
 Leu Ser Lys Phe Pro Trp Leu Met Asp Ala Tyr Pro Glu Leu Pro Glu  
 50                  55                  60  
 Tyr Ile His Arg Ile Leu His His Ser Leu Ser Lys Val Tyr Asn Ser  
 65                  70                  75                  80  
 Leu Arg Pro Leu Pro Thr Val Glu Glu Leu Arg Glu Gln Gln Gln Ile  
                   85                  90                  95  
 Pro Ser Gln Asp Gln Gly Gly Leu Ala Lys Gly Gln Ile Arg Leu Thr  
                   100                  105                  110  
 Ser Ala Pro Pro Arg Arg Val Leu Arg Trp Ala Gln Leu Asp Lys Asp  
                   115                  120                  125  
 Asp Thr Asn Asp Gly Thr Asp Tyr Arg Phe Tyr Trp Asp Asp Trp Ala  
 130                  135                  140  
 Asp Asn Ile Pro Val Cys Gln Ser Val Asp Asp Val Phe Ala Leu Cys  
 145                  150                  155                  160  
 Ser Ser Phe Leu Asn Ile Ser Gly His Lys Ile Gly Leu Asp Pro Ser  
                   165                  170                  175  
 Leu Leu Ala Lys Leu Ala Arg Ile Gly Lys Phe Ser Leu Thr Gln Asp  
                   180                  185                  190  
 Asp Ser Thr Glu Asn Lys Ala Arg Trp Gln Asp Leu Cys Lys Arg Leu  
                   195                  200                  205  
 Leu Val Pro Ala Ile Ser Leu Thr Lys Ala Asn Pro Gly Val Val Asn  
                   210                  215                  220  
 Glu Val Phe Asp Leu Leu Arg Phe Phe Pro Arg Ala Thr Arg Tyr Asn  
 225                  230                  235                  240  
 Ile Tyr Ala Glu Trp Tyr Ser Gly Gln Thr Ser Arg Leu Pro Asp Ile  
                   245                  250                  255  
 Lys Ser Ala Phe Asp Gln Ala Arg Ala Glu Thr Lys Asp Val Leu Lys  
                   260                  265                  270  
 Arg Leu Ser Lys Thr Asn Ile Arg Pro Met Ala Arg Ala Leu Ala Lys  
                   275                  280                  285  
 Ile Ala Phe Ala Asn Pro Gly Ile Val Ile Asn Val Ala Ile Ser Gln

## 18730

```

      290              295              300
Ile Glu Ser Tyr Glu Asn Leu Ile Glu Val Val Val Glu Cys Ala Arg
305              310              315              320
Tyr Phe Thr Tyr Leu Gly Tyr Asp Ile Leu Thr Trp Ala Leu Ile Asn
      325              330              335
Ser Leu Gly Gln Lys Gly Arg Ser Arg Val Gln Glu Gly Gly Leu Leu
      340              345              350
Thr Ser Arg Trp Leu Asn Ala Leu Ala Thr Phe Ala Gly Arg Thr Tyr
      355              360              365
Lys Arg Tyr Ser Ile Met Asp Pro Thr Pro Val Leu Gln Tyr Val Val
      370              375              380
Glu Gln Leu Arg Gln Asn Asn Ser Thr Asp Leu Ile Val Leu Glu Gln
385              390              395              400
Met Ile Ser Ser Met Ala Gly Ile Ile Thr Asp Thr Asn Phe Asn Asp
      405              410              415
Ala Gln Ile Gln Ala Met Ala Gly Gly Glu Ile Leu Gln Ser Gln Thr
      420              425              430
Ile Leu Gln Leu Leu Asp Lys Arg His Glu Ser Lys Thr Thr Ser Lys
      435              440              445
Arg Leu Met Lys Ala Leu Thr Val Ser Glu Leu Ala Gly Gln Leu Leu
      450              455              460
Val Ala Ile Ala Gln Glu Arg Trp Thr Cys Ile Tyr Lys Ala Thr Glu
465              470              475              480
Gly Asp Ser Glu Leu Lys Leu Leu Gly Asn Val Phe Asp Glu Ile His
      485              490              495
Arg Ile Leu Ala Gln Tyr Leu Asp Val Leu Arg Ser Asn Met Ser Val
      500              505              510
Asp Glu Phe Asp Pro Leu Phe Pro Thr Trp Leu Leu Leu Ser Arg Thr
      515              520              525
Ser Val Phe Ser Arg Arg Leu Arg Phe Gly Ser Ala Asp Leu Ala Phe
      530              535              540
Pro Val Arg Leu Pro Met Leu Lys Arg Gln Cys Lys Arg Arg Lys Gln
545              550              555              560
Gln Pro Pro Leu Arg Gly Leu Ala Lys Ser Lys Gln Arg Pro Ser Asn
      565              570              575
Pro Arg Met Thr Lys Trp Lys Arg Gln Met Arg Val Lys
      580              585

```

&lt;210&gt; 42062

&lt;211&gt; 292

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42062

```

His Arg Lys Ile Leu Thr Thr Phe Arg Phe Gly Thr Tyr Ser Thr Cys
1              5              10              15
Asp Ala Ile Asn Ala Gly Leu Asp Leu Glu Met Pro Gly Pro Thr Arg
      20              25              30
Trp Arg Gly Thr Ala Leu Ala His Ala Val Ser Ser Asn Lys Ala Phe
      35              40              45
Glu Phe Val Met Asp Glu Arg Val Arg Asn Ile Leu Asn Leu His Asn
      50              55              60
Phe Val Glu Pro Leu Gly Ile Pro Glu Asn Ala Pro Glu Lys Ala Leu
65              70              75              80
Asn Arg Pro Glu Asp Gln Ala Leu Leu Arg Arg Ala Ala Ala Glu Ser
      85              90              95

```

## 18731

Val Val Leu Met Lys Asn Gln Asp Asn Ile Leu Pro Leu Lys Lys Glu  
 100 105 110  
 Lys Pro Ile Leu Val Ile Gly Pro Asn Ala Lys Thr Ala Ala Tyr Cys  
 115 120 125  
 Gly Gly Gly Ser Ala Ser Leu Asp Ala Tyr Tyr Thr Val Thr Pro Phe  
 130 135 140  
 Glu Gly Val Ala Ala Gln Ser Gln Gly Glu Val Thr Phe Ser His Gly  
 145 150 155 160  
 Val Tyr Ser Tyr Lys Glu Leu Pro Leu Leu Gly Pro Leu Leu Lys Asn  
 165 170 175  
 Asp Asp Gly Lys Lys Gly Phe Lys Phe Arg Val Tyr Asn Glu Pro Pro  
 180 185 190  
 Ser Glu Pro Asn Arg Gln Leu Ile Asp Glu Leu His Leu Glu Ser Ser  
 195 200 205  
 Ser Gly Phe Leu Met Asp Tyr Gln Pro Pro Lys Ile Lys Thr Phe Thr  
 210 215 220  
 Phe Tyr Val Asp Met Glu Gly Tyr Phe Pro Pro Glu Asp Asp Cys Ile  
 225 230 235 240  
 Tyr His Phe Gly Val Thr Phe Val Gly His Gly Lys Leu Phe Val His  
 245 250 255  
 Asp Glu Leu Val Val Gln His Ser Lys Asn Pro Pro Glu Cys His Arg  
 260 265 270  
 His Val Pro Ala Thr Pro Pro Ser Lys Asn Lys Cys Ser Lys Glu Leu  
 275 280 285  
 Gln Gly Arg Pro  
 290

&lt;210&gt; 42063

&lt;211&gt; 839

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42063

Gln Ile Lys Thr Met Arg Arg Pro Glu Gly Gly Pro Arg Gln Glu Val  
 1 5 10 15  
 Thr Lys Lys Ser Glu Val Glu Asp Gly Glu Ile Glu Asp Ala Lys Met  
 20 25 30  
 Thr Asp Val Ser Ala Lys Asp Ile Glu Thr Ser Asn Gln Val Ala Gln  
 35 40 45  
 Lys Pro Ala Glu Lys Ala Glu Ala Ala Ser Arg Gln Gly Glu Glu Ser  
 50 55 60  
 Ile Val Thr Gln Pro Pro Glu Thr Thr Ser Thr Gln Pro Thr Ser Glu  
 65 70 75 80  
 Lys Pro Val Ala Ser Thr Glu Ala Tyr Thr Gly Val Glu Leu Pro Ser  
 85 90 95  
 His Pro Arg Ile Ser Asp Ser Pro Ala Ala Ser Lys Thr Ala Thr Lys  
 100 105 110  
 Ala Ser Glu Ser Gly Arg Leu Pro Asn Val Pro Arg Arg Pro Glu Ser  
 115 120 125  
 Asp Arg Ala Pro Phe Ser Ser Pro Asn Met Arg Pro Gln Ser Gln Met  
 130 135 140  
 Pro Ser Arg Pro Phe Arg Gly Asp Asp Gly Arg Leu Pro Pro Arg Ser  
 145 150 155 160  
 Asp Ile Met Asp Ala Arg Arg Asp Arg Gln Ser Asp Phe Pro Arg Gly  
 165 170 175  
 Gly Arg Phe Gly Asp His Glu His Ser Arg Ser Phe Glu Gln Pro Gly

	180		185		190										
Pro	Glu	Gly	Arg	Ser	Tyr	Gly	Arg	Leu	Glu	Arg	Asp	Phe	Pro	Ser	Arg
	195					200						205			
Pro	Pro	Ala	Asp	Glu	Pro	Phe	Arg	Gly	Pro	Pro	Tyr	Arg	Asp	Gly	Arg
	210					215					220				
Leu	Thr	Arg	Glu	Ala	Asp	Gly	Pro	Asp	Arg	Ala	Gly	Arg	Leu	Arg	Gly
225					230					235					240
Pro	Pro	Asp	Ser	Arg	Glu	Ala	Pro	Ser	Ser	Arg	Ser	Val	Pro	Pro	Gly
			245					250						255	
Pro	Gln	Thr	His	Pro	Asp	Arg	Ala	Asp	Leu	Ile	Gln	Glu	His	Pro	Glu
		260					265					270			
Arg	Gly	Gly	Asp	Gly	Tyr	Arg	Arg	Gly	Glu	Gln	Met	Arg	Gln	Glu	Lys
	275					280					285				
Asp	Asp	Arg	Arg	Ala	Leu	Pro	Thr	Arg	Ala	Leu	Ser	Pro	Pro	Arg	Ala
	290					295					300				
Asp	Leu	Pro	Asn	Arg	Pro	Pro	Pro	Asp	Asp	Arg	Arg	Phe	Pro	Ser	His
305					310					315					320
Ala	Gln	Gly	Arg	Ser	Arg	Tyr	Asp	Asp	Thr	Pro	Thr	Gly	Pro	Arg	Asn
			325						330					335	
Asp	Arg	Pro	Ser	Arg	Ala	Pro	Met	Asp	Ala	Ser	Glu	Pro	Arg	Glu	Pro
		340						345				350			
Gly	Ala	Asp	Met	Ser	His	Gly	Arg	Leu	Arg	Gln	Pro	Glu	Pro	Ala	Ser
	355					360						365			
Asp	Ile	Pro	Ser	Gly	Pro	Arg	Gly	Arg	Asn	Pro	Ser	Gly	Arg	Gly	Gly
	370					375					380				
Arg	Thr	Ala	Ser	Gly	Leu	Ser	His	Ala	Thr	Pro	Ser	Ser	Pro	Ala	Gly
385					390					395					400
Ala	Ala	Asp	Arg	Gln	Pro	Pro	Thr	Gly	Pro	Gly	Arg	Gln	Gly	Met	Arg
			405					410						415	
Gly	Ala	Pro	Glu	Gln	Ser	Ser	Ser	Thr	Gly	Pro	Ser	Ser	Pro	Thr	Ile
		420						425					430		
Glu	Lys	Leu	Asp	Ala	Ser	Gly	Ile	His	Pro	Asp	Arg	Leu	Lys	Ala	Leu
	435						440					445			
Gln	Gln	Gln	Ala	Ser	Glu	Asp	Thr	Phe	Gly	Gly	Ser	Pro	Arg	Ser	His
	450					455					460				
Gln	Ser	Leu	Ser	Pro	Ala	Ser	Thr	Gly	Pro	Pro	Ser	Gly	Pro	Arg	Ser
465					470					475					480
Gly	Leu	Ala	Pro	Leu	Ser	Gly	Pro	Asn	Ser	Asn	Asn	Arg	Gly	Pro	Pro
			485					490						495	
Ser	Gly	Pro	Ala	Phe	Gly	Gly	Glu	Arg	Gly	Arg	Gly	Asp	Lys	Arg	Phe
		500					505					510			
Ala	Gly	Ile	Asn	Asn	Met	Leu	Gln	Gln	Ser	Gly	Gly	Pro	Gly	Asp	Arg
	515						520					525			
Gly	Gly	Pro	Gly	Thr	Gln	Ile	Arg	Gly	Arg	Gly	Ala	Asn	Arg	Gln	Ser
	530					535					540				
Thr	Met	Gly	Gly	Pro	Ser	Pro	Gln	Asn	Thr	Arg	Pro	Gly	Ser	Pro	Gly
545					550					555					560
Ala	Ser	Glu	Glu	Gly	Ser	Arg	Ser	Gly	Leu	Ser	Ser	His	Gly	Arg	Pro
			565					570						575	
Asp	Leu	Leu	Ile	Gly	Arg	Pro	Ser	Ala	Ser	Phe	Thr	Glu	Asp	Asp	Gly
		580						585					590		
Pro	Ser	Lys	Gly	Arg	Leu	Gly	Gly	Gly	Arg	Arg	Glu	Pro	Ala	Glu	Glu
	595						600					605			
Thr	Gly	Ser	Glu	Ser	Arg	Arg	Ser	Gly	Arg	Ala	Ser	His	Asp	Arg	Glu
	610					615					620				
Arg	Glu	Arg	Asp	Arg	Asp	Arg	Asp	Arg	Asp	Arg	Asp	Arg	Glu	Arg	Asp

## 18733

625                      630                      635                      640  
 Arg Asp Arg Asp Arg Glu Arg Glu Arg Arg Gly Gly Ala Asp Glu Glu  
                                  645                      650                      655  
 Gly Gly Arg Ser Ser Ser His Arg Glu Glu Arg Glu Arg Val Arg Glu  
                                  660                      665                      670  
 Phe Glu Arg Glu Arg Ser Arg Arg Gly Asp Thr Gly Gly Ser Ala Ser  
                                  675                      680                      685  
 Arg Glu Glu Arg Tyr Asp Ser Arg Glu Ala Ser Arg Arg Gly Thr Gly  
                                  690                      695                      700  
 Ser Arg Glu Glu Asn Arg Arg Arg Asp Arg Arg Glu Arg Glu Glu Asn  
 705                      710                      715                      720  
 Pro Glu Phe Gly Pro Ser Ser His Glu His Glu Gly Arg Leu Arg Pro  
                                  725                      730                      735  
 Pro Ser Ser Leu Gly Gly Gly Pro Pro Pro Pro Pro Pro Pro Leu  
                                  740                      745                      750  
 Pro Gly Asn Ala Glu Glu Asp Arg Arg Trp Gly Ala Gly Ser Gly Gly  
                                  755                      760                      765  
 Gly Asn Gly Gly Arg Glu Leu Arg Asp Arg Asp Arg Asp Arg Asn Arg  
                                  770                      775                      780  
 Asp Arg Gly Arg Asp Arg Asp Tyr Thr Arg Asp Gly Gly Ser Gly Gly  
 785                      790                      795                      800  
 Pro His Arg Lys Arg Gly Arg Pro Gly Gly Asp Asp Gly Pro Gly Glu  
                                  805                      810                      815  
 Gly Gly Gly Gly Gly Gly Arg Gly Gly Met Arg Met Gly Gly Glu Ser  
                                  820                      825                      830  
 Lys Arg Pro Arg Arg Gly Gln  
                                  835

&lt;210&gt; 42064

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42064

Leu Ser Gln Leu Val Ser Asp Gly Ala Ile Ser His Val Ile Ser Asn  
 1                      5                      10                      15  
 His Glu Trp Met Lys Phe Trp Cys Tyr Thr Ser Thr Met Glu Leu Thr  
                                  20                      25                      30  
 Arg Ile Met Ile Thr Gly Ile Asp Phe Trp His Thr Ala Ala Val Pro  
                                  35                      40                      45  
 Arg Leu Asn Ile Pro Ser Leu Arg Met Ser Asp Gly Pro Asn Gly Val  
                                  50                      55                      60  
 Arg Gly Thr Arg Phe Phe Asn Gly Val Pro Ala Ala Cys Phe Pro Cys  
 65                      70                      75                      80  
 Ala Thr Ala Leu Gly Ala Thr Trp Asp Thr Lys Leu Leu Tyr Glu Val  
                                  85                      90                      95  
 Gly Arg Leu Met Gly Glu Glu Ser Ile Ala Lys Gly Ala His Val Val  
                                  100                      105                      110  
 Leu Gly Pro Thr Ile Asn Thr Gln Arg Ser Pro Leu Gly Gly Arg Gly  
                                  115                      120                      125  
 Phe Glu Ser Phe Ala Glu Asp Gly Val Leu Ser Gly Ile Leu Ala Gly  
                                  130                      135                      140  
 His Tyr Cys Lys Gly Leu Gln Glu Thr Gly Val Ala Ala Thr Leu Lys  
 145                      150                      155                      160  
 His Phe Val Cys Asn Asp Gln Glu His Glu Arg Leu Ala Val Asp Ser  
                                  165                      170                      175

## 18734

```

Ile Val Thr Met Arg Ala Met Arg Glu Ile Tyr Leu Leu Pro Phe Gln
      180                      185                      190
Leu Ala Met Arg Ile Cys Lys Thr Ala Cys Val Met Thr Ala Tyr Asn
      195                      200                      205
Lys Val Asn Gly Thr His Val Ser Glu Asn Lys Gln Ile Ile Thr Asp
      210                      215                      220
Ile Leu Arg Lys Glu Trp Gly Trp Asp Gly Leu Val Met Ser Asp Trp
225                      230                      235                      240

```

&lt;210&gt; 42065

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42065

```

Leu Val Lys Gln Pro Arg Leu Arg Gln Leu Arg Val Thr Phe Leu Pro
1                      5                      10                      15
Glu Arg Asp Lys Phe Leu Phe Gly Asn Ala Val Ser Lys Met Phe Ile
      20                      25                      30
Leu Leu Pro Met Leu Met Asp Thr Gln Arg Gly Asp Gly Leu Leu Ala
      35                      40                      45
Pro Phe Gly Arg Ile Val Met Ala Arg Pro Asp Leu Asp Val Ile Gly
      50                      55                      60
Gln Ala Gln Asp Leu Pro Pro
65                      70

```

&lt;210&gt; 42066

&lt;211&gt; 481

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42066

```

Ser Ser Cys Arg Ser Thr Leu Ala Ser Phe Cys Ser Leu Ala Leu Gln
1                      5                      10                      15
Phe Ser Tyr Ile Phe Arg Ser His Ile Met Ser Val Met Phe Arg Ser
      20                      25                      30
Arg Val Thr Val Ala Ala Ser Ala Ala Val Ser His Ser Val Phe Ala
      35                      40                      45
Ala Gln Asn Ala Ser Thr Val Thr Arg Gly Phe Ala Thr Ala Ala Val
      50                      55                      60
Gly Thr Ser Arg Asn His Arg Val Val Val Val Gly Gly Gly Ser Ala
65                      70                      75                      80
Gly Leu Thr Val Ser His Gln Leu Leu Arg Thr Gly Lys Phe Ser Gln
      85                      90                      95
Asp Asp Ile Ala Val Val Asp Pro Ala Ile Trp His His Tyr Gln Pro
      100                      105                      110
Gly Trp Thr Leu Val Gly Gly Gly Leu Lys Asn Lys Glu Asp Leu Arg
      115                      120                      125
Gln Pro Leu Asn Gly Leu Leu Asp Pro Lys Leu Arg Phe Tyr Asn Asp
      130                      135                      140
Ser Val His Thr Phe Ser Pro Glu Asn Asn Phe Ile Thr Leu Ala Asn
      145                      150                      155                      160
Gly Asp Lys Val Asn Tyr Glu His Leu Val Val Val Pro Gly Ile Asn
      165                      170                      175
Val Asp Phe Ile Ser Ile Lys Gly Leu Pro Glu Ala Leu Ala Asp Ser
      180                      185                      190

```



## 18735

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Asn Ser Leu Val Ser Ser Ile Tyr Gly Tyr Asp Thr Cys Asp Lys Ala
    195                200                205
Tyr Ser Ser Ile Glu Lys Leu Gln Lys Gly Thr Ala Ile Tyr Thr Gln
    210                215                220
Pro Ala Gly Val Ile Lys Cys Ala Gly Ala Pro Gln Lys Val Met Trp
    225                230                235                240
Leu Ala Leu Asp Tyr Trp Lys Arg Ala Gly Leu Tyr Asn Pro Ser Asn
    245                250                255
Pro Ser Ser Gly Ala Ile Gln Ile Ser Phe Ala Thr Ala Leu Pro Gly
    260                265                270
Met Phe Gly Val Pro Lys Tyr Ser Ala Lys Leu Glu Glu Leu Arg Lys
    275                280                285
Glu Arg Lys Val Glu Gly Leu Phe Gln His Asp Leu Val Ser Ile Asp
    290                295                300
Gly Asp Lys Ala Thr Phe Lys Arg Leu Asp Gly Gln Glu Gln Val Thr
    305                310                315                320
Arg Arg Phe Asp Phe Leu His Val Val Pro Lys Met Gly Ala His Ala
    325                330                335
Phe Val Lys Asn Ser Pro Leu Ala Asn Glu Ala Gly Phe Val Asp Val
    340                345                350
Asp Asp Asn Thr Thr Arg His Lys Lys Tyr Gly Asn Val Trp Ser Ala
    355                360                365
Gly Asp Ala Ser Ser Leu Pro Thr Ser Lys Thr Ala Ala Ala Ile Thr
    370                375                380
Ala Gln Ala Pro Val Leu Val Ser Asn Leu Leu Arg Thr Met Glu Gly
    385                390                395                400
Lys Glu Leu Asp Ser Ser Tyr Asp Gly Tyr Thr Ser Cys Pro Leu Leu
    405                410                415
Thr Glu Tyr Gly Lys Val Leu Leu Ala Glu Phe Lys Tyr Ala Gly Glu
    420                425                430
Pro Lys Glu Thr Phe Gly Lys Met Leu Gly Ile Asp Gln Ala Thr Pro
    435                440                445
Arg Arg Ala Phe Tyr His Leu Lys Lys Asp Phe Phe Pro Trp Val Tyr
    450                455                460
Tyr Asn Tyr Met Val Lys Gly Thr Trp Gly Gly Pro Lys Gly Trp Ile
    465                470                475                480
Arg

```

&lt;210&gt; 42067

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42067

```

Leu Asn Arg Leu Asp Asn Val Phe Cys Gly Asp Leu Ile Phe His Ser
1          5          10          15
Asp Ile Gly Thr Ala Arg Cys Asp Phe Pro Gly Gly Ser Ala Asn Asn
    20          25          30
Leu Tyr Arg Ser Gly Arg Lys Val Leu Gly Leu Pro Asp His Val Lys
    35          40          45
Val Trp Thr Gly His Asp Tyr Pro Pro Glu Gly Arg Lys Glu Pro Val
    50          55          60
Pro Ser Leu Ser Val His Glu His Arg Gln Gln Asn Lys His Leu Arg
    65          70          75          80
Asp Gly Val Thr Glu Glu Glu Phe Val Thr Leu Arg Lys Glu Arg Asp

```

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.45	0.50	0	1	-0.05	3.0	0.99
Education	12.5	2.5	8	16	0.20	3.5	0.97
Income	45000	15000	20000	80000	0.30	3.8	0.96
Marital Status	0.60	0.49	0	1	-0.02	3.1	0.99
Occupation	1.5	1.2	1	5	0.10	3.3	0.98
Health Status	0.75	0.43	0	1	-0.08	3.0	0.99
Stress Level	3.5	1.5	1	6	0.25	3.6	0.97
Life Satisfaction	4.2	1.0	1	5	0.18	3.4	0.98
Resilience	2.8	1.2	1	5	0.22	3.7	0.96
Emotional Stability	3.8	1.1	1	5	0.12	3.3	0.98
Self-Esteem	4.0	1.0	1	5	0.15	3.4	0.98
Optimism	3.5	1.2	1	5	0.20	3.6	0.97
Gratitude	3.2	1.1	1	5	0.18	3.5	0.98
Forgiveness	3.0	1.0	1	5	0.22	3.7	0.96
Empathy	3.8	1.1	1	5	0.12	3.3	0.98
Compassion	3.5	1.2	1	5	0.20	3.6	0.97
Kindness	3.2	1.1	1	5	0.18	3.5	0.98
Generosity	3.0	1.0	1	5	0.22	3.7	0.96
Patience	3.8	1.1	1	5	0.12	3.3	0.98
Self-Control	3.5	1.2	1	5	0.20	3.6	0.97
Emotional Regulation	3.2	1.1	1	5	0.18	3.5	0.98
Stress Management	3.0	1.0	1	5	0.22	3.7	0.96
Resilience Training	3.8	1.1	1	5	0.12	3.3	0.98
Positive Psychology	3.5	1.2	1	5	0.20	3.6	0.97
Mindfulness	3.2	1.1	1	5	0.18	3.5	0.98
Transcendental Meditation	3.0	1.0	1	5	0.22	3.7	0.96
Vipassana	3.8	1.1	1	5	0.12	3.3	0.98
Zen	3.5	1.2	1	5	0.20	3.6	0.97
Therapy	3.2	1.1	1	5	0.18	3.5	0.98
Counseling	3.0	1.0	1	5	0.22	3.7	0.96
Support Groups	3.8	1.1	1	5	0.12	3.3	0.98
Online Courses	3.5	1.2	1	5	0.20	3.6	0.97
Books	3.2	1.1	1	5	0.18	3.5	0.98
Podcasts	3.0	1.0	1	5	0.22	3.7	0.96
Apps	3.8	1.1	1	5	0.12	3.3	0.98
Workshops	3.5	1.2	1	5	0.20	3.6	0.97
Retreats	3.2	1.1	1	5	0.18	3.5	0.98
Coaching	3.0	1.0	1	5	0.22	3.7	0.96
Community	3.8	1.1	1	5	0.12	3.3	0.98
Networking	3.5	1.2	1	5	0.20	3.6	0.97
Volunteering	3.2	1.1	1	5	0.18	3.5	0.98
Charity	3.0	1.0	1	5	0.22	3.7	0.96
Philanthropy	3.8	1.1	1	5	0.12	3.3	0.98
Leadership	3.5	1.2	1	5	0.20	3.6	0.97
Management	3.2	1.1	1	5	0.18	3.5	0.98
Business	3.0	1.0	1	5	0.22	3.7	0.96
Entrepreneurship	3.8	1.1	1	5	0.12	3.3	0.98
Investing	3.5	1.2	1	5	0.20	3.6	0.97
Real Estate	3.2	1.1	1	5	0.18	3.5	0.98
Technology	3.0	1.0	1	5	0.22	3.7	0.96
Art	3.8	1.1	1	5	0.12	3.3	0.98
Music	3.5	1.2					

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<210> 42068
<211> 374
<212> PRT
<213> A.fumigatus
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His	His	His	Pro	Asp	Val	Ile	Ser	Ser	Ile	Gln	Ile	Lys	Val	Lys	Arg
1				5					10					15	
Arg	Leu	His	Ile	Ser	Arg	Arg	Pro	Pro	Arg	Pro	Glu	Thr	Lys	Met	Asp
			20					25					30		
Arg	Ile	Tyr	Arg	Asn	Val	Ala	Phe	Gln	Leu	Arg	Pro	Asn	Leu	Pro	Leu
		35					40					45			
His	Ile	Pro	Thr	Cys	Ser	His	Ser	Thr	Arg	Ser	Ile	Ser	Ile	Leu	Thr
	50					55					60				
Ile	His	Arg	Pro	Arg	Ile	Thr	Asn	Phe	Lys	Ser	Gly	Val	Thr	Lys	Thr
65					70					75					80
Gln	Ile	Gly	Arg	Glu	Tyr	Ser	Leu	Thr	Thr	Ser	Glu	Glu	Asn	Met	Arg
				85					90					95	
Ile	Ala	Ile	Thr	Gly	Ala	Arg	Gly	Ser	Val	Gly	Gln	Phe	Val	Val	Lys
			100					105					110		
Leu	Cys	Ala	Asp	Ala	Gly	His	Ser	Thr	Val	Gln	Ile	Asn	Arg	Thr	Asp
		115					120					125			
Thr	Asp	Tyr	Asp	Gly	Thr	Pro	Arg	Ser	Glu	Met	Ala	Thr	Ala	Asp	Val
	130					135					140				
Ala	Asn	Asp	Tyr	Asp	Ala	Cys	Leu	Lys	Ala	Phe	Lys	Asn	Cys	Asp	Ala
145					150					155					160
Val	Ile	His	Leu	Ala	Ser	Ile	Pro	Asp	Pro	Val	Asp	Lys	Pro	Asp	His
				165					170					175	
Thr	Val	His	Asn	Asn	Asn	Val	Asn	Ser	Ala	Phe	Asn	Cys	Phe	Arg	Ala
			180					185					190		
Ala	Ala	Glu	Leu	Gly	Ile	Lys	Arg	Phe	Cys	Tyr	Ala	Ser	Ser	Val	Asn
		195					200					205			
Ala	Val	Gly	Leu	Ala	Tyr	Ala	Asn	Gln	Pro	Leu	Gln	Phe	Asp	Tyr	Phe
	210					215					220				
Pro	Val	Asp	Glu	Asp	Ala	Pro	Gln	Arg	Pro	Thr	Asp	Ala	Tyr	Ala	Leu
225					230					235					240
Ala	Lys	His	Glu	Ala	Glu	Ile	Gln	Ala	Arg	Ser	Phe	Ala	Thr	Trp	Phe
				245					250					255	
Pro	Gly	Met	Lys	Ile	Ala	Cys	Leu	Arg	Ile	His	Glu	Val	Ala	Pro	Leu
			260					265					270		
Lys	Asp	Val	Gln	Lys	Glu	His	Gln	Glu	Asp	Trp	Glu	Asn	Ala	Ala	Val
	275						280					285			
Lys	Gln	Leu	Trp	Gly	Trp	Val	Ser	Pro	Gln	Ala	Thr	Ala	Arg	Ala	Cys
	290					295					300				
Leu	Leu	Ala	Val	Glu	Arg	Ser	Asp	Asn	Phe	Glu	Gly	Cys	Gln	Val	Phe
305					310					315					320
Asn	Ile	Val	Ala	Pro	Thr	Thr	Gln	Asp	Thr	Pro	Ser	Glu	Glu	Leu	
				325				330						335	

18737

Ala Lys Lys Tyr Tyr Pro Gly Ala Glu Ile Arg Gly Asp Met Ser Lys  
 340 345 350  
 Asn Gln Ser Phe Phe Ala Val Glu Lys Ala Gln Arg Ile Leu Gly Trp  
 355 360 365  
 Thr His Asp Glu Lys Glu  
 370

<210> 42069  
 <211> 230  
 <212> PRT  
 <213> A.fumigatus

<400> 42069  
 Ile Val Val Phe Ile Leu Ser Thr Gly Pro Thr Asn Lys Pro Thr Tyr  
 1 5 10 15  
 Gln Ser Gln Ile Pro Thr Ile Leu Pro Asn Tyr Tyr Leu Ser Thr Thr  
 20 25 30  
 Met Phe Lys Ser Ala Ala Leu Phe Ser Leu Leu Leu Ala Ala Ala Thr  
 35 40 45  
 Ala Ser Pro Thr Pro Ser Glu Asp Leu Glu Ala Arg Ala Cys Ala Gly  
 50 55 60  
 Leu Gly Pro Ser Val Ile Asp Val Leu Arg Val Ser Thr Pro Asp Asn  
 65 70 75 80  
 Ala Ser Pro Gly Gln Gln Phe Thr Leu Ser Arg Ala Gly Tyr Pro Pro  
 85 90 95  
 Tyr Asn Thr Gln Ile Ser Ala Ile Thr Phe Asn Tyr Ile Pro Pro Asn  
 100 105 110  
 Ala Thr Gly Cys Met Leu Glu Ile Asp Ile Pro Ala Leu Ser Gln Pro  
 115 120 125  
 Asn Gln Ile Ala Glu Gly Ala Thr Gln Val Asp Ile Trp Thr Thr Asp  
 130 135 140  
 Pro Trp Asn Tyr Leu Ser Leu Pro Thr Tyr Asn Ser Pro Pro Lys Arg  
 145 150 155 160  
 Arg Glu Met Val Gly Thr Tyr Ile Phe Pro Thr Gln Pro Thr Thr Glu  
 165 170 175  
 Ala Ser Lys Thr Ile Ile Ala Ser Asn Thr Cys Ser Asp Thr Met Ser  
 180 185 190  
 Phe Leu Val Glu Leu Ser Asn Trp Gln Gln Gln Ser Gly Ser Val Thr  
 195 200 205  
 Phe Tyr Asn Thr Leu Gly Gly Lys Gln Gly Ile Glu Pro Thr Gly Phe  
 210 215 220  
 Lys Met Ile Tyr Asn Cys  
 225 230

<210> 42070  
 <211> 163  
 <212> PRT  
 <213> A.fumigatus

<400> 42070  
 Gly Ser Gln Leu Leu Ala Leu Val Ala Pro Ser Ala Asn Leu Trp Ser  
 1 5 10 15  
 Asn Ser Ala Leu Met Pro Ala Thr Pro Arg Cys Arg Ser Ile Ala Pro  
 20 25 30  
 Thr Pro Thr Met Thr Ala Arg Pro Ala Arg Arg Trp Gln Arg Arg Thr  
 35 40 45

## 18738

Leu Gln Thr Thr Met Thr Arg Ala Ser Lys His Ser Arg Thr Ala Met  
 50 55 60  
 Arg Ser Ser Ile Trp His Arg Ser Pro Thr Arg Ser Ile Asn Gln Ile  
 65 70 75 80  
 Thr Pro Ser Thr Thr Thr Thr Ser Thr Arg His Ser Thr Ala Ser Ala  
 85 90 95  
 Pro Arg Arg Asn Trp Ala Ser Ser Gly Ser Ala Met Leu Arg Gln Ser  
 100 105 110  
 Thr Leu Trp Gly Trp Arg Met Gln Thr Ser His Ser Asn Ser Thr Thr  
 115 120 125  
 Ser Pro Ser Met Lys Thr Pro Arg Ser Asp Gln Arg Met Pro Met His  
 130 135 140  
 Trp Pro Ser Met Arg Pro Arg Ser Arg His Ala Arg Ser Arg His Gly  
 145 150 155 160  
 Ser Leu Ala

&lt;210&gt; 42071

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42071

Glu Ile Leu Ile Ser Pro Val Gly Pro Pro Ala Pro Val Ser Ala Thr  
 1 5 10 15  
 Met Phe Lys Phe Val Met Leu Gly Ile Tyr Tyr Val Ser Cys Ile Asn  
 20 25 30  
 Ser Asp Val Met His Arg Ser Gln Ser Pro Ile Gln Ser His Val Phe  
 35 40 45  
 Gly Ser Pro Ser Gly Tyr Arg Ser Ile Pro Asp Ala Leu Ala Ala  
 50 55 60

&lt;210&gt; 42072

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42072

Ala Gln Thr Tyr Leu Asn Met Ala Ser Ile Gln Pro His Ile Cys Arg  
 1 5 10 15  
 Asn Trp Gln Val Thr Ala Gly Leu Phe Gly Ala Pro Pro Thr Ala Val  
 20 25 30  
 Arg Val Pro Leu Arg Pro Leu Pro Tyr Arg Ala Thr Gln Lys Ser Pro  
 35 40 45  
 Tyr Thr Thr Gly Lys Val His Leu Arg Pro Leu Ala Val Tyr Thr Arg  
 50 55 60  
 Pro Leu Ser Lys Val Arg Ala Leu Asn Asn Arg Ala Tyr Pro Ser Lys  
 65 70 75 80  
 Ser Ser Leu Asn Gly Pro Val His Arg Val Pro Tyr Ser Thr Ala Thr  
 85 90 95  
 Met Glu Pro Gly Glu Pro Thr Ile His Asp Val Phe Glu Ser Lys Thr  
 100 105 110  
 Gly Thr Trp Gln Tyr Val Val Ala Asp Pro Thr Thr Ser Thr Ala Val  
 115 120 125  
 Ile Ile Asp Pro Val Leu Asp Tyr Asp Pro Ala Thr Gln Gly Ile Thr  
 130 135 140

## 18739

Thr Glu Ser Ala Asp Ala Leu Leu Ser Leu Val Lys Glu Lys Gly Tyr  
 145 150 155 160  
 Lys Val Asp Arg Ile Leu Glu Thr His Ala His Ala Asp His Leu Thr  
 165 170 175  
 Ala Ala Ser Tyr Leu Gln Lys Arg Leu Ala Glu Glu Gln Gly His Arg  
 180 185 190  
 Pro Arg Ile Gly Ile Gly Lys Arg Ile Gly Gln Val Gln Lys Leu Phe  
 195 200 205  
 Gly Gln Arg Tyr Gly Ile Pro Glu Gln Glu Tyr Lys Asp Val Phe Asp  
 210 215 220  
 Lys Leu Phe Glu Asp Asp Glu Thr Phe Lys Ile Gly Asn Leu Met Ala  
 225 230 235 240  
 Gln Ala Ile His Leu Pro Gly His Thr Pro Asp His Leu Gly Tyr Arg  
 245 250 255  
 Ile Gly Gly Met Pro Ser His Ala His  
 260 265

&lt;210&gt; 42073

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42073

Asp Ala Arg Ala Ser Ser Asp Arg Leu Trp Asp Leu His Ala Asn Asn  
 1 5 10 15  
 Ser Ser Ile Asp Gln Cys Glu Gly Leu Val Ala Phe Glu Tyr Thr Asn  
 20 25 30  
 Gly Leu Val Arg Lys Pro Asn Thr Leu Val Phe Ile Gly Gly Leu Gly  
 35 40 45  
 Asp Gly Leu Gly Thr Val Glu Tyr Leu Thr Asp Ile Ile Thr Ala Leu  
 50 55 60  
 Glu Tyr Thr Pro Trp Ser Val Phe Ser Pro Ile Leu Ser Ser Ser Tyr  
 65 70 75 80  
 Ser Gly Trp Gly Val Gly His Leu Gly Lys Asp Ile Asp Glu Ile Ala  
 85 90 95  
 Arg Cys Val Gln Tyr Ala Arg Glu Tyr Lys Gln Gly Leu Phe Gly Ala  
 100 105 110  
 Gly Lys Ile Val Ile Met Gly His Ser Thr Gly Ser Gln Asp Val Met  
 115 120 125  
 His Tyr Leu Ser Cys Ala Asn Pro Arg Pro Arg His Pro Val Leu Asp  
 130 135 140  
 Lys Asp Ala Ala Val Glu Pro Pro Lys Arg Pro Pro Val Asp Gly Ala  
 145 150 155 160  
 Val Met Gln Ala Pro Val Ser Asp Arg Glu Ala Ile Thr Trp Val Ile  
 165 170 175  
 Arg Asp Gly Thr Asp Arg Asp Gly Pro Gly Arg Met Arg Glu Ile Tyr  
 180 185 190  
 Gln Arg Thr Ile Ala Arg Ala Arg Ser Thr Pro Tyr Glu Asp Asp Asp  
 195 200 205  
 Thr Leu Asp Thr Ile Leu Pro Leu Ser Ala Thr Thr Arg Ile Gly Tyr  
 210 215 220  
 Pro Ser Ser Thr Pro Val Ser Ser Arg Arg Phe Leu Ser Leu Ala Ser  
 225 230 235 240  
 Pro Asp Ser Pro Glu Lys Pro Glu Glu Asp Asp Leu Phe Ser Ser Asp  
 245 250 255  
 Leu Thr Asp Asp Gln Met Gln Lys Asn Phe Gly His Leu Gly Ser Arg

## 18740

260 265 270  
 Gly Leu Leu Gly Ser Lys Leu Leu Val Leu Phe Ser Gly Lys Glu Gln  
 275 280 285  
 Ser Val Ala Pro Trp Gly  
 290

<210> 42074

<211> 87

<212> PRT

<213> A.fumigatus

<400> 42074

Arg Gln Glu Gly Tyr Lys Val Trp Glu Ala His Val Thr Ile Asn Ser  
 1 5 10 15  
 Lys Glu Gln Ser Gln Cys Tyr Thr Ser Ile Arg Arg Ala Ser Thr Ile  
 20 25 30  
 Ser Cys Ser Val Trp Pro Glu Cys Arg Pro Tyr Lys Arg Thr Ile Arg  
 35 40 45  
 Thr Glu Ala Val Glu Ile Ser Glu Arg Gln Ala Ser Arg Ser Asn Tyr  
 50 55 60  
 Phe Ala Tyr Gly Tyr Thr Gly Ile Pro Gln Ala Cys Gln Ser Ile Ala  
 65 70 75 80  
 Gly Ser Tyr Arg Thr Ile Thr  
 85

<210> 42075

<211> 179

<212> PRT

<213> A.fumigatus

<400> 42075

Ile Leu Lys Ser Ala Met Ala Arg Pro Lys Val His Pro Ala Asn Arg  
 1 5 10 15  
 Leu Arg Ala Tyr Glu Ala Cys Leu Phe Cys Arg Thr Ser Lys Arg Arg  
 20 25 30  
 Cys Ser Gly Ser Phe Pro Cys Gln Asn Cys Ile Arg Lys Gly Gln Ala  
 35 40 45  
 His Ser Cys Met Pro Ser Arg Arg Arg Glu Ser Phe Ser Ala Ser Arg  
 50 55 60  
 Gln Pro Asn Thr Pro Asp Ala Pro Ser Gly Pro Val Thr Ala Ile Met  
 65 70 75 80  
 Pro Ser Gln Val Leu Ser Ser Thr Asp Ser Gln Ser His Ala Ser Leu  
 85 90 95  
 Glu Thr Ser Val Asp Gln Gly Leu Ala Ser Pro Glu Ala Gln His Lys  
 100 105 110  
 Thr Arg Pro Arg Met Leu Arg Ser Leu Gln Gly Glu Arg Gly Val Cys  
 115 120 125  
 Val Cys Val Val Thr Asp Asp Phe Thr Pro Lys His Leu Ser Val Asp  
 130 135 140  
 Met Leu Ser Ser Val Cys Gly Gln Gly Cys Val Ala Ile Leu Pro Ala  
 145 150 155 160  
 Thr Thr Pro Arg Tyr Cys His Pro Thr His Arg Pro Val Thr Val Leu  
 165 170 175  
 Thr Gln Cys

&lt;210&gt; 42076

&lt;211&gt; 501

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42076

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His Arg Tyr Ser Tyr Ala Lys Pro Ser Arg Pro Ser Arg Ala Tyr Ile
1      5      10      15
His Val Thr Ser Ser Glu His Ile Ala Pro Leu Ser Asp Lys Val Arg
      20      25      30
Gln Thr Ser Phe Val Asp Ala Arg Asn Thr Phe Asn Asp Pro Val Leu
      35      40      45
Leu Gly Pro Pro Ser Leu Glu Phe Ala Pro Tyr Ala Lys Ile Pro Gly
      50      55      60
Ser Arg Val Arg Lys Asp Ala Arg Gln Gly Thr Ile Asp Gln Asp Pro
65      70      75      80
Glu Phe Ile Ala Phe Leu Glu Ser Leu Thr Gln Pro Ile Thr Lys Pro
      85      90      95
Thr Thr Val Asp Thr Pro Thr Asp Ala Glu Glu Lys Lys Glu Thr Val
      100     105     110
Thr Thr Thr Pro Leu Val Gln Tyr Ile Lys Glu Lys Lys Ala Asn Lys
      115     120     125
Ala Lys Glu Ala Ser Ser Lys Ser Ser Arg His Ala Lys Gly Glu Lys
      130     135     140
Glu Ser Lys Ser Glu Lys Val Gln Ala Lys Lys Leu Leu Gln Arg Gln
145     150     155     160
Asp Lys Asp Ala Ala Leu Ala Pro Thr Gly Asp Lys Ala Glu Lys Lys
      165     170     175
Ser Arg Ala Ser Asp Lys Ala Ser Lys Glu Ala Val Lys Ala Ala Asn
      180     185     190
Arg Ala Ala Asn Ala Ala Ala Lys Gln Ala Ala Lys Pro Ala Ala Thr
      195     200     205
Gln Asn Thr Ser Lys Asp Thr Ala Gln Pro Ala Ser Thr Glu Arg Lys
      210     215     220
Arg Glu Arg Asn Asn Ile Ala Val Ala Ala Lys Ile Leu Gln Arg Asp
225     230     235     240
Leu Gly Leu Ala Pro Ser Gly Gly Arg Arg Arg Ala Gly Lys Gly Gly
      245     250     255
Ser Thr Glu Thr Asp Ser Ser Lys Lys Glu Pro Asp Ala Ala Ile Thr
      260     265     270
Ala Asp Ser Gly Lys Lys Asp Thr Lys Ser Gly Lys Pro Met Ser Pro
      275     280     285
Ser Thr Pro Arg Ser Lys Ala Asn Ala Thr Pro Pro Ser Gly Glu Pro
      290     295     300
Ala Pro Ser Arg Ala Gln Ser Gly Pro Asn Ala Gly Pro Thr Ser Ala
305     310     315     320
Pro Ser Ala Gln Lys Gln Ser Lys Ser Ala Lys Gly Lys Pro Ala Ala
      325     330     335
Pro Ile Thr Ser Pro Thr Ala Thr Gln Ala Phe Leu Lys His Ala Asn
      340     345     350
Pro Ser Gln Gly Val Thr Glu Pro Leu Leu Glu Thr Ala Phe Ala Pro
      355     360     365
Phe Gly Lys Ile Leu Lys Val Glu Ile Asp Lys Lys Lys Gly Phe Gly
      370     375     380
Tyr Ile Asp Phe Ala Glu Pro Asp Gly Leu Gln Lys Ala Ile Ala Ala
385     390     395     400

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## 18742

Ser Pro Val Thr Val Ala Gln Ser Gln Val Val Val Leu Glu Arg Lys  
 405 410 415  
 Ala Asn Pro Gly Ala Glu Lys Thr Arg Gly Lys Gly Arg Arg Glu Gln  
 420 425 430  
 Pro Ala Pro Asn Asn Gly Ser Asn Ser Asn Ser Asn Ser Asn Arg Gly  
 435 440 445  
 Ala Lys Gln Gly Ser Asp Gly Gly Ser Gly Pro Ala Thr Pro Ser Ser  
 450 455 460  
 Ser Arg Gly Pro Arg Gly Gly Arg Gly Ser Arg Asn Lys Gly Gly Ser  
 465 470 475 480  
 Lys Gly Asn Gly Ala Asn Ala Ser Ser Asn Thr Pro Ser Gly Lys Thr  
 485 490 495  
 Gly Gly Glu Thr Lys  
 500

&lt;210&gt; 42077

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42077

Ile Leu Ser Leu Thr Pro Ser Asp Phe Pro Phe Val Ala Ser Phe Val  
 1 5 10 15  
 Arg Thr Arg Thr Met Val Asp Asn Lys Ile Pro Glu Pro Gly Pro Ala  
 20 25 30  
 Lys Leu Arg Arg Asn Ala Gly Pro Asp Glu Trp Leu Glu Ala Ala Lys  
 35 40 45  
 Asp Cys Lys Tyr Leu Ser Glu Gln His Met Lys Gln Leu Cys Glu Ile  
 50 55 60  
 Val Lys Glu Tyr Met Met Glu Gly Glu Ser Ala Gln Gly Ser Arg Asp  
 65 70 75 80  
 Thr Leu Arg Leu

&lt;210&gt; 42078

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42078

Gln Ser Ile Ser Glu Glu Ser Asn Ile Gln Pro Val Ser Thr Pro Val  
 1 5 10 15  
 Thr Ile Cys Gly Asp Ile His Gly Gln Phe Tyr Asp Leu Leu Glu Leu  
 20 25 30  
 Phe Arg Val Ser Gly Gly Met Pro Asp Gly Ser Glu Ala Glu Ala Pro  
 35 40 45  
 Lys Thr Gln Ser Ala Val Ile Thr Ser Asp Asp Ile Glu Pro Pro Ser  
 50 55 60  
 Thr Ile Ser Asp Pro Lys Leu Arg Lys Lys Leu Arg Asn Thr Phe Ala  
 65 70 75 80  
 Pro Glu Asp Gly Ser Glu Asp Ser Ser Ala Ser Gln Arg Asp Arg Ser  
 85 90 95  
 Ser Ser Val Phe Thr Thr Arg Leu Glu Gly Thr Ala Leu Gly Val  
 100 105 110

&lt;210&gt; 42079



&lt;211&gt; 423

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42079

```

Tyr Asn Lys Asn Leu Val Ile Thr Arg Asn Leu Asp Cys Leu Glu Tyr
1      5      10      15
Leu Val Ile Thr Arg Phe Tyr Tyr Thr Arg Leu Gly Pro Ser Ala Gly
      20      25      30
Leu Gly Glu Tyr Pro Ala Ala Val Ile Lys Thr Ala Phe Ser Pro Pro
      35      40      45
Gly Lys Lys Asp Phe Phe Leu Arg His Gln Pro Ser Leu Leu Ser Ala
      50      55      60
Arg Met His Leu Pro Lys Leu Phe Ala Ser Gly Leu Val Leu Leu Val
      65      70      75      80
Val Pro Ser Ala Val Thr Ala Arg Arg Gly Gly Gly Gly Gly Ile
      85      90      95
Asp Thr Asp Thr Ser Ser Asp Gly Asp Gly Gly Ser Ser Ser Ala Pro
      100      105      110
Gly Gly Thr Ser Thr Ile Gly Gly Gly Ser Thr Ser Cys Gly Pro Thr
      115      120      125
Thr Glu Ile Leu Tyr Lys Ser Asp Leu Val Pro Met Asn Ser Tyr Asn
      130      135      140
Trp Thr Ser Lys Gly Ala Ser Asn Ser Gly Thr Asn Pro Thr Thr Tyr
      145      150      155      160
Asp Gly Ser Tyr Phe Gln Gly Glu Ala Phe Leu His Trp Gln Phe Thr
      165      170      175
Ala Cys Arg Pro Cys His Asn Ser Ser Gly Thr Val Arg Met Leu Arg
      180      185      190
Tyr Ala Trp Val Gly Pro Gln Pro Pro Tyr Pro Thr Gly Pro Thr Asn
      195      200      205
Pro Ile Ile Ile Gly Phe Lys Ala Trp His Thr Asn Asp Ala Leu Glu
      210      215      220
Asn Ile Thr Phe Ser Tyr Asp Phe Leu His Asp Gly Leu Tyr Cys Pro
      225      230      235      240
Thr Ala Pro Asp Leu Val Lys Ile Gln Thr Ser Asn Gly Trp Thr Asp
      245      250      255
Tyr Gln Ala Ser Thr Asp Ile Pro Arg Ala Asp Arg Ala Arg Ala His
      260      265      270
Asp Val Phe Asp Leu Asp Leu Ala Leu Asp Ala Glu Arg Pro Asp Ser
      275      280      285
Val Arg Phe Asn Gly Ser Met Val Pro Gly Leu Lys Pro Pro Pro Thr
      290      295      300
Tyr Thr Val Glu Val Leu Leu Pro Ala Ser Ala Cys Asn Arg Gln Ser
      305      310      315      320
Arg Leu Ser Leu Gly Tyr Gly Glu Glu Leu Asn Met Ser Gly Ser Leu
      325      330      335
Thr Asn Thr Thr Leu Glu Leu Ser Leu Ala Gly Val Gly Lys Gly Ser
      340      345      350
Tyr Ala Ser Gly Ser Gly Ile Met Leu Arg Ala Met Phe Asn Ile Thr
      355      360      365
Phe Ser Gly Thr Phe Asp Ser Gly Asn Ser Thr Arg Ala Val Ala Ile
      370      375      380
Lys Pro Asp Thr Gln Pro Met Val Phe Trp Val Asp Asn Gly Ala Met
      385      390      395      400
Met His Gly Cys Leu Ser Trp Met Leu Lys Leu Met Phe Ile Gly Trp

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18744

Val Ala Trp Phe Val Cys Cys  
420

410

415

<210> 42080  
<211> 109  
<212> PRT  
<213> A.fumigatus

<400> 42080  
Gln Pro Asn Cys Ile Leu Val Ser Cys Leu Ala Met Ser Ile Arg Arg  
1 5 10 15  
Thr Ser Ala Thr Ala His Asn Ala Ala Ile Lys Asp Arg Ser Gln Ala  
20 25 30  
Val Ala Ala Gln Val Ala Glu Gln Gln Gly Trp Leu Glu Lys Lys Leu  
35 40 45  
Lys Pro Lys Lys Val Thr Ala Arg Tyr Pro Phe Lys Gly Ala Pro Leu  
50 55 60  
Leu Tyr Ala Thr Cys Ala Phe Gly Ser Leu Gly Asp Ala Leu Phe Gly  
65 70 75 80  
Tyr Asn Ser Gly Ile Val Pro Tyr Lys Leu Asp Gly Arg Ser Ala Pro  
85 90 95  
His Ala Asn Gly Asn Arg Tyr His Val Arg Leu Ala Gly  
100 105

<210> 42081  
<211> 332  
<212> PRT  
<213> A.fumigatus

<400> 42081  
Val Ser Glu Gly Pro Arg Gln Arg Arg Thr Met Arg Pro Ser Lys Thr  
1 5 10 15  
Ala Arg Lys Leu Trp Gln Arg Arg Leu Gln Ser Asn Lys Ala Gly Trp  
20 25 30  
Arg Lys Ser Ser Ser Pro Arg Arg Ser Leu Pro Asp Ile Arg Ser Arg  
35 40 45  
Glu Arg Leu Cys Ser Met Arg His Ala Pro Leu Glu Val Trp Gly Met  
50 55 60  
Pro Cys Leu Gly Thr Thr Leu Val Leu Ser Pro Ile Ser Trp Thr Ala  
65 70 75 80  
Gly Val Leu Leu Met Leu Thr Ala Ile Gly Ile Met Ser Gly Leu Leu  
85 90 95  
Val Asn Pro Val Phe Val Ser Arg Phe Phe Lys Asp Tyr Gly Gly Ala  
100 105 110  
Asp Gly Thr Thr Asn Ala Val Asn Pro Ser Ile Thr Gly Ile Ser Val  
115 120 125  
Ala Cys Leu Gln Ala Ser Ala Ala Val Gly Ala Leu Ile Ala Gly Arg  
130 135 140  
Leu Gly Asp Ile Ile Gly Arg Lys Arg Cys Val Arg Leu Gly Gly Phe  
145 150 155 160  
Ile Tyr Phe Phe Ser Ala Phe Ile Gln Ile Phe Ala Pro Asp Phe Ala  
165 170 175  
Thr Phe Ile Ala Gly Arg Thr Ile Gln Gly Leu Gly Val Gly Phe Leu  
180 185 190  
Ser Met Thr Val Pro Ile Ile Gln Thr Glu Ile Ala Ala Pro His Arg

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<210> 42082
<211> 97
<212> PRT
<213> A.fumigatus
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<210> 42083
<211> 159
<212> PRT
<213> A.fumigatus
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<400> 42083															
Leu	Phe	Tyr	Pro	Ser	Gly	Leu	Ala	Met	Ala	Val	Leu	Leu	Gly	Ile	Val
1				5					10					15	
Cys	Ala	Phe	Thr	Gln	Ala	Asn	Leu	Asp	Ile	Thr	Val	Lys	Ala	Asn	Gly
			20					25					30		
Gln	Tyr	Ala	Phe	Val	Met	Leu	Tyr	Asn	Ile	Val	Tyr	Gly	Phe	Thr	Trp
		35					40					45			
Gly	Pro	Met	Pro	Trp	Leu	Leu	Pro	Ala	Glu	Ile	Phe	Pro	Leu	Arg	Gly
	50					55					60				
Arg	Ser	Lys	Gly	Met	Ala	Leu	Ala	Thr	Thr	Ser	Asn	Trp	Ile	Phe	Asn
65					70					75					80
Phe	Ile	Ile	Gly	Met	Val	Ser	Pro	Asp	Ala	Phe	Ala	Gly	Ile	His	Gly

[illegible]

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<210> 42084
<211> 68
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (33)
<223> Identity of amino acid sequences at the above locations are unknown.
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<210> 42085
<211> 1686
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (847)
<223> Identity of amino acid sequences at the above locations are unknown.
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<400> 42085															
Ala	Ser	Pro	Leu	Val	Trp	Trp	Leu	Val	His	His	His	Leu	Ser	His	Tyr
1				5					10					15	
Pro	Cys	Ala	Arg	Leu	Ser	Ile	Phe	Phe	Ser	Leu	Ser	Glu	Phe	Val	Met
			20					25					30		
Ala	Ser	Gly	Ala	Thr	Ser	Ala	Ser	Ser	Glu	Ala	Arg	Glu	Leu	Ser	Leu
		35					40					45			
Ile	Ser	Lys	Val	Glu	Leu	Arg	Ile	Ala	Leu	Ala	Asp	Thr	Asp	Glu	Lys
	50					55					60				
Leu	Glu	Gly	Leu	Leu	Asn	Thr	Tyr	Leu	Ala	Pro	Leu	Leu	Leu	Lys	Leu
65					70					75					80
Gly	Ser	Glu	Ser	His	Ala	Val	Arg	Ser	Lys	Val	Ile	Ala	Val	Cys	Gln
				85					90					95	
His	Ile	Asn	Thr	Arg	Val	Gln	Ala	Pro	Ser	Ile	Gln	Leu	Pro	Val	Ala

			100					105					110			
Ala	Leu	Leu	Lys	Gln	Phe	Lys	Asp	Gln	Lys	Ser	Gln	Leu	Ile	Arg	His	
		115					120					125				
Phe	Asp	Leu	Leu	Tyr	Leu	Gln	Gln	Gly	Ile	Asp	Arg	Leu	Ser	Pro	Asn	
	130					135					140					
Ala	Arg	Ile	Asp	Ile	Leu	Ser	Pro	Leu	Leu	Gln	Gly	Ile	Ser	Glu	Ile	
145					150					155					160	
Gly	Ala	Thr	Asn	Gln	Gly	Ala	Ile	Ile	Phe	Asn	Leu	Val	Leu	Arg	Leu	
				165					170						175	
Leu	Pro	Leu	Leu	Asn	Leu	Pro	Pro	Lys	Gly	Ser	Glu	Glu	Asp	Thr	Arg	
		180						185					190			
Leu	Lys	Ser	Thr	Leu	Cys	Leu	Ser	Asp	Gln	Asp	Arg	Ser	Phe	Leu	Ser	
		195					200					205				
Ser	Trp	Phe	Glu	Lys	Leu	Leu	Leu	Leu	Tyr	Pro	Ala	Glu	Lys	Asp	Ala	
	210					215					220					
Thr	Thr	Cys	Pro	Gly	Leu	Ser	Pro	Ala	Glu	Tyr	Thr	Phe	Leu	Asn	Lys	
225					230					235					240	
Gly	Leu	Pro	Ala	Asp	Glu	Thr	Trp	Asn	Pro	Ala	Ser	Asn	Gly	Gly	Leu	
				245					250					255		
Asn	Leu	Thr	Ala	Thr	Lys	Val	Thr	Ala	Leu	Arg	Phe	Leu	Thr	Ser	Gly	
			260					265					270			
Ala	Phe	Thr	Asp	Ser	Glu	Arg	Phe	Ile	Pro	Ala	Leu	Ile	Ala	Ser	Ala	
		275					280					285				
Asp	Val	Asn	Ser	Arg	Val	Ser	Asp	Leu	Gly	Glu	Glu	Ile	Leu	Lys	Arg	
	290					295					300					
Phe	Ile	Pro	Asp	Leu	Glu	His	Pro	Asp	Val	Val	Gln	Lys	Leu	Tyr	Ser	
305				310					315						320	
Leu	Tyr	Phe	Gly	Asp	Gly	Thr	Val	Asp	Gly	Ala	Gln	Pro	Ala	Arg	Pro	
				325					330					335		
Pro	Ile	Gln	Leu	Lys	Ile	Leu	Val	Phe	Leu	Gly	Lys	Ser	Ile	Val	Ala	
			340					345					350			
Thr	Lys	Asp	Thr	Glu	Lys	Val	Ile	Arg	Leu	Ile	Glu	Glu	Gly	Leu	Leu	
		355					360					365				
Ser	Asp	Lys	Ala	Arg	Ser	Ser	Gln	Gly	Leu	Gln	Ala	Ser	Lys	Leu	Arg	
	370					375					380					
Thr	Gln	Ile	Phe	Thr	Phe	Thr	Thr	Trp	Val	Val	Arg	Met	Gly	Ser	Pro	
385					390					395					400	
Ser	Asp	Leu	Lys	Leu	Met	Ala	Pro	Lys	Leu	Ile	Ala	Gly	Leu	Trp	Asp	
				405					410				415			
Phe	Ile	Gln	Ser	Gln	Gly	Trp	Pro	Ser	Pro	Ala	Ala	Ser	Gly	Gln	Arg	
			420					425					430			
Leu	Pro	Ala	Ser	Asp	Leu	Ser	Leu	Arg	Gly	Leu	Ala	Tyr	Glu	Ser	Ile	
		435														

545					550					555					560	
Ala	Arg	Trp	Ile	Asp	Leu	Met	Ala	Val	Ala	Arg	Gly	Ser	Glu	Leu	Asn	
				565					570					575		
Gln	Glu	Val	Val	Glu	Glu	Gly	Lys	Lys	Gly	Leu	His	Pro	Tyr	Trp	Tyr	
				580					585					590		
Arg	Leu	Leu	Asn	Pro	Ser	Lys	Asp	Arg	Lys	Trp	Val	Ala	Ser	Thr	Ala	
				595					600					605		
Ala	Asp	Glu	Thr	Glu	Gln	Ala	Trp	Tyr	Asn	Phe	Pro	Thr	Phe	Ser	Asp	
				610					615					620		
Ala	Thr	Arg	Phe	Leu	Leu	Gly	Ser	Pro	Glu	Ser	Ala	Arg	Ser	Ala	Val	
				625					630					635	640	
Ala	Pro	Ala	Leu	Ser	Ala	Ser	Glu	Ala	Leu	Ser	Gly	Pro	Tyr	Arg	Thr	
				645					650					655		
Ala	Leu	Pro	Val	Ala	Ile	Ala	Phe	Leu	Arg	Asn	Ile	Leu	Leu	Trp	Glu	
				660					665					670		
Ala	Leu	Ser	Ala	Ser	Gly	Asn	Ile	Glu	Ile	Asp	Gln	Asp	Trp	Asp		
				675					680					685		
Val	Lys	Leu	Asp	Val	Leu	Leu	Thr	Ser	Asp	Glu	Gly	Ala	Arg	Arg	Gly	
				690					695					700		
Leu	Lys	Gln	Tyr	Met	Gln	Ser	Ser	Asp	Lys	Glu	Pro	Ile	Leu	Leu	Phe	
				705					710					715	720	
Leu	Thr	Ser	Ala	Leu	Thr	Gly	Leu	Thr	Ser	Asp	Lys	Arg	Leu	Gly	Leu	
				725					730					735		
Gln	Arg	Cys	Gly	Glu	His	Phe	Val	Ser	Ile	Cys	Ser	Leu	Ala	Ser	Asn	
				740					745					750		
Asp	Thr	Val	Gly	Ala	Met	Val	Pro	Gln	Thr	Leu	Ala	Leu	Lys	Ala	Ser	
				755					760					765		
Val	Ser	Ser	Thr	Asp	Gln	Glu	Ile	Gln	Asn	Lys	Ala	Ala	Gln	Ala	Leu	
				770					775					780		
Gly	Ile	Leu	Ala	Ser	His	Pro	Ala	Phe	Ser	Asp	Ala	Asp	Ile	Arg	Ser	
				785					790					795	800	
Leu	Leu	Ser	Asp	Leu	Ser	Asp	Ser	Val	Ser	Ser	Trp	Lys	Pro	Ala	Ile	
				805					810					815		
Gly	Glu	Ala	Leu	Leu	Lys	Ile	Arg	Gly	Ala	Ile	Leu	Ala	Ile	Gly	Tyr	
				820					825					830		
Ile	Leu	Ser	Arg	Leu	Ala	Phe	Arg	Ser	Ala	Leu	His	Arg	Ala	Xaa	Asp	
				835					840					845		
Glu	Gln	Val	Glu	Arg	Phe	Thr	Ser	Thr	Val	Phe	Asp	Leu	Val	Glu	Asn	
				850					855					860		
Ser	Arg	Asp	Ser	Phe	Leu	Arg	Arg	Phe	Ala	Gln	Val	Ala	Leu	Gly	Leu	
				865					870					875	880	
Leu	Ser	Leu	Ser	Gly	Ile	Leu	Ser	Pro	Ala	Met	Ile	Ser	Asp	Ala	Arg	
				885					890					895		
Trp	Lys	Gln	Ile	Lys	Glu	Lys	Leu	Thr	Gln	Asp	Ala	Lys	Ser	Glu	Ser	
				900					905					910		
Asp	Thr	Ala	Ile	Ala	Thr	Leu	Gly	Leu	Leu	Ala	Leu	Thr	Phe	Ala	Arg	
				915					920					925		
Ser	Ser	Pro	Asp	His	Ala	Leu	Phe	Lys	Glu	Leu	Leu	Thr	Ser	Leu	Tyr	
				930					935					940		
Glu	Leu	His	Glu	Ile	Arg	Ser	Pro	Glu	Ile	His	Phe	Thr	Val	Gly	Asp	
				945					950					955	960	
Ala	Leu	Ser	Ser	Ala												

995	1000	1005
Lys Pro Ser Leu Arg	Lys Ser Ser Ala Ile Trp	Leu Leu Cys Leu Ile
1010	1015	1020
Lys Asn Cys Gly His	Leu Ala Glu Ile Gln Ser Arg	Leu Arg Lys Cys
1025	1030	1035
Gln Ala Thr Phe Thr	Gly Ile Leu Gly Asp Arg Asp	Glu Val Val Gln
1045	1050	1055
Glu Thr Gly Ala Gln Gly	Leu Gly Leu Val Tyr Glu Met Gly	Asp Gln
1060	1065	1070
Ser Leu Lys Asp Asp	Leu Val Arg Asp Leu Ile Glu Ser Phe Thr	Ala
1075	1080	1085
Asn Lys Ser Asn Leu Gly	Gly Gly Lys Val His Ala Asp Thr	Glu Leu
1090	1095	1100
Phe Glu Pro Gly Ala	Leu Pro Thr Gly Glu Gly Ser Ser Ile Asn Thr	
1105	1110	1115
Tyr Lys Asp Ile Met	Asn Leu Ala Ser Glu Ala Gly Asp Pro Thr Met	
1125	1130	1135
Val Tyr Arg Phe Met	Ser Leu Ala Ser Asn Asn Ala Leu Trp Thr Asn	
1140	1145	1150
Arg Ala Ala Phe Ser	Lys Leu Gly Val Ser Thr Ile Phe Ser Asp Ser	
1155	1160	1165
Ser Val Asn Gly Tyr	Leu Ala Lys Ser Thr Lys Ile Tyr Pro Lys Leu	
1170	1175	1180
Phe Arg Tyr Arg Phe	Asp Pro Asn Pro Asn Val Gln Arg Ser Met Asn	
1185	1190	1195
Thr Ile Trp Thr Ala	Leu Val Lys Asp Pro Ala Val Val Ile Asn Thr	
1205	1210	1215
His Phe Asp Glu Ile	Met Asp Asp Leu Leu Thr Ser Met Leu Ala Gly	
1220	1225	1230
Arg Glu Trp Arg Val	Arg Gln Ala Ser Cys Ala Ala Ile Ala Asp Leu	
1235	1240	1245
Met Gln Gly Arg Gln	Pro Glu Lys Tyr Ala Lys Tyr Leu Asp Glu Ile	
1250	1255	1260
Phe Thr Lys Ala Phe	Lys Leu Leu Asp Asp Ile Lys Glu Ser Val Arg	
1265	1270	1275
Val Ser Ala Leu Lys	Leu Cys Gln Thr Leu Thr Asn Ala Ile Val Arg	
1285	1290	1295
Thr Leu Glu Thr Ser	Asp Leu Glu Thr Lys Arg Ala Asn Ala Met Leu	
1300	1305	1310
Ala Ser Ala Ile Pro	Phe Leu Leu Ser Asp Lys Gly Met Glu Ser Ser	
1315	1320	1325
Val Gln Glu Val Gln	Gly Phe Ala Ile Gly Thr Leu Val Gln Met Ile	
1330	1335	1340
Arg Lys Ser Pro Ser	Gly Pro Leu Arg Ala Phe Val Pro Arg Ile Ile	
1345	1350	1355
Glu Gln Phe Leu Asn	Ser Leu Ser Ser Leu Glu Pro Gln Ala Val Asn	
1365	1370	1375
Tyr Val His Leu Asn	Ala Asp Lys Tyr Gly Leu Thr Gly Gln Glu Ile	
1380	1385	1390
Asp Lys Met Arg Leu	Ser Ser Ile Arg Thr Ser Pro Met Met Glu Val	
1395	1400	1405
Ile Glu Arg Tyr Leu	Ile Asp Met Leu Asp Asp Ala Ser Met Lys Glu	
1410	1415	1420
Phe Ala Pro Arg Leu	Glu Gly Val Leu Arg Ser Ala Val Gly Leu Pro	
1425	1430	1435
Ser Lys Val Gly Cys	Ser Arg Val Leu Val Leu Leu Ser Met Arg Pro	

# 18750

1445	1450	1455
Met Leu Phe Arg Pro Tyr Ala Asp	Arg Phe Val Gln Leu Leu Ser Lys	
1460	1465	1470
Tyr Val Val Asp Arg Asn Glu Thr	Val Ser Ala Ser Tyr Cys Thr Ser	
1475	1480	1485
Ile Gly Tyr Leu Met Arg Leu Ala Thr	Asp Asp Gln Val Leu Lys Thr	
1490	1495	1500
Ile Asn Tyr Ala Lys Asn Leu Tyr Leu	Ala Ala Glu Asp Ala Asn Glu	
1505	1510	1515
Arg Val Ile Ser Ala Glu Ile Leu His	Ser Thr Ser Lys Leu Ser Asn	
1525	1530	1535
Asp Arg Phe Met Ala Phe Ala Ala Thr	Thr Leu Pro Phe Val Phe Ile	
1540	1545	1550
Ser Lys Tyr Asp Thr Asp Thr His Val	Arg Glu Val Phe Asp Asn Thr	
1555	1560	1565
Trp Gln Asp Asn Val Gly Gly Thr Arg	Ala Val Ser Leu Tyr Leu Lys	
1570	1575	1580
Glu Ile Ala Ser Leu Ala Ala Glu Asn	Leu Asp Ser Pro Arg Trp Ala	
1585	1590	1595
Ile Lys His Thr Ala Ala Leu Gly Ile	Ala Asn Ala Ile Met Leu Leu	
1605	1610	1615
Asp Ala Asp Leu Asp Leu Ala Thr Ser	Gln Ser Leu Trp Pro Val Leu	
1620	1625	1630
Glu Lys Ala Leu Ala Gly Lys Thr Trp	Asp Gly Lys Glu Ala Val Leu	
1635	1640	1645
Lys Ala Phe Met Lys Phe Ala Ser Gln	Ala Gln Lys Leu Trp Gln Glu	
1650	1655	1660
Asn Lys Gln Leu Ser Asp Ser Met Lys	Val Ser Leu Ser Leu Ala Tyr	
1665	1670	1675
Arg Val Tyr Leu Gly Gly		1680
1685		

<210> 42086  
 <211> 393  
 <212> PRT  
 <213> A.fumigatus

<400> 42086

Glu Asn Thr Arg Val Ser Ala Tyr Arg	Gln Arg Leu Arg Ala Ala Leu
1	5 10 15
Glu Ile Gln His Ile Ser Ile Phe Phe	Met Gly Asn Ala Phe Tyr Gln
20	25 30
Ile Arg Thr Asp Pro Lys Leu Thr Glu	Pro Asp Ser Glu Glu Phe Lys
35	40 45
Arg Leu Glu Lys Arg Glu Thr Glu Ala	Tyr Glu Glu Ala Lys Leu Ile
50	55 60
Arg Met Glu Ile Leu Ser Asp Val Ser	Arg Lys Val Ser Arg Tyr Met
65	70 75 80
Lys Val Ile Arg Glu Lys Ser Glu Lys	Lys Gln Phe Val Val Ile Pro
85	90 95
Lys Met Lys Pro Gln Leu Tyr Ser Lys	Gly Leu Glu Ala Arg Arg Ile
100	105 110
Phe Asp Arg Tyr Glu Glu Phe Cys Glu	Val Met Asn Lys His Ala Val
115	120 125
Gln Tyr Asn Glu Trp Arg Asp Ile Met	Val Lys Leu Leu Ser Gln Ser
130	135 140



## 18751

Leu Ile Asp Gln Glu Asp Glu Ser Glu Leu Glu Gly Asn Glu Tyr Glu  
 145 150 155 160  
 Arg Ser Thr Lys His Gln Asp Glu Met Tyr Val Tyr Met Glu Ala Leu  
 165 170 175  
 Arg Ala Met Phe Ala Asp Arg His Asp Ala Leu Thr Gly Gln Gln Asn  
 180 185 190  
 Val Leu Ile Ala His Glu Val Lys Gly Gly Ile Ile Gln Ala Gln Gln  
 195 200 205  
 Gly Glu Gly Pro Ser Pro Ala Leu Phe Leu Ser Val Met Asn Thr Arg  
 210 215 220  
 Ser Ala Leu Lys Pro Ala Pro Ala Leu Gly Ser Leu Arg Gly Ile Ile  
 225 230 235 240  
 Ser Glu Leu Arg Ser Leu Ala Thr Ser Leu Glu Trp Gln Gly Ser Gly  
 245 250 255  
 Gly Ser Ser Arg Ala Leu Ala Glu Leu Leu Val Asn Ser Val Leu  
 260 265 270  
 Gln His Ala Lys Met Ala Ala Glu Gln Asn Lys Val Ser Ser Asn  
 275 280 285  
 Leu Glu Arg Glu Val Glu Met Phe Arg Asp Thr Met Asn Asn Arg Leu  
 290 295 300  
 Glu Tyr Tyr Arg Gln Leu Gln Gln Ile Ser Asp Thr Val Ala Pro Tyr  
 305 310 315 320  
 Asp Glu Glu Ser Val Gly Lys Pro Leu Asp Glu Glu Leu Tyr Gly Ala  
 325 330 335  
 Lys Leu Lys Gln Glu Asn Glu Ile Asp Ala Lys Ile Ser Thr Leu Arg  
 340 345 350  
 Ser Lys His Arg Tyr Leu Leu His Leu Arg Asp Asp Ser Gly Ala Asp  
 355 360 365  
 Asn Ala Ser Arg Ile Cys Val Ile Cys Gln Ser Ser Phe Glu Ile Gly  
 370 375 380  
 Arg Cys Met Cys Ser Ile Pro Lys Arg  
 385 390

&lt;210&gt; 42087

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42087

Asp Phe Val Leu Leu Thr Phe Ile Gly Val Leu Thr Val Cys Gly His  
 1 5 10 15  
 Lys Tyr Cys Lys Asp Cys Leu Arg Ile Trp Trp Asn Gln His Arg Thr  
 20 25 30  
 Cys Pro Thr Cys Lys Arg Arg Leu Lys Val Asn Asp Phe His Gln Ile  
 35 40 45  
 Thr Tyr Lys Pro Glu Glu Phe Val Val Gln Glu Glu Lys Thr Pro Lys  
 50 55 60  
 Leu Glu Ser Gly Arg Ser Ser Asn Ser Phe Ile Tyr Thr Asp Ile Ser  
 65 70 75 80  
 Ser Gly Thr Leu Lys Glu Ile Lys Asn Ile Asp Leu Glu Ala Ser Phe  
 85 90 95  
 Gly Thr Lys Ile Asp Thr Leu Ala Arg His Ile Leu Trp Leu Arg Glu  
 100 105 110  
 His Asp Pro Gly Ala Lys Ser Ile Ile Phe Ser Gln Tyr Lys Thr Phe  
 115 120 125  
 Leu Glu Val Leu Gly Thr Ala Phe Ser Arg Phe Lys Ile Gly Tyr Ser

## 18752

130 135 140  
 Ser Ile Asp Asn Ala Asp Gly Ile Glu Arg Phe Lys Ser Asp Pro Ala  
 145 150 155 160  
 Val Cys Phe Pro Lys Pro His Cys Tyr Cys Phe Phe Thr Asp Asn Cys  
 165 170 175  
 Leu Ala Gly Arg Met Leu Leu Ser Thr Cys  
 180 185

<210> 42088  
 <211> 91  
 <212> PRT  
 <213> A.fumigatus

<400> 42088  
 Glu Ala Lys Trp Pro Gly Gln Val Ile Ala Ile Arg Glu Ala Lys Arg  
 1 5 10 15  
 Asn Asn Pro Ile Tyr Arg Pro His Gly Leu Val Ala Leu Gly Gly Val  
 20 25 30  
 Ala Arg Ala Arg Ser Asp Val Asp Phe Met Pro Asp Ala Leu Asn Ile  
 35 40 45  
 Val Ser Arg Val Leu Asp Glu Val Thr Glu Ala Asp Ala Asp Ser Met  
 50 55 60  
 Asp Ile Asp Ser Gly Ser Gly Gln Asn Ser Lys Tyr Val Tyr Lys Ile  
 65 70 75 80  
 Cys Ser Pro Phe Ser Val Phe Cys Arg Leu Phe  
 85 90

<210> 42089  
 <211> 138  
 <212> PRT  
 <213> A.fumigatus

<400> 42089  
 Arg Thr Ala Ile Lys Ser Tyr Leu Glu Glu Met Thr Pro Leu Ile Glu  
 1 5 10 15  
 Lys Ala Val Val His Gly Thr Arg Lys Val Gln Ile Ser Leu Tyr Glu  
 20 25 30  
 Glu Leu Gly Lys Leu Phe Glu Arg Phe Arg Lys Trp Ala Thr Ala Gly  
 35 40 45  
 Asn Gly Gln Lys Pro Glu Ala Gly Glu Leu Gln Gly Pro Leu Val Ala  
 50 55 60  
 Leu Ala Gln Lys Met Leu Cys Arg Glu Ile Asp Met Ser Ile Glu Asn  
 65 70 75 80  
 Ile Arg Met Gly Arg Ala Gln Ala Ala Ala Tyr Val Ala Leu Ser  
 85 90 95  
 Gln Gln Met Glu Leu Asp Val Thr Gln Ala Leu Gln Asp Ser Val Lys  
 100 105 110  
 Thr Trp Lys Asp Ser Glu Arg Ser Gly Leu Val Gln Gln Val Leu Asn  
 115 120 125  
 Gln Ile Leu Thr Asp Leu Ala Val Leu Trp  
 130 135

<210> 42090  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 42090

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Arg Lys Thr Lys Thr Lys Thr Ser Leu Ser Ala Asn Gln Asn Val Leu
1           5           10           15
Gln Ser Met Asp Glu Leu Tyr Ser Ser Thr Asp Ala Met Pro Asp Leu
           20           25           30
Thr Ser Tyr Asn Thr Ala Glu Arg Phe Leu Gly Thr Gln Gly Ala Gln
           35           40           45
Ser Lys Lys Pro Asp Ser Arg Pro Lys Thr Arg Leu Ala Val Glu Phe
           50           55           60
Gln Pro Ala Leu
65

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&lt;210&gt; 42091

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42091

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Arg Gly Ser Arg Ala Thr Gln Arg Tyr Val Ser Pro Asn Pro Thr Val
1           5           10           15
Thr Val Ser Leu Leu Ile Ile Ala Leu Gln Val Glu Cys Phe Phe Leu
           20           25           30
His Ala Lys Ala Gln Ser Ser Gly Leu Asn Leu Val Asn Ala Thr His
           35           40           45
Val Phe Leu Cys Glu Pro Leu Val Asn Thr Ala Ile Glu Leu Gln Ala
           50           55           60
Ile Ala Arg Val His Arg Ile Gly Gln His Arg Pro Thr Thr Val Trp
65           70           75           80
Met Tyr Leu Val Ser Asp Thr Val Glu Gln Ser Ile Tyr Glu Leu Ser
           85           90           95
Val Ser Arg Arg Leu Ala His Ile Val Gln Lys Glu Lys Val Lys Glu
           100          105          110
Ala Leu Asp Asp Pro Gly Ala Val Phe Lys Asn Leu Thr Glu Thr Ala
           115          120          125
Ile Asp Ser Ala Asn Ser Leu Glu Val Gln Asp Ala Thr Leu Ala Lys
           130          135          140
Leu Met Thr Lys Gly Thr Ala Gly Gly Glu Leu Val Lys Lys Asp Asp
145          150          155          160
Leu Trp Gln Cys Leu Phe Gly Asn Ala Thr Gln Lys Met Asp Leu Arg
           165          170          175
Ala Asp Gly Glu Val Ala Arg Phe Leu Arg Gly Asp Ala Ala Glu Lys
           180          185          190
Arg Arg Ala Ala Ala Ser Ser
195

```

&lt;210&gt; 42092

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42092

```

Asp Ala Gly Glu Tyr Asp Leu Arg Ser Ala Leu Gly Val Ser Leu Ile
1           5           10           15
Met Asp Lys Pro Tyr Pro Ser Val Val Val Ile Glu Gln Leu Ser Gly
           20           25           30

```

[illegible]

```
<210> 42093
<211> 67
<212> PRT
<213> A.fumigatus
```

```
<210> 42094
<211> 469
<212> PRT
<213> A.fumigatus
```

<400>	42094														
Gly	Thr	Asp	Ile	Ser	Val	Ala	Ala	Ala	Ile	Ile	Ser	Pro	Phe	Leu	Thr
1				5					10					15	
Glu	Pro	Thr	Leu	Leu	Ser	Met	Gln	Cys	Tyr	Ala	Leu	Met	Ser	Leu	Tyr
			20					25					30		
Leu	Met	Asn	Ala	Ser	Gln	Phe	Arg	Asp	Ala	Tyr	Ser	Leu	Leu	Gly	Thr
			35				40					45			
Ala	Ile	Arg	Asp	Ser	His	Ser	Val	Asn	Leu	His	Glu	Glu	Pro	Ser	Glu
	50					55					60				
Arg	Leu	Gln	Pro	Lys	Asp	Arg	Ile	Ala	Gln	Arg	Ile	Trp	Trp	Leu	
65				70						75					80
Leu	Phe	Met	Leu	Asp	Ile	Lys	Cys	Ser	Gln	Gln	Leu	Gly	Lys	Pro	Val
				85					90					95	
Ala	Val	Gln	Thr	Ala	Thr	Ile	Thr	Cys	Ala	Leu	Pro	Ser	Val	Asp	Glu
			100					105					110		
Leu	Thr	Thr	Met	Pro	Glu	Asn	Thr	Arg	Val	Cys	Trp	Lys	Asp	Leu	His
			115				120					125			
Val	Ser	Thr	Tyr	Phe	Ile	His	Ala	Val	Lys	Phe	Ala	Val	Ser	Leu	Ala
	130					135					140				
Glu	Ile	Gln	Arg	Leu	Ile	Ser	Pro	Ser	Lys	Leu	Phe	Glu	Asp	Thr	Asn
145				150						155					160
Asn	Ile	Thr	Ala	Leu	Glu	Gln	Arg	Ala	Asn	Leu	Leu	Ala	Thr	Ser	Leu
				165					170					175	
Ala	Gly	Leu	Glu	Lys	Trp	Ser	Asn	Glu	Leu	Pro	Glu	Asp	Leu	Ile	Ser
			180					185					190		
Pro	Arg	Lys	Asn	Thr	Gly	His	Ala	Glu	Ala	Met	Ser	Thr	Ala	Glu	Ser
		195					200					205			

## 18755

```

Pro Ile Val Leu Glu Leu Gly Ala Pro Ser Trp Leu His His Gln Arg
 210                      215                      220
Val Leu Leu Glu Val Tyr Tyr His Asn Ala Tyr Val Met Leu Gln Arg
225                      230                      235                      240
Pro Phe Ile Cys Phe Pro Gln Pro Ser Asn Ser Ser Pro Val Gln Gln
                      245                      250                      255
Pro Gln Thr Asp His His Ala Arg Ser Ser Leu Gln His Ala Ile Thr
                      260                      265                      270
Met Ile Ile Ile Val His Asp Leu Cys Ser Ser Ser Asp Leu Phe Phe
                      275                      280                      285
Gly Trp Pro Ala Ile Leu His Pro Leu Trp Asn Ala Thr Val Thr Ile
290                      295                      300
Leu Gly Phe Val Val Ala Asn Pro Ser Ser Ser Arg Ser Arg Arg Ala
305                      310                      315                      320
Ile Gln Trp Ile Phe Lys Ala Leu Ala Val Phe Glu Ala Phe Ala Ala
                      325                      330                      335
Thr Glu Pro Phe Ala Ala Arg Ala Glu Thr Leu Thr Lys Ser Leu Val
                      340                      345                      350
Thr Lys Leu Asn Asp Ile Leu Thr Thr Leu Asp Glu Lys Ser Glu Gln
                      355                      360                      365
Glu Gln Thr Asn Asp Arg Gly Arg Ile Ala Pro Gly Leu Thr Leu Gln
                      370                      375                      380
Gln Ser Pro Asp Ser Val Pro Ser Thr Thr Pro Ser Ser Ala Asn Pro
385                      390                      395                      400
Val Asp Met Leu Arg Gly Ser Leu Ala Gly Gly Leu Glu His Thr Phe
                      405                      410                      415
Asp Asn Thr Phe Phe Thr Asn Asp Ser Leu Cys Ser Ser Ile Glu Ala
                      420                      425                      430
Ala Glu Ile Asn Thr Trp Ala Ala Tyr Gln Asp His Leu Asp Ile Trp
                      435                      440                      445
Asn Gly Ser His Ser Asp Lys Ala Leu Asp Ala Thr Tyr Thr Leu Gly
450                      455                      460
Ile Gly Asn Thr Pro
465

```

&lt;210&gt; 42095

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42095

```

Phe Ser Asp Ile Pro His Gly Ile Ser Thr His Arg Ile Lys Met Asn
 1                      5                      10                      15
Gln Ile Pro Val Phe Ala Gly Leu Gly Ser Asp Ala Leu Phe Ser Glu
                      20                      25                      30
Arg Thr Leu Gly Thr Ala Ala Glu Asp Ala Arg Thr Pro Glu Gly Gln
                      35                      40                      45
Ile Ile Leu Arg Ala Cys His Ser Ile Phe Leu Lys Glu Val Ala Ser
50                      55                      60
Val Thr His Ser Arg Arg Leu Pro Ser Asp Ile Asn Leu Asp Asp Phe
65                      70                      75                      80
Val Glu Pro Glu Ser Leu Ile Arg Pro Arg Gln Cys Asn Glu Arg Asn
                      85                      90                      95
Ser Ile Ile Gln His Val Ser Leu Tyr Thr Ile Gln Leu Leu Arg Tyr
100                      105                      110
Leu Arg Tyr Ser Lys Glu Lys Pro Gly Ile Val Leu Gly Val Ala Gly

```

## 18756

```

      115              120              125
Phe Cys Ala Gly Leu Leu Pro Cys Ala Ala Val Ala Thr Ser Lys Thr
      130              135              140
Val Ile Glu Leu Leu Ala Arg Ala Gln Asp Phe Phe Tyr Val Ala Leu
      145              150              155              160
His Leu Gly Ile Arg Val Glu Ser Tyr Arg Gln Thr Met Val Ala Lys
      165              170              175
Glu Ala Cys Ser Pro Asp Leu Pro Cys Ser Leu Val Val Asp Gly Ile
      180              185              190
Asp Ala His His Ala Arg Glu Leu Leu Asp Asp His Asn Arg Arg Val
      195              200              205
Trp Leu Val His Asp
      210

```

&lt;210&gt; 42096

&lt;211&gt; 349

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (85),(108),(122),(123)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42096

```

Arg Asn Ala Gln Gly Thr Phe Val Glu Gly Asp Ser Arg Gly Glu Ala
1          5          10          15
Arg Asn Ala Ala Gln Arg Glu Glu Met Ala Ala Ala Ala Arg Arg Ala
      20          25          30
Gln Leu Leu Ala Glu Gln Glu Arg Leu Ser Gln Ala Gln Ala Gln Ala
      35          40          45
Pro Gly Leu Pro Ser Thr Ala Asn Trp Ala Ser Ala Gly Ser Pro Ala
      50          55          60
Thr Pro Thr Ser Thr Gly Ser Val Trp Asn Asn Lys Gly Gln Ala Thr
      65          70          75          80
Thr Thr Gly Gly Xaa Ala Lys Lys Thr Leu Ala Gln Ile Gln Lys Glu
      85          90          95
Glu Glu Ala Pro Lys Gln Arg Leu Ala Ala Cys Xaa Ala Ala Ala Gln
      100          105          110
Thr Ala Ala Val Ser Ser Pro Ala Thr Xaa Xaa Arg Lys Arg Tyr Ala
      115          120          125
Asp Leu Gly Ser Gln Gly Ser Cys Asp Ser Pro Cys Cys Arg Asn Gln
      130          135          140
Leu Arg Val Leu Gly Thr Thr Val Gly Ala Gly Gly Lys Pro Lys Pro
      145          150          155          160
Pro Pro Ala Ala Pro Ser Gly Pro Arg Ala Thr Ser Gly Asn Val Pro
      165          170          175
Pro Ala Ala Ser Pro Ala Lys Pro Arg Ala Val Pro Val Ala Ser Pro
      180          185          190
Arg Pro Val Ala Val Gly Ser Ala Pro Pro Ser Asn Ala Asn Arg Ala
      195          200          205
Leu Glu Glu Phe Thr Lys Trp Ala Lys Leu Ser Leu Gly Lys Gly Leu
      210          215          220
Asn Ser Asn Ile Asn Gly Glu Phe Cys Ile Tyr Ala Ile Ile Glu Asn
      225          230          235          240
Lys Gln Leu Met Val Ile Leu Val Asp Asp Phe Val Gln Gln Leu Leu

```

## 18757

245 250 255  
 Leu Leu Pro Ala Glu Ala Glu Ile Ile Ser Asp Ser Val Tyr Ala Asn  
 260 265 270  
 Ser Gln Thr Leu Asp Gly Arg Arg Phe Ala Glu Glu Phe Ile Arg Arg  
 275 280 285  
 Arg Lys Leu Ala Asp Lys Gly Ile Val Asp Pro Val Ala Pro Ser Ala  
 290 295 300  
 Leu Ala Asp Gln Lys Asn Ala Ala Gly Gly Gly Trp Ser Glu Val Ala  
 305 310 315 320  
 Lys Lys Gly Ser Ser Asn Ala His Arg Glu Glu Glu Ser Ser Asn Ala  
 325 330 335  
 Ala Phe Lys Val Val Ala Pro Arg Lys Lys Gly Lys Arg  
 340 345

&lt;210&gt; 42097

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42097

Leu Arg Leu Pro Arg Arg Pro Pro Arg Cys Arg Arg Ile Gln Ile Pro  
 1 5 10 15  
 Gln Arg Gln Val Arg Arg Arg Arg Arg Val Arg Pro Asn Gly Gln Arg  
 20 25 30  
 Arg Pro Val Gly Arg Lys Leu Gly Ile Arg Lys Arg Thr Arg Ala Ser  
 35 40 45  
 Leu Leu Ala Gln Gln Pro Arg Pro Arg Thr Gln Asn Arg Arg Val Arg  
 50 55 60  
 Met His Arg Leu His Arg Gly Arg Asp Pro Gln Leu Ala Gln Pro Arg  
 65 70 75 80  
 Arg Val Leu Arg Arg Arg Gln Leu Gln Met Leu Asp Ala Met Pro Pro  
 85 90 95  
 Ala Gly Arg Ala His Arg Gly Gln Arg Val Asp Cys Gln Pro His Arg  
 100 105 110  
 Arg Ile Ala Asp Arg Met Gln Arg Ala Leu Gln Ala Arg Ser Val Arg  
 115 120 125  
 Leu Gly His Tyr Gly Pro Gln His Val Gly Arg Pro Gln Arg Leu Ala  
 130 135 140  
 Val Arg Arg Pro Val Thr Ile Gly Ser Arg Ser Ser Ser Ser Ile  
 145 150 155 160  
 Arg Gln Gln Gln Arg Arg Gly Ala Arg Ile His His Pro Val Ala Asp  
 165 170 175  
 Asp Leu Asp Ala Arg Asp Ala Glu Ile Arg Arg  
 180 185

&lt;210&gt; 42098

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42098

Thr Leu Arg Cys His His Arg Tyr Cys Tyr Leu His Cys Asp Trp Ile  
 1 5 10 15  
 Gly Leu Gly Tyr Ala Arg Leu Ile Leu Thr Cys Ser Thr Thr Asp Val  
 20 25 30  
 His Pro Met Trp Glu Gly Pro Val Arg Tyr Ala Glu Leu Asp His Tyr

## 18758

35                      40                      45  
 Tyr Asp Gly Ala Arg Glu Met Glu Val Gln Asp Cys Arg  
 50                      55                      60

<210> 42099  
 <211> 226  
 <212> PRT  
 <213> A.fumigatus

<400> 42099  
 Gln Pro Gln Leu Ile His His Thr Ile Gly Asn Phe Asn Ile Gln Pro  
 1                      5                      10                      15  
 Asp Lys Gln Ala Val Thr Arg Ile Asn Asp Ser Leu Ser Thr Leu Gln  
 20                      25                      30  
 Gln Ser Arg Glu Leu Arg Met Arg Asp Ala Glu Ser Ala Leu Arg Lys  
 35                      40                      45  
 Leu Ser Arg Asn Leu His Ala Leu Thr Ala Gln His Glu Glu Ala Val  
 50                      55                      60  
 Ser Ser His Asp Ser Ala Lys His Ala Ala Gln Met Val Glu Leu Asp  
 65                      70                      75                      80  
 Thr Lys Lys Phe Arg Ile Ala Lys Ala Ala Thr Glu Leu Glu Ile Glu  
 85                      90                      95  
 Ser Glu Arg Leu Glu Gly Glu Leu Glu Met Leu Lys Glu Arg Leu Ala  
 100                      105                      110  
 Glu Leu Glu Ala Gln Gly Leu Glu Gly Asp Glu Ala Thr Arg Arg Glu  
 115                      120                      125  
 Arg Glu Ala Asp Asp Ala Thr Met Trp Val Val Leu Leu Cys Phe Tyr  
 130                      135                      140  
 Trp Arg Val Leu Thr Asp Tyr Ala Thr Asp Phe Ala Ser Lys Ser Thr  
 145                      150                      155                      160  
 Gly Pro Trp Ala Leu Ile Ser Arg Arg Thr Arg Pro Ala Thr Ser Ala  
 165                      170                      175  
 Arg Pro Leu Phe Ala Thr Val Ala Arg Glu Thr Ser Thr Trp Ser Ile  
 180                      185                      190  
 Trp Thr Pro Ser Ser Arg Val Phe Ser Met Pro Ile Thr Phe Gly Gln  
 195                      200                      205  
 Pro Cys Arg Val Glu Leu Cys Asn Leu Val Met Ala Phe Gly Phe Leu  
 210                      215                      220  
 Pro Gly  
 225

<210> 42100  
 <211> 330  
 <212> PRT  
 <213> A.fumigatus

<400> 42100  
 Lys Thr Thr Glu Lys Met Pro Gly Phe Gly Ser Val Arg Gly Glu Ser  
 1                      5                      10                      15  
 Arg Leu Lys Gly Leu Phe Ser Lys Asp Ser Ser Glu Asp Ile Ser Ala  
 20                      25                      30  
 Ser Ile Lys Glu Lys Pro Ser Leu Ser Asn Leu Glu Arg Leu Ala Glu  
 35                      40                      45  
 Asp Gln Glu Glu Lys Arg Ser Gln Ser Pro Trp Gly Glu Thr Val Lys  
 50                      55                      60  
 Thr Arg Thr Gly Arg Ser Glu Thr Asn Pro Phe Ala Glu Asp Thr Arg



## 18759

65					70					75					80
Ser	Gly	Ser	Ala	Ala	Leu	Gly	Gly	Ser	Gln	Asp	Ala	Ser	Ala	Pro	Ser
				85					90					95	
Gln	Thr	Ala	Asp	Gln	Leu	Gly	Phe	Ser	Ala	Phe	Gly	Met	Thr	Ser	Ser
			100					105					110		
Ile	Pro	Gly	Phe	Arg	Glu	Leu	Met	Gln	Ser	His	Glu	Asn	Ser	Arg	Asn
		115					120					125			
Pro	Thr	Pro	Ser	Leu	Leu	Gln	Gly	Gln	Glu	Pro	Thr	Ser	Pro	Thr	Asn
	130					135					140				
Thr	Asn	Pro	Tyr	Gln	Ser	Pro	Gln	Gly	Glu	Arg	Ile	Asp	Ala	Asp	Asp
145					150					155					160
Val	Glu	Thr	Asp	Gly	Ser	Asp	Ile	Gln	Asn	Thr	His	His	Pro	Gly	Leu
			165					170						175	
Ser	Gly	Leu	Arg	Asp	Ser	Ala	Gly	Pro	Phe	Ser	Ser	Met	Arg	Arg	Ile
		180						185					190		
Gly	Ser	Gly	Met	Asp	Leu	Pro	Ser	Ile	Asp	Arg	Ser	Gln	Thr	Ser	Ser
	195					200						205			
Ala	Ala	Gly	Asn	Arg	Ser	Tyr	Ser	Gly	Leu	Gly	Gly	Leu	Gly	Gly	Leu
	210					215					220				
Pro	Thr	Leu	Gly	Gly	Ala	Ser	Ala	Trp	Ser	Ser	Gly	Val	Val	Gly	Thr
225					230					235					240
Pro	Thr	Arg	Glu	Arg	Ser	Ala	Phe	Ser	Thr	Gly	Phe	Gly	Asp	Pro	Ile
			245					250						255	
Phe	Gly	Thr	Met	Ala	Asp	Leu	Gln	Ser	Pro	Ser	Leu	Ser	Thr	Leu	Gly
		260					265						270		
Gly	Gly	Gly	Ile	Phe	Ser	Pro	Gly	Ile	Thr	Gly	Thr	Gly	Ser	Ile	Gly
	275					280					285				
Arg	Ser	Ser	Lys	Leu	Gly	Ser	Leu	Phe	Pro	Pro	Ala	Met	Gln	Glu	Gln
	290				295					300					
Met	Gln	Gly	Asp	Gln	Ala	Arg	Gln	Gly	Ser	Leu	Glu	Asp	Gly	Ser	Gln
305				310						315					320
His	Gln	Gly	Arg	Ser	Asn	Tyr	Ala	Pro	Ile						
			325					330							

&lt;210&gt; 42101

&lt;211&gt; 566

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (342), (367)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42101

Ile	Phe	Gln	Tyr	Thr	Asp	Pro	Phe	Cys	Glu	Glu	Val	Ser	Gln	Gly	Asp
1			5					10					15		
Lys	Ala	Gly	Gln	Pro	Thr	Thr	Thr	Ser	Thr	Ser	Gln	Thr	Pro	Val	Ser
		20						25				30			
Ala	Ile	Gly	Ser	Val	Pro	Ala	Ser	Met	Ala	Ser	Glu	Ala	Pro	Gln	Pro
		35				40					45				
Ser	Gln	Thr	Pro	Gly	Gln	Ser	Gly	Ser	Asn	Ala	Gly	Ser	Val	Pro	Pro
	50				55					60					
Ala	Gln	Gln	Arg	Thr	Met	Val	Met	Pro	Asp	Arg	Met	Arg	Trp	Ile	Tyr
65				70					75					80	
Arg	Asp	Pro	Gln	Gly	Asn	Ile	Gln	Gly	Pro	Trp	Thr	Gly	Leu	Glu	Met

										85			90			95		
His	Asp	Trp	Phe	Lys	Ala	Gly	Phe	Phe	Ser	Pro	Asp	Leu	Gln	Ile	Lys			
			100					105					110					
Lys	Leu	Glu	Asp	Pro	Glu	Phe	Glu	Pro	Leu	Ala	Gln	Leu	Val	Arg	Arg			
			115				120					125						
Ile	Gly	Asn	Ser	Arg	Glu	Pro	Phe	Leu	Val	Pro	Gln	Ile	Gly	Ile	Pro			
			130				135				140							
His	Gly	Pro	Asp	Pro	Asn	Ala	Gly	Ala	Pro	Trp	Thr	Gly	Ser	Thr	Thr			
145					150					155					160			
Ala	Gln	Pro	Pro	Phe	Pro	Gly	Ser	Phe	Pro	Ser	Phe	Gly	Thr	Thr	Leu			
			165						170					175				
Thr	Ala	Glu	Gln	Gln	Asn	Ala	Leu	Glu	Arg	Arg	Lys	Gln	Glu	Glu	Gln			
			180					185					190					
Tyr	Leu	Met	Ala	Arg	Gln	Lys	Glu	His	Leu	Ala	Gln	Gln	Gln	Ala	Met			
			195				200				205							
Met	Lys	Gln	Met	Gln	Leu	Gln	Gly	Ala	Val	His	Pro	Gly	Ile	His	Pro			
			210				215				220							
Gln	Leu	Gln	His	His	Ser	Ser	Ala	His	Ser	Leu	His	Ser	Gln	Pro	Ser			
225					230					235					240			
Phe	Gly	Ser	Ile	Ala	Ser	Pro	Ile	Gly	Phe	Gln	Pro	Ser	Pro	Ile	Gln			
			245						250					255				
Gly	Pro	Met	Gln	Gln	Gln	Pro	Pro	Gln	Ser	Val	Ala	Gly	Phe	Phe	Asp			
			260					265					270					
Ala	Ala	Ala	Pro	Leu	Arg	Gln	Gly	Pro	Gln	Met	Val	Gly	Ala	Asp	Leu			
			275				280					285						
Val	Asn	Ser	Pro	His	Gln	Leu	Ala	Pro	Leu	Leu	Asp	Arg	Leu	Asn	Ile			
			290				295				300							
Ser	Arg	Pro	Asp	Pro	Phe	Ala	Phe	Gly	Ser	Pro	Ser	Tyr	Phe	Ala	Ala			
305					310					315					320			
Arg	Gln	Pro	Asp	Asn	Leu	Phe	His	Ser	Gln	Gln	Val	Ala	Thr	Met	Leu			
			325						330					335				
Gln	Asp	Arg	Ala	Arg	Xaa	Gln	Gln	Glu	Gln	Glu	Gln	Phe	Asp	Ser	Thr			
			340					345					350					
Gln	Gly	Glu	Gly	Ile	Phe	Glu	Gln	Gln	Ala	Arg	Glu	Asp	Arg	Xaa	Arg			
			355				360					365						
Gln	Phe	His	Ala	Leu	Arg	Ala	Gln	Glu	Gly	Asp	Phe	Gly	Met	Gln	Asn			
			370			375					380							
Ala	Gln	Gly	His	Pro	Ser	His	His	Ala	Thr	Glu	Pro	Ser	Gln	Gln	Gln			
385					390					395					400			
Glu	Met	Ala	Pro	Ile	Gly	Ser	Pro	Gln	Lys	Thr	Gly	Thr	Ser	Ser	Gly			
			405						410					415				
Val	Val	Asp	Gln	Gly	Thr	Ala	Pro	Ser	Glu	Glu	Ala	Pro	Leu	Thr	Leu			
			420					425					430					
Ser	Gln	Gln	Val	Gln	Lys	Ala	Ala	Ser	Ala	Gln	Arg	Gln	Gln	Gln	Glu			

Variable	Mean	SD	Min	Max	Median	Mode	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	32	30	0.15	3.2	0.95
Gender	0.5	0.5	0	1	0.5	0	0.0	0.0	0.99
Marital Status	0.7	0.5	0	1	0.7	0	0.0	0.0	0.99
Education	12.5	2.5	8	16	12	12	0.1	3.0	0.96
Income	1500	500	500	3000	1200	1000	0.2	3.5	0.94
Occupation	1.5	1.0	1	5	1.5	1	0.0	0.0	0.99
Health Status	0.8	0.4	0	1	0.8	0	0.0	0.0	0.99
Stress Level	3.5	1.5	1	6	3	3	0.1	3.0	0.96
Life Satisfaction	4.2	1.2	1	7	4	4	0.1	3.0	0.96
Resilience	5.5	1.5	1	8	5	5	0.1	3.0	0.96
Emotional Stability	6.0	1.0	1	8	6	6	0.1	3.0	0.96
Self-Esteem	5.8	1.2	1	8	5	5	0.1	3.0	0.96
Optimism	5.2	1.5	1	8	5	5	0.1	3.0	0.96
Gratitude	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Forgiveness	5.0	1.5	1	8	5	5	0.1	3.0	0.96
Empathy	5.8	1.2	1	8	5	5	0.1	3.0	0.96
Compassion	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Kindness	5.2	1.5	1	8	5	5	0.1	3.0	0.96
Generosity	5.0	1.5	1	8	5	5	0.1	3.0	0.96
Patience	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Perseverance	5.8	1.2	1	8	5	5	0.1	3.0	0.96
Endurance	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Stamina	5.2	1.5	1	8	5	5	0.1	3.0	0.96
Strength	5.0	1.5	1	8	5	5	0.1	3.0	0.96
Power	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Influence	5.8	1.2	1	8	5	5	0.1	3.0	0.96
Authority	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Leadership	5.2	1.5	1	8	5	5	0.1	3.0	0.96
Management	5.0	1.5	1	8	5	5	0.1	3.0	0.96
Organization	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Coordination	5.8	1.2	1	8	5	5	0.1	3.0	0.96
Communication	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Interpersonal Skills	5.2	1.5	1	8	5	5	0.1	3.0	0.96
Teamwork	5.0	1.5	1	8	5	5	0.1	3.0	0.96
Collaboration	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Partnership	5.8	1.2	1	8	5	5	0.1	3.0	0.96
Relationships	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Connections	5.2	1.5	1	8	5	5	0.1	3.0	0.96
Networks	5.0	1.5	1	8	5	5	0.1	3.0	0.96
Community	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Society	5.8	1.2	1	8	5	5	0.1	3.0	0.96
Culture	5.5	1.2	1	8	5	5	0.1	3.0	0.96
Traditions	5.2	1.5	1	8	5	5	0.1	3.0	0.96
Customs	5.0	1.5	1	8	5	5	0.1	3.0	0.96
Values	5.5	1.2	1	8	5	5			

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<210> 42102
<211> 257
<212> PRT
<213> A.fumigatus
```

[illegible]

```
<210> 42103
<211> 598
<212> PRT
<213> A.fumigatus
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Ala Gly Ser Glu Asp Gly Leu Gly Ser Ile Asp Ala Ala Gly Cys Ala  
1 5 10 15  
Gly Arg Gly Gly Cys Trp Gly Asp Pro Glu Gly Val Gly Ala Gly Leu

	20		25		30										
Trp	Asp	Leu	Cys	Ala	Cys	Val	Cys	Ala	Arg	Arg	Val	Val	Val	Asp	Pro
	35						40					45			
Ala	Glu	Cys	Ala	Gly	Leu	Leu	Gly	Glu	Glu	Arg	Phe	Arg	Val	Ala	Cys
	50					55					60				
Arg	Cys	Ala	Glu	Arg	Ala	Met	Gln	Gln	Ala	Gly	Glu	Glu	Val	Cys	Arg
65					70					75				80	
Ala	Lys	Val	Val	Met	Val	Ile	Phe	Pro	Thr	Cys	Ile	Tyr	Phe	Leu	Arg
				85					90					95	
Cys	Ile	Tyr	Ile	Tyr	Ile	Tyr	Ile	Ser	Leu	His	Glu	Phe	Cys	Val	Ser
	100							105					110		
Asn	Cys	Leu	Gly	Thr	Ala	Val	His	Pro	Pro	Ser	Ile	Lys	Val	Cys	Leu
	115						120					125			
Ala	His	Arg	Gly	Leu	Gln	Gln	Leu	Leu	Gly	Leu	Pro	Leu	His	Leu	Gln
	130					135					140				
Asp	Cys	Lys	Ile	Arg	Leu	Leu	Pro	Asp	Leu	Gln	Ala	Pro	Arg	Glu	Pro
145					150					155					160
Ile	Arg	Gln	Ser	Thr	Ser	Thr	Pro	Ser	Arg	Pro	Ser	Pro	Pro	Lys	Pro
				165					170					175	
Pro	Gly	Ser	Ser	Asp	Ser	Leu	Asn	Cys	Gly	Phe	Thr	Val	Thr	Val	Asp
			180					185					190		
Ser	Gly	Ser	Leu	Ala	Asp	Arg	Arg	Val	Val	Ala	Val	Tyr	Arg	Phe	Leu
	195					200						205			
Ser	Gly	Arg	Cys	Gly	Ala	Val	Gly	Glu	Ser	Val	Pro	Met	Ala	Ser	Gly
	210					215					220				
Ala	Arg	Trp	Ala	Ala	Asn	Ser	Ala	Tyr	Ala	Asn	Ala	Arg	Ala	His	Arg
225					230					235					240
Ser	Ser	Pro	Ser	Ser	Arg	Gly	His	Ala	Arg	Arg	Ile	Ala	Gly	Ser	Ala
				245					250					255	
Cys	Thr	Gly	Cys	Thr	Glu	Ala	Val	Ile	Pro	Ser	Trp	Pro	Ser	Arg	Ala
	260						265						270		
Ala	Ser	Ser	Gly	Ala	Val	Ser	Ser	Arg	Cys	Ser	Met	Arg	Cys	Arg	Arg
	275						280				285				
Pro	Gly	Val	Pro	Thr	Ala	Ala	Ser	Val	Ser	Ile	Ala	Ser	Arg	Thr	Val
	290					295					300				
Ala	Ser	Pro	Ile	Ala	Cys	Ser	Ala	His	Cys	Arg	Pro	Ala	Ala	Ser	Ala
305					310					315					320
Leu	Ala	Thr	Thr	Ala	Arg	Ser	Met	Ser	Ala	Gly	His	Ser	Gly	Ser	Gln
				325					330					335	
Phe	Val	Gly	Pro	Ser	Pro	Ser	Ala	Val	Ala	Ala	Ala	Ala	Ala	Ala	Tyr
				340				345					350		
Gly	Ser	Ser	Ser	Ala	Ala	Val	His	Ala	Ser	Thr	Thr	Pro	Ser	Gln	Met
	355						360					365			
Thr	Leu	Met	Pro	Ala	Met	Arg	Lys	Ser	Gly	Asp	Glu	Arg	Ala	Leu	Tyr
	370					375					380				
Thr	Ala	Cys	Ser	Ser	Ile	Ala	Arg	Ser	Thr	Cys	Ala	Arg	His	Ser	Ser
385					390					395					400
Thr	Val	Ala	Ala	Gly	Val	Ile	Ile	Gln	Cys	Ala	Ala	Ser	Arg	Ser	Asp
				405					410					415	
Thr	Phe	Ser	Val	Cys	Arg	Ser	Ala	Ser	Ile	Val	Pro	His	Thr	Phe	Ser
			420					425					430		
Ser	Val	Ala	Ile	Ser	Thr	Thr	Pro	Val	Tyr	Pro	Ala	Ala	Leu	Tyr	Ala
	435						440				445				
Arg	Thr	Ala	Leu	Arg	Thr	Asn	Ser	Ile	Phe	Ser	Ser	Ala	Val	Ala	Thr
	450					455					460				
Arg	Ala	Thr	Cys	Gly	His	Thr	Ile	Phe	Thr	Ala	Ala	Ala	Ser	Glu	Ser

## 18763

465                      470                      475                      480  
 Asn Pro Leu Gly Cys Pro Ser Ser Pro Arg Trp Met Thr Pro Pro Ala  
                                  485                      490                      495  
 Gly Ser Gly Val Ser Ala Thr Pro Ser Ser Arg Ser Ala Ala Val Leu  
                                  500                      505                      510  
 His His Ala Leu Cys Arg Ser Phe Glu Ser Met Lys Met Gly Arg Gly  
                                  515                      520                      525  
 Ser Arg Ser Ser Ser Met Leu Ala Ser Ala Cys Pro Ser Val Met Glu  
                                  530                      535                      540  
 Cys Ile His Pro Arg Gln Lys Arg Arg Gly Ala Cys Gly Ser Cys Ala  
 545                                   550                      555                      560  
 Ala Ala Val Leu Met Val Glu Arg Met Ser Glu Arg Asp Leu Gln Cys  
                                  565                      570                      575  
 Pro Arg Ser Ile Leu Glu Arg Pro Ala Pro Asn Arg Arg Arg Cys Met  
                                  580                      585                      590  
 Cys Leu Leu Ser Leu Cys  
                                  595

<210> 42104

<211> 230

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (13)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42104

Leu Arg Trp Leu Tyr Thr Pro Arg Gly Ser Ala Ile Xaa Tyr Val Pro  
 1                      5                      10                      15  
 Leu Arg Asn Gln His Leu Ile Arg Thr Thr Leu Pro Thr Ser Trp Gly  
                                  20                      25                      30  
 Phe Ile Pro Ser Pro Asp Ser Pro Thr Thr Ala Pro Ser Leu Met Arg  
                                  35                      40                      45  
 Ser Ser Gly Ser Gly Lys Ser Ala Phe Glu Glu Leu Phe Glu Phe Val  
                                  50                      55                      60  
 Ala Thr Thr Asp Asp Thr Ala Tyr Leu Cys Val Pro Ala Ala Leu Lys  
 65                                   70                      75                      80  
 Phe Arg Ser Gln Val Cys Gly Gly Glu Asp Arg Ile Tyr Ala Tyr Leu  
                                  85                      90                      95  
 Glu Lys Leu Ala Met Glu Ala Gly Asp Ile Val Ala Ala Ala Leu Gly  
                                  100                      105                      110  
 Thr Glu Val Met Gln Glu Pro Gly Leu Lys Pro Gly Glu Val Ser Gln  
                                  115                      120                      125  
 Leu Arg Arg Cys Ala Met Ala Thr Val Arg Leu Pro Phe Ala Val Ser  
                                  130                      135                      140  
 Gly Ser Glu Gln Asp Pro Lys Thr Ala Ser Ala Arg Leu Thr Leu Gln  
 145                                   150                      155                      160  
 Ala Ala Gln Ala Ala Glu Val Ala Gly Glu Ile Gln Lys Ala Leu Val  
                                  165                      170                      175  
 Arg Asp Tyr Gly Thr Phe Val Pro Val Phe Ala His Gly Gly Trp Leu  
                                  180                      185                      190  
 Trp Thr Arg Leu Ser Ala Gln Val Tyr Leu Glu Lys Ser Asp Phe Glu  
                                  195                      200                      205  
 Trp Leu Ala Gly Val Leu Asn Glu Leu Cys Asn Lys Leu Val Lys Lys

## 18764

210 215 220  
Phe Ala Glu Pro Lys Leu  
225 230

<210> 42105  
<211> 62  
<212> PRT  
<213> A.fumigatus

<400> 42105  
Leu Cys Asp Arg Leu Arg Leu Lys Ile Tyr Arg Ser Leu Gly Ile Asp  
1 5 10 15  
Ile Glu Ala Asp Glu Ala Gly Asn Phe Ser Lys Ala Val Ile Arg Asn  
20 25 30  
Ser Arg Lys Gly Asp Val His Val Val Asn Met Asp Pro Lys Phe Ser  
35 40 45  
Arg Phe Phe Tyr Ala Asn Tyr Phe Trp Ser Thr Met Gln Gly  
50 55 60

<210> 42106  
<211> 226  
<212> PRT  
<213> A.fumigatus

<400> 42106  
Tyr Arg Trp Cys Ala Ala Trp Thr Leu Tyr Ser Thr Gly Trp Pro Thr  
1 5 10 15  
Pro Thr Gly Met Ala Arg Ile Arg Ile Arg Thr Arg Ile Lys Thr Lys  
20 25 30  
Ile Gly Thr Pro Pro Val Arg Arg Met Lys Arg Ser Pro Thr Ser Ile  
35 40 45  
Val Arg Gly Val Ser His Pro Asn Ser Val Gln Leu Ala Gly Tyr Leu  
50 55 60  
Arg Glu Met Arg Met Val Arg Ser Arg Trp His His Leu Ser Ala Pro  
65 70 75 80  
Ser Glu Ser Thr Ser Pro Phe Ser Phe Ser Val Tyr Gly Pro Trp Leu  
85 90 95  
Thr Ser Phe Asp Ser Ile Leu Glu Leu Phe Arg Ala Asp Phe Gly Gly  
100 105 110  
Gly Met Glu Gly Gly Gly Val Arg Val Met Thr Gly Pro Asn Pro Leu  
115 120 125  
Ala Met Leu Ser Thr Leu Leu Asn Phe Asp Arg His Gly Asp Ala Val  
130 135 140  
Tyr Ser Gln Glu Glu Leu Asp Arg Val Ile Ser Gln Leu Ile Asp Gln  
145 150 155 160  
Asn Leu Asn Arg Thr Gly Ala Pro Pro Ala Pro Gln Ser Ala Ile Arg  
165 170 175  
Ala Leu Pro Lys Lys Lys Val Asp Glu Glu Met Leu Gly Ser Asp Gly  
180 185 190  
Lys Ala Glu Cys Ser Ile Cys Met Glu Gln Val Glu Leu Gly Thr Glu  
195 200 205  
Val Ala Val Leu His Cys Asn Thr Gly Phe Thr Ile Pro Ala Leu Lys  
210 215 220  
Pro Gly  
225

<210> 42107  
 <211> 618  
 <212> PRT  
 <213> A.fumigatus

<400> 42107

His	Lys	Asp	Lys	Arg	His	Met	His	Leu	Leu	Leu	Phe	Gly	Ala	Gly	Leu
1				5				10						15	
Ser	Lys	Ile	Asp	Leu	Gly	His	Cys	Arg	Ser	Leu	Ser	Asp	Ile	Arg	Ser
			20					25					30		
Thr	Ile	Lys	Thr	Ala	Ala	Ala	Gln	Leu	Pro	His	Ala	Pro	Arg	Leu	Phe
			35				40					45			
Cys	Arg	Gly	Trp	Met	His	Ser	Met	Thr	Asp	Gly	Gln	Ala	Leu	Ala	Ser
			50			55					60				
Met	Leu	Asp	Asp	Leu	Asp	Pro	Arg	Pro	Ile	Phe	Ile	Asp	Ser	Lys	Asp
65					70					75					80
Leu	His	Ser	Ala	Trp	Cys	Asn	Thr	Ala	Ala	Leu	Arg	Glu	Leu	Gly	Val
				85					90					95	
Ala	Asp	Thr	Pro	Asp	Pro	Ala	Gly	Gly	Val	Ile	His	Arg	Gly	Glu	Asp
			100					105					110		
Gly	Gln	Pro	Ser	Gly	Leu	Leu	Ser	Glu	Ala	Ala	Ala	Val	Asn	Ile	Val
			115					120					125		
Trp	Pro	His	Val	Ala	Arg	Val	Ala	Thr	Ala	Glu	Glu	Lys	Met	Glu	Phe
			130			135						140			
Val	Arg	Ser	Ala	Val	Arg	Ala	Tyr	Asn	Ala	Ala	Gly	Tyr	Thr	Gly	Val
145					150					155					160
Val	Glu	Met	Ala	Thr	Asp	Glu	Asn	Val	Trp	Gly	Thr	Met	Leu	Ala	Leu
				165				170						175	
Arg	Gln	Thr	Glu	Lys	Val	Ser	Leu	Arg	Leu	Ala	Ala	His	Trp	Ile	Ile
			180					185					190		
Thr	Pro	Ala	Ala	Thr	Val	Glu	Glu	Cys	Leu	Ala	Gln	Val	Asp	Arg	Ala
			195					200					205		
Ile	Glu	Leu	His	Ala	Val	Tyr	Asn	Ala	Arg	Ser	Ser	Pro	Asp	Phe	Arg
			210			215					220				
Ile	Ala	Gly	Ile	Lys	Val	Ile	Cys	Asp	Gly	Val	Val	Asp	Ala	Cys	Thr
225				230						235					240
Ala	Ala	Leu	Leu	Leu	Pro	Tyr	Ala	Ala	Ala	Ala	Ala	Ala	Thr	Ala	Asp
				245					250					255	
Gly	Asp	Gly	Pro	Thr	Asn	Cys	Glu	Pro	Leu	Trp	Pro	Ala	Asp	Met	Leu
			260					265					270		
Arg	Ala	Val	Val	Ala	Lys	Ala	Asp	Ala	Ala	Gly	Leu	Gln	Cys	Ala	Leu
			275				280					285			
His	Ala	Ile	Gly	Asp	Ala	Thr	Val	Arg	Leu	Ala	Ile	Asp	Thr	Leu	Ala
			290			295					300				
Ala	Val	Gly	Thr	Pro	Gly	Arg	Arg	His	Arg	Ile	Glu	His	Leu	Glu	Leu
305				310						315					320
Thr	Ala	Pro	Glu	Asp	Ala	Ala	Arg	Leu	Gly	Gln	Leu	Gly	Ile	Thr	Ala
				325					330					335	
Ser	Val	Gln	Pro	Val	His	Ala	Asp	Pro	Ala	Ile	Leu	Arg	Ala	Trp	Pro
			340					345					350		
Arg	Leu	Leu	Gly	Glu	Glu	Arg	Cys	Ala	Arg	Ala	Phe	Ala	Tyr	Ala	Glu
			355				360					365			
Phe	Ala	Ala	His	Arg	Ala	Pro	Leu	Ala	Ile	Gly	Thr	Asp	Ser	Pro	Thr
			370			375					380				
Ala	Pro	His	Leu	Pro	Leu	Arg	Asn	Leu	Tyr	Thr	Ala	Thr	Thr	Arg	Arg
385					390					395					400

## 18766

```

Ser Ala Arg Glu Pro Glu Ser Thr Val Thr Val Asn Pro Gln Phe Lys
      405      410      415
Leu Ser Leu Leu Pro Gly Gly Phe Gly Gly Asp Gly Arg Leu Gly Val
      420      425      430
Leu Val Leu Trp Arg Met Gly Ser Arg Gly Ala Trp Arg Ser Gly Arg
      435      440      445
Arg Arg Ile Leu Gln Ser Trp Arg Trp Ser Gly Arg Pro Arg Ser Cys
      450      455      460
Trp Arg Pro Arg Cys Ala Arg His Thr Leu Met Glu Gly Gly Cys Thr
465      470      475      480
Ala Val Pro Arg Gln Leu Leu Thr Gln Asn Ser Cys Arg Asp Ile Tyr
      485      490      495
Ile Tyr Ile Tyr Ile His Leu Arg Lys Tyr Ile His Val Gly Asn Ile
      500      505      510
Thr Ile Thr Thr Leu Ala Arg Gln Thr Ser Ser Pro Ala Cys Cys Ile
      515      520      525
Ala Arg Ser Ala His Leu Gln Ala Thr Arg Asn Arg Ser Ser Pro Ser
530      535      540
Lys Pro Ala His Ser Ala Gly Ser Thr Thr Thr Arg Arg Ala Gln Thr
545      550      555      560
Gln Ala Gln Arg Ser His Ser Pro Ala Pro Thr Pro Ser Gly Ser Pro
      565      570      575
Gln Gln Pro Pro Arg Pro Ala Gln Pro Ala Ala Ser Ile Glu Pro Arg
      580      585      590
Pro Ser Ser Asp Pro Ala His Tyr Gln Thr Arg Gln Thr Ala Ala Ala
595      600      605
Arg Ser Pro Trp His Ser Gly Ala Ala Asp
610      615

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&lt;210&gt; 42108

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42108

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Lys Gln Arg Ser Thr Thr His Ile Val Ala Ser Ser Ala Ser Leu Ser
1      5      10      15
Leu Arg Val Ala Ser Ser Pro Ser Ser Pro Cys Ala Ser Asn Ser Ala
      20      25      30
Ser Leu Ser Leu Ser Ile Ser Ser Ser Pro Ser Ser Leu Ser Leu Ser
      35      40      45
Ile Ser Ser Ser Val Ala Ala Leu Ala Ile Arg Asn Phe Phe Val Ser
50      55      60
Ser Ser Thr Ile Cys Ala Ala Cys Phe Ala Glu Ser Cys Glu Asp Thr
65      70      75      80
Ala Ser Ser Cys Cys Ala Val Arg Ala Cys Lys Leu Arg Glu Ser Leu
      85      90      95
Arg Ser Ala Asp Ser Ala Ser Arg Ile Arg Ser Ser Arg Asp Cys Cys
100      105      110
Asn Val Asp Arg Glu Ser Leu Met Arg Val Thr Ala Cys Leu Ser Gly
115      120      125
Trp Ile Leu Lys Leu Pro Met Val Trp Trp Met Ser Cys Gly Cys
130      135      140

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&lt;210&gt; 42109

&lt;211&gt; 74



18767

<212> PRT

<213> A.fumigatus

<400> 42109

Gly	Leu	Ile	Lys	Ser	Asn	Ala	Arg	Thr	Asp	Gln	Gln	Glu	Gly	Val	Arg
1				5					10					15	
Leu	Leu	Ser	Glu	Ile	Phe	Arg	Ala	Ala	Pro	Glu	Arg	Arg	Arg	Glu	Cys
			20					25					30		
Leu	Tyr	Tyr	Leu	Ala	Leu	Gly	Asn	Tyr	Lys	Leu	Gly	Asn	Tyr	Gly	Glu
		35					40					45			
Ala	Arg	Arg	Tyr	Asn	Asp	Leu	Leu	Leu	Glu	Lys	Glu	Pro	Gly	Asn	Leu
	50					55					60				
Ala	Ser	Cys	His	Pro	Arg	Phe	Ala	Asp	Arg						
65						70									

<210> 42110

<211> 184

<212> PRT

<213> A.fumigatus

<400> 42110

Gln	Leu	Gly	His	Arg	Ser	Arg	Arg	Leu	Tyr	Ile	Arg	Val	Leu	Ser	Phe
1				5					10					15	
Phe	His	Asn	Phe	Phe	Phe	Asn	Val	Gly	His	Tyr	Phe	Val	Ile	His	Cys
			20					25					30		
Asn	Met	Lys	Thr	Val	Phe	Thr	Asn	Gly	Leu	Ile	Val	Arg	Gly	Asn	Gly
		35					40					45			
Ser	Ser	Gln	Ser	Glu	Pro	Val	Leu	Gly	Cys	Met	Val	Val	Glu	Asp	Asp
	50					55					60				
Lys	Ile	Ala	Tyr	Ile	Gly	Ala	Glu	Asn	Asp	Glu	Ser	Val	Ala	Gln	Ala
65					70					75				80	
Lys	Gln	Ala	Pro	Gly	Val	Glu	Val	Val	Asp	Leu	His	Arg	Arg	Thr	Val
			85					90						95	
Ile	Pro	Gly	Phe	Ile	Asp	Gly	Tyr	Val	Ser	Leu	Ile	His	Leu	Phe	Asn
			100					105						110	
Lys	Asn	Ala	Thr	Leu	Arg	Phe	Pro	Tyr	Gly	Phe	Ala	Thr	Leu	Ala	Thr
		115					120					125			
Asn	Thr	Lys	Thr	Lys	Asp	Thr	Cys	Ile	Ser	Ser	Cys	Ser	Ala	Gln	Ala
	130					135					140				
Ser	Pro	Lys	Ser	Thr	Ser	Gly	Thr	Ala	Asp	Pro	Ser	Pro	Thr	Ser	Ala
145					150					155				160	
Leu	Pro	Ser	Arg	Pro	Pro	Pro	His	Ser	Ser	Arg	Thr	Pro	Pro	Ala	Ser
			165						170					175	
Ser	Ala	Ala	Gly	Gly	Cys	Thr	Pro								
			180												

<210> 42111

<211> 63

<212> PRT

<213> A.fumigatus

<400> 42111

Lys	Val	Ser	Ile	Ile	Arg	Leu	Ser	Ile	Ala	Met	Pro	Thr	Leu	Asn	Tyr
1				5					10					15	
Pro	Asp	Ser	Ser	Pro	Leu	Lys	Pro	Ala	Glu	Leu	Gln	Val	Leu	Arg	Ala
			20					25					30		

## 18768

Gln Tyr Glu Lys Glu Gly Asp Tyr Val Gly Ile Gln Thr Lys Phe Asn  
           35                  40                  45  
 Tyr Ala Trp Val Cys Arg Leu Phe Cys Phe Gln Ser Thr Gly  
       50                  55                  60

<210> 42112

<211> 210

<212> PRT

<213> A.fumigatus

<400> 42112

Phe His Arg Asp Cys Thr Asn Pro Ser Tyr Val Leu Gly Ile Phe Trp  
 1                  5                  10                  15  
 Ile Ser Ala Asn Arg Arg Tyr Gln Ile Glu Ile Pro Pro Asp Thr Glu  
           20                  25                  30  
 Asp Ser Ser Ser Arg Pro Thr Asn Asp Ser Pro Pro Arg Glu Glu Asn  
       35                  40                  45  
 Asn Gln Pro Asn Val Asn Pro Trp Ala Asp His Asn Pro Trp Ala Asn  
       50                  55                  60  
 Glu Glu Gly Tyr Gly Gly Asp Asp Asn Thr Trp Arg Pro Gly Phe Ser  
 65                  70                  75                  80  
 Arg Arg Thr Tyr Arg Ser Pro Asp Gly Arg Phe Thr Phe Thr Thr Thr  
           85                  90                  95  
 Thr Thr Thr Leu Gly Gly Gly Gly Phe His Met Gly Arg Ser Met Asp  
       100                  105                  110  
 Gln Arg Gln Met Pro Ile Asp Pro Leu Ile Pro Val Val Arg Ser Leu  
       115                  120                  125  
 Asp Thr Ile Phe His Gly Leu Ala Asp Thr Tyr Arg His Gly Gln Asn  
       130                  135                  140  
 Gln Asp Gln Asn Gln Asn Gln Asn Gln Asn Arg Asn Ala Thr Gly Gln  
 145                  150                  155                  160  
 Glu Asn Glu Thr Val Ala Asp Glu His Arg Ala Arg Ser Glu Ser Pro  
           165                  170                  175  
 Glu Phe Arg Ala Thr Gly Arg Leu Phe Ala Arg Asp Ala Asp Gly Pro  
       180                  185                  190  
 Gln Pro Met Ala Pro Pro Phe Gly Thr Leu Gly Glu Tyr Val Ala Ile  
       195                  200                  205  
 Phe Val  
       210

<210> 42113

<211> 159

<212> PRT

<213> A.fumigatus

<400> 42113

Gly Arg Gly Ala Ala Gly Pro Ala Gly Asp His Gly Leu Gly Ala Ala  
 1                  5                  10                  15  
 Gly Ala Cys Gly Pro Gly Asp Ser Ala Cys Val Ala Ala Ala Ala Gly  
       20                  25                  30  
 Arg Gly Ala Met Arg Ala Cys Val Cys Val Cys Arg Val Cys Gly Pro  
       35                  40                  45  
 Pro Gly Ala Ala Gly His Trp Asp Gly Leu Ala Asp Gly Ala Ala Pro  
       50                  55                  60  
 Ala Ala Glu Glu Ser Val Tyr Gly Asp Asn Ala Ala Val Gly Glu Gly  
 65                  70                  75                  80

## 18769

Ala	Gly	Val	Asn	Cys	Asp	Gly	Lys	Pro	Ala	Val	Gln	Ala	Val	Ala	Ala
			85						90					95	
Ala	Arg	Arg	Phe	Arg	Arg	Arg	Arg	Pro	Ala	Arg	Arg	Thr	Arg	Ala	Leu
			100					105					110		
Ala	Asp	Gly	Phe	Thr	Gly	Ser	Leu	Glu	Val	Gly	Lys	Lys	Ala	Asp	Phe
		115					120					125			
Ala	Val	Leu	Glu	Met	Glu	Trp	Glu	Ala	Glu	Lys	Leu	Leu	Glu	Ala	Ser
		130				135					140				
Val	Cys	Glu	Thr	Tyr	Phe	Asp	Gly	Arg	Arg	Val	Tyr	Ser	Arg	Ser	
145					150					155					

&lt;210&gt; 42114

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42114

Leu	Met	Thr	Ser	Glu	Ser	Ala	Lys	Leu	Lys	His	His	His	His	His	His
1				5					10					15	
Ser	Asp	Leu	Glu	Leu	Pro	Asn	Pro	His	Ala	His	Gln	Gly	Pro	Glu	Glu
		20					25						30		
Thr	Phe	Glu	Asn	Leu	Leu	Met	Met	Leu	Glu	Ala	Gln	Phe	Gly	Ser	Asn
		35					40					45			
Ile	Ala	Pro	Ile	Glu	Arg	Pro	Arg	Ile	Pro	Ser	Gly	Ile	Arg	Ala	Asn
	50					55					60				
Arg	Thr	Thr	Lys	Ala	Asp	Pro	Ser	Val	Ser	Ala	Ala	Val	Lys	Thr	Lys
65					70					75					80
Ser	Asp	Ala	Ala	Gly	Glu	Thr	Pro	Ala	Glu	Ser	Gln	Glu	Asp	Glu	Ser
				85					90					95	
Thr	Glu	Glu	Ile	Glu	Ala	Ala	Glu	Leu	Ala	Arg	Leu	Gln	Ala	Leu	Gly
			100					105					110		
Ile	Pro	Tyr	Pro	Gly	Ile	Glu	Ile	Lys	Val	Asp	Lys	His	Val	Ala	Arg
		115					120					125			
Val	Trp	Leu	Glu	Asn	Phe	Glu	Val	Glu	Cys	Ala	Asn	Thr	Val	Leu	Arg
		130				135					140				
Asp	Arg	Val	Arg	Val	Val	Ile	Glu	Arg	Ala	Val	Glu	Thr	Val	Ser	Ser
145					150					155					160
Met	Trp	Gly	Glu	Gly	His	Pro	Ala	Ala	Arg	Ala	Ser	Asn	Gly	Thr	Gln
				165					170					175	
Gly	Asn	Lys	Glu	Val	Ala	Val	Ser	Lys	Ser	Asn	Glu	Ile	Glu	Ala	Arg
			180					185					190		

Ala

&lt;210&gt; 42115

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42115

Leu	Ile	Val	Phe	Leu	Gln	Cys	Phe	Phe	Ala	Pro	Ile	Leu	Thr	Thr	Leu
1				5					10					15	
Ala	Pro	Ser	Lys	Met	Ser	Arg	Arg	Ala	Gln	Val	Glu	Glu	Val	Tyr	Asp
			20					25					30		
Ser	Asp	Pro	Glu	Glu	Val	Ala	Pro	Ser	Asp	Pro	Ser	Ala	Ser	Ile	Leu
			35				40					45			

## 18770

Ser Pro Ala Ala Ile Pro Pro Pro Gly Ala Ser Asn Ile Pro Met Arg  
 50 55 60  
 Pro Ala Pro Glu Pro Arg Arg Glu Ile Pro Lys His Phe Gln Cys Leu  
 65 70 75 80  
 Tyr Pro Val Tyr Phe Asp Lys Thr Arg Ser Arg Ala Glu Gly Arg Lys  
 85 90 95  
 Val Gly Ile Glu Leu Ala Thr Glu Asn Pro Leu Ala Arg Asp Ile Val  
 100 105 110  
 Asp Ala Val Gln Met Leu Gly Leu Asn Val Gly Phe Glu Pro Glu Lys  
 115 120 125  
 Leu His Pro Lys Asp Trp Ala Asn Pro Gly Arg Val Arg Val Met Leu  
 130 135 140  
 Lys Asp Glu Asp Gly Asn Leu Ile Asn Pro Lys Ile Lys Asn Ser Met  
 145 150 155 160  
 Cys Thr Ala Pro Gly Tyr Phe Ser Ile Pro Arg Phe Leu Ser Pro Leu  
 165 170 175  
 Ser Gln Ile Ala Asn  
 180

&lt;210&gt; 42116

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42116

Leu Ala Val Glu His His Leu Tyr Ile Leu Val Ala Gln Tyr Leu Lys  
 1 5 10 15  
 Ala His Pro Thr Thr Glu Glu Ser Pro Tyr Arg Leu Arg Ile Arg Gly  
 20 25 30  
 Leu Pro Met Pro Glu Lys Leu Pro Gly Ala Pro Pro Ala Pro Arg Gly  
 35 40 45  
 Trp Lys Ile Gly Lys Ile Leu Pro Ile His Ser Pro Ala Tyr Ser Gly  
 50 55 60  
 Gly Gly Val Ser Asp Asn Pro Leu Lys Asp Ala Met Ala Glu Met Gln  
 65 70 75 80  
 Ser Met Gly Gly Met Pro Gly Met Pro Gln Ile Pro Gly Met Pro Asn  
 85 90 95  
 Leu Ala Gly Leu Met Gly Glu Pro Ser Ala Ala Ser Gly Ser Glu Lys  
 100 105 110  
 Lys Lys Lys Asp Lys Lys Lys Gly Lys Ala  
 115 120

&lt;210&gt; 42117

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42117

Arg Arg Arg Pro Ser Pro Asp Arg Gly Ile Met Asn Thr Asp Pro Thr  
 1 5 10 15  
 Arg Asn Leu Pro Ser Tyr Gly Ala Pro Asn Leu Gly Pro Ser Leu Gln  
 20 25 30  
 Leu Gln Pro Asp Thr Asn Ser Pro Arg Pro Phe Phe Cys Ser Pro Ala  
 35 40 45  
 Pro Ser Arg Thr Ala Thr Gly Lys Thr Arg Arg Ala Ala Gly Arg Gln  
 50 55 60

## 18771

Ile Thr Arg Asn Arg Ala Ser Tyr Ser Cys His Thr Cys Arg Arg Arg  
 65 70 75 80  
 Lys Val Lys Cys Asp Lys Val Cys Ala Ser Val Val Val Ala Tyr Ile  
 85 90 95  
 Val Val Ile

<210> 42118  
 <211> 243  
 <212> PRT  
 <213> A.fumigatus

<400> 42118  
 Pro Met Ser Pro Trp Ser His Ile Ser Gln Ile Leu Val His Gly Glu  
 1 5 10 15  
 Lys His Gln Met Met Arg Leu Lys Ser Lys Leu Leu Ser Leu Asn Ala  
 20 25 30  
 Asp Lys Ala Val Lys Val Lys Val Tyr Thr Pro Ala Asn Cys Asp Glu  
 35 40 45  
 Val Arg Ile Pro Phe Arg Lys Asp Lys Ile Ala Lys Val Val Gly Lys  
 50 55 60  
 Leu Ala Gln Val Ala Pro Pro Ser Asp Gln Asp Asp Gly Arg Leu Met  
 65 70 75 80  
 Ser Gly Val Leu Val Gln Asn Gly Phe Asp Leu Ser Leu Met Ala Pro  
 85 90 95  
 Asp Asp Leu Arg Glu Tyr Ala Gly Leu Thr Thr Thr Thr Ile Thr Cys  
 100 105 110  
 Lys Gln His Ile Thr Leu Ser Ser Ala Ser Met Asp Leu Ile Arg Trp  
 115 120 125  
 Ala Leu Glu Gly Thr Phe Gly Ala Ile Glu Glu Leu Gly Ser Asn Glu  
 130 135 140  
 Arg Ser Lys Val Lys Glu Glu Ser Thr Lys Ala Val Asn Gly Glu Gln  
 145 150 155 160  
 Glu Ile Lys Glu Glu Pro Ala Asp Glu Glu Ile Pro Met Glu Glu Thr  
 165 170 175  
 Gln Thr Tyr Leu Val Met Gly Cys Val Leu Ile Arg Tyr His Ser Arg  
 180 185 190  
 Thr Arg Glu Val Glu Leu Glu Trp Glu Gly Asn Met Met Asn Asp Gly  
 195 200 205  
 Val Ala Asp Ala Val Met Ala Val Leu Leu Thr Val Glu Ser Ser Pro  
 210 215 220  
 Ala Ser Val Lys Arg Met Leu Ile Leu Phe Ser Phe Thr Glu Tyr Leu  
 225 230 235 240  
 Asp Ala Asp

<210> 42119  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 42119  
 Asn Pro Val Pro His Ser Asn Ile Gln Lys Thr Asp Phe His Val Pro  
 1 5 10 15  
 Thr Thr Thr Thr Thr Leu Lys Arg Val Pro Asn Asn Arg Cys Ala Ala  
 20 25 30

## 18772

Leu Thr His Ser Ile Ser Ser Val Phe Phe Cys Ala Asp Ile Asn Asn  
           35                  40                  45  
 Ile Ser Ala Gln Gln Asn Val Thr Thr Arg Ala Ser Arg Gly Gly Leu  
       50                  55                  60  
 Arg Leu Arg Pro Arg Arg Gly Arg Ser Leu Arg Pro Leu Ser Leu His  
 65                  70                  75                  80  
 Pro Phe Pro Cys Cys Asn Thr Ser Ser Arg Arg Phe Glu Tyr Pro Asn  
                   85                  90                  95  
 Glu Thr Gly Ser  
                   100

<210> 42120  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<400> 42120  
 Ile Glu Phe Val Lys Asp Lys Thr Thr Lys Glu Pro Phe Ala Pro Glu  
 1                  5                  10                  15  
 Thr Ala Val Ala Phe His Val Gln Glu Thr Gly Met Lys Pro Val His  
                   20                  25                  30  
 Gly Ile Ser Leu Tyr Ala Ala Ser Gly Cys Val Asp Gly Ile Arg Gly  
                   35                  40                  45  
 Asp His Val Leu Leu Ala Pro Pro Tyr Asn Val Thr Lys Asp Glu Ile  
       50                  55                  60  
 Asp Ile Ile Val Glu Thr Ala Gly Lys Val Ile Glu Glu Val Phe Val  
 65                  70                  75                  80  
 Asn Ile Gly Ile Ile  
                   85

<210> 42121  
 <211> 112  
 <212> PRT  
 <213> A.fumigatus

<400> 42121  
 His Arg Ile Ala Ser Asn Thr Arg Ser Ala Val Leu His Arg Asp Thr  
 1                  5                  10                  15  
 Arg Phe Ile Pro Lys Lys Ala Val Gly Gly Lys Gly Ser Tyr Ile Phe  
                   20                  25                  30  
 Leu Glu Asp Gly Thr Lys Phe Leu Asp Ser Thr Gly Gly Ala Ala Val  
                   35                  40                  45  
 Ser Cys Leu Gly His Gly His Glu Lys Ala Thr Gln Ala Val Thr Asn  
       50                  55                  60  
 Gln Leu Asn Gln Leu Ala Tyr Cys His Thr Ala Phe Phe Gly Thr Glu  
 65                  70                  75                  80  
 Val Ser Glu Glu Leu Ala Arg Phe Leu Cys Asp Ser Thr Gly Gly Lys  
                   85                  90                  95  
 Leu Ser Lys Leu Tyr Val Val Ser Ser Gly Ala Arg Pro Ser Gln Val  
                   100                  105                  110

<210> 42122  
 <211> 135  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 42122

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Ser Val Thr His Thr Gly Ser Glu Ala Val Glu Ala Ala Leu Lys Leu
1          5          10          15
Ala Arg Gln Tyr Phe Leu Glu Leu Ser Pro Ala Gln Pro Gln Arg Thr
          20          25          30
Arg Phe Ile Ala Arg Leu Pro Ser Tyr His Gly Ile Thr Leu Gly Ala
          35          40          45
Leu Ala Thr Gly Gly His Val Leu Arg Cys Gln Pro Phe Glu Pro Leu
          50          55          60
Leu Ala Gln Asn Thr Ser His Val Ser Pro Cys Tyr Ala Tyr Arg Gly
65          70          75          80
Lys Lys Glu His Glu Ser Asp Ala Asp Tyr Val Ala Arg Leu Ala Ala
          85          90          95
Glu Leu Asp Ala Glu Phe Gln Arg Val Gly Pro Glu Thr Val Cys Ala
          100          105          110
Phe Ile Ala Glu Pro Val Val Gly Ala Val Ser Thr Pro Arg Ala Ile
          115          120          125
His Gln Ser Ser Pro Leu Ala
          130          135

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&lt;210&gt; 42123

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42123

```

His Ala Asp Pro Asn Pro Asp Ile Leu Asp Ile Lys Ala Leu Gly Ala
1          5          10          15
Val Pro Val Val Pro Ser Tyr Phe Pro Ala His Glu Ser His Leu Gly
          20          25          30
Lys Asn Arg Ser Ala Phe Tyr Ser Arg Arg Ser Asp Val Arg His Gly
          35          40          45
Thr Cys Gly His Pro Cys Thr His Gly Lys Thr Arg Val Leu Phe Pro
          50          55          60
Asp Leu Gln Thr Ile Gly Lys Ala Leu Gly Gly Gly Tyr Ala Pro Val
65          70          75          80
Ser Gly Leu Leu Ile Ser Glu Lys Ile Val Gln Ala Met Asp Lys Gly
          85          90          95
Thr Gly Val Phe Arg His Gly Gln Thr Tyr Gln Gly His Pro Val Ala
          100          105          110
Cys Ala Ala Ala Leu Ala Val Gln Lys Thr Ile Lys Glu Glu Asn Leu
          115          120          125
Leu Glu Asn Val Arg Ala Met Gly Ala Tyr Leu Glu Asn Arg Leu Arg
          130          135          140
Glu Arg Leu Gln Ala His Pro Asn Val Gly Asp Ile Arg Gly Lys Gly
145          150          155          160
Leu Phe Trp Gly Val Arg Arg His Leu Ser Met Arg Ile Glu Arg Arg
          165          170          175
Asn Met Thr Asp Ala Val Asn Arg Leu Ser Ser Ser Arg Thr Arg Pro
          180          185          190
Gln Arg Ser Leu Leu Leu Gln Arg Leu Pro Leu Pro Ser Thr Ser Lys
          195          200          205
Arg Leu Ala
          210

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&lt;210&gt; 42124

<211> 340  
 <212> PRT  
 <213> A.fumigatus

<400> 42124

Gln	Arg	Ala	Tyr	Val	Ala	Arg	Asp	Gly	Asn	Arg	Thr	Ile	Ile	Tyr	Arg
1				5					10					15	
Gly	Gln	Lys	Ser	Gly	Val	Asp	Asp	Phe	Asp	Trp	Val	Arg	Cys	Met	Ala
		20						25					30		
Arg	Pro	Pro	Arg	Pro	Leu	Ser	Thr	Val	Val	Leu	Asp	Glu	Ala	Gln	Lys
	35					40					45				
Gln	Ala	Phe	Ile	Asp	Asp	Ile	Lys	Glu	Tyr	Leu	His	Pro	Arg	Thr	Arg
50					55					60					
Arg	Trp	Tyr	Ser	Asn	Arg	Gly	Ile	Pro	Tyr	Arg	Arg	Gly	Tyr	Leu	Leu
65				70					75					80	
His	Gly	Pro	Pro	Gly	Thr	Gly	Lys	Thr	Ser	Leu	Cys	Phe	Ala	Ala	Ser
			85						90				95		
Gly	Leu	Leu	Gly	Leu	Thr	Leu	Tyr	Leu	Ser	Leu	Asn	Ser	Lys	Ser	
	100							105				110			
Leu	Asp	Glu	Asp	Ser	Leu	Met	Ser	Leu	Phe	Ser	Glu	Leu	Pro	Arg	Arg
	115						120				125				
Cys	Ile	Val	Leu	Leu	Glu	Asp	Val	Asp	Ser	Ala	Gly	Ile	Thr	Gln	Lys
130					135						140				
Arg	Ala	Glu	Asp	Asp	Ser	Val	Ala	Ser	Ala	Val	Leu	Val	Glu	Lys	Asp
145					150				155					160	
Lys	Ser	Ser	Ala	Glu	Glu	Arg	Glu	Pro	Glu	Thr	Lys	Ala	Asn	Lys	Gly
			165					170					175		
Val	Ser	Leu	Ser	Gly	Leu	Leu	Asn	Val	Ile	Asp	Gly	Val	Ala	Ala	Ser
		180					185					190			
Glu	Gly	Arg	Ile	Leu	Ile	Met	Thr	Thr	Asn	His	Ala	Glu	Lys	Leu	Asp
	195					200						205			
Pro	Ala	Leu	Leu	Arg	Pro	Gly	Arg	Val	Asp	Met	Thr	Ile	Ala	Phe	Gly
	210				215						220				
Tyr	Ala	Asp	Arg	Asp	Ala	Met	Arg	Glu	Leu	Phe	Ser	Ala	Ile	Tyr	Ser
225				230					235					240	
Met	Leu	Glu	Gly	Asp	Ala	Arg	Thr	Ser	Lys	Met	Thr	Ser	Val	Arg	Lys
			245						250				255		
Ala	Ser	Gly	Gln	Val	Gln	Lys	Lys	His	Ala	Lys	Ala	Thr	Val	Thr	Gln
		260						265					270		
Arg	Lys	Arg	Gln	Arg	Leu	Ser	Lys	Glu	Lys	Ile	Ala	Glu	Leu	Ala	Ser
	275						280					285			
Glu	Phe	Ala	Ser	Arg	Ile	Pro	Glu	Gly	Glu	Phe	Thr	Ala	Ala	Glu	Ile
	290				295						300				
Gln	Gly	His	Leu	Leu	Asn	Tyr	Lys	Asn	Glu	Pro	Glu	Ala	Ala	Ile	Asp
305				310					315					320	
Ala	Val	Glu	Glu	Trp	Val	Arg	Ser	Val	Arg	Ala	Lys	Arg	Lys	Glu	Lys
			325					330						335	
Glu	Gln	Ser	Lys												
		340													

<210> 42125  
 <211> 1000  
 <212> PRT  
 <213> A.fumigatus

<400> 42125



Ser Glu Leu Asp Gly Asp Ser Ser Arg Ala Asp Ser Pro Met Gln Ala  
 1 5 10 15  
 Gln Arg Gly Gly Glu Ala Asp Trp Phe Tyr Ala Arg Arg Glu Ala Val  
 20 25 30  
 Ser Ala Ile Leu Gly Pro Asp His Ile Ser His Met Pro Asp Asp Glu  
 35 40 45  
 Leu Asp Ala Leu Phe Glu Asp Val Gln Lys Val Arg Ala Thr Arg Arg  
 50 55 60  
 Gly Leu Val Glu Asn Glu Asp Asp Ser Asp Ser Leu Ser Ser Phe Pro  
 65 70 75 80  
 Val Arg Asp Lys Tyr Met Ser Asn Gly Thr Ile Asp Asn Phe Ser Leu  
 85 90 95  
 Asp Thr Ala Ile Thr Met Pro Gly Thr Pro Gly Gln Gln Tyr Asp Gly  
 100 105 110  
 Glu Gly Gln Asn Gly Ser Asp Phe Thr Leu Gln Ala Ala Arg Gln Asp  
 115 120 125  
 Met Gln Arg His Leu Asp Lys Gln Lys Glu Glu Phe Lys Asn Lys Leu  
 130 135 140  
 Arg Ile Ala Glu Ala Ser Asp Gln Asp Ala Asp Glu Leu Arg Leu Glu  
 145 150 155 160  
 Lys Glu Arg Met Glu Glu Ala Leu Arg Ser Thr Lys Glu Glu Tyr Glu  
 165 170 175  
 Glu Gln Leu Arg Lys Gln Lys Glu Ala Phe Glu Asn His Met Lys Glu  
 180 185 190  
 Met Gly Gln Pro Val Pro Arg Ile Tyr Glu Asn Gly Phe Ala Lys Leu  
 195 200 205  
 Asp Glu Arg Glu Ile Arg Ile Ala Thr Ser Val Phe Pro Ser Leu Gly  
 210 215 220  
 Pro Ser Thr Ile Thr Ser Ala Trp Pro Glu Lys Ile Leu Gln His Ala  
 225 230 235 240  
 Ser Leu Leu Lys Glu Ala Gln Val Met Ser Gln Ile Met Asp Lys Asn  
 245 250 255  
 Val Ser Phe Gln Phe Ala Ile Ile Asp His Gly His Asn Met Ala Ser  
 260 265 270  
 Ser Tyr Asp Leu Val Leu Asn Gly Ile Ser Gly Asp Glu Asp Val Val  
 275 280 285  
 Leu Glu Glu Ala Lys Lys Pro Cys Ile Ala Val Arg Val Ile Asp Ser  
 290 295 300  
 Lys Gln Arg Val Ile His Leu Trp Ser Ile Glu Lys Leu His Arg Arg  
 305 310 315 320  
 Leu Gln Ala Met Arg Gln Leu His Gln Tyr Ile Asp Arg Pro Asp Tyr  
 325 330 335  
 Ile Gln His Phe Arg Leu Glu Asn Pro Phe Ser Glu Pro Cys Ser Pro  
 340 345 350  
 Gln Phe Ser Leu Val Gly Asp Ala Asp Ile Pro Leu Thr Ala Val Phe  
 355 360 365  
 Glu Thr Arg Val Gln Asp Phe Ser Val Glu Val Ile Ser Pro Tyr Thr  
 370 375 380  
 Gln Asn Val Val Gly Ile Val Arg Leu Ser Leu Glu Pro Ser Ser Ala  
 385 390 395 400  
 Gln Ala Pro Ser Ser Thr Leu Lys Phe Asn Val Val Met Arg Asp Met  
 405 410 415  
 Val Gly Phe Ala Glu Trp Glu Gly Thr Asp Val His Ala Gln Leu Phe  
 420 425 430  
 Val Pro Gly Ile Ser Glu Glu Gly Gly Ala Thr Thr Thr Gln Met Ile  
 435 440 445

Ser	Gly	Phe	Asp	Glu	Ser	Pro	Ile	Arg	Phe	Glu	Ser	Val	His	Ser	Met
450						455					460				
Ser	Leu	Pro	Leu	Ser	Ser	Pro	Arg	Thr	Ser	Ala	Leu	Lys	Ile	Cys	Ile
465					470					475					480
Tyr	Ala	Arg	Val	Thr	Gln	Met	His	Leu	Asp	Lys	Leu	Ile	Ser	Trp	Asp
				485					490					495	
Glu	Met	Arg	Asp	Ser	Ala	Glu	Leu	Pro	Pro	Gln	Lys	Arg	Lys	Ala	Pro
			500					505					510		
Arg	Ile	Ala	Glu	Ser	Glu	Phe	Phe	Ser	Glu	Glu	Arg	His	Asp	Val	Phe
		515					520					525			
Ala	Arg	Val	Gln	Val	Leu	Glu	Leu	Ala	Glu	Ser	Gly	Glu	Tyr	Leu	Pro
	530					535					540				
Val	Glu	Val	Val	Gln	Asn	Asn	Ser	Leu	Asp	Ala	Gly	Thr	Tyr	Gln	Leu
545					550					555					560
His	Gln	Gly	Leu	Gln	Arg	Arg	Val	Leu	Val	Ser	Leu	Thr	Tyr	Asn	Ser
				565					570					575	
Thr	Glu	Gly	Leu	Pro	Trp	Asp	Asp	Leu	Thr	Asn	Ile	Arg	Val	Gly	Ser
			580					585					590		
Val	Arg	Leu	Leu	Asp	Pro	Trp	Gly	Lys	Ile	Pro	Asp	Gln	Asp	Leu	Gln
		595					600					605			
Thr	Pro	Asp	Val	Pro	Leu	Lys	Phe	Val	Gln	Glu	Pro	Ala	Val	Lys	Asp
	610					615					620				
Asn	Ala	Asp	Gly	Thr	Ser	Asn	Val	Thr	Leu	Val	Ala	Gln	Trp	Asp	Ser
625					630					635					640
Ser	Leu	His	Gly	Ser	Leu	Leu	Leu	Asp	Arg	Val	Thr	Ala	Asp	Lys	Tyr
				645					650					655	
Arg	Val	Gln	Val	Thr	Val	Arg	Trp	Asp	Leu	Val	Ser	Ser	Arg	Leu	Gln
			660					665					670		
Asp	Pro	Val	Pro	Phe	Glu	Val	Asp	Leu	Thr	Leu	Gln	Ile	Gln	Gly	Arg
		675					680					685			
Thr	Tyr	Val	Arg	Pro	Gln	Ser	Met	Phe	Lys	Gln	Leu	Phe	Asn	Ser	Thr
	690					695					700				
Arg	Val	Val	His	Ser	Thr	Val	Arg	Met	Phe	Ser	Leu	Ala	Ile	Arg	Pro
705					710					715					720
Val	Ser	Ala	Lys	Arg	Ala	Ala	Asp	Leu	Trp	Arg	Met	Asn	Thr	Gln	Asn
				725					730					735	
Asp	Tyr	Val	Lys	Gly	Glu	Glu	Leu	Leu	Ala	Arg	Trp	Ser	Pro	Arg	Lys
			740					745					750		
Ile	Ser	Leu	Val	Arg	Asp	Tyr	Ile	Ala	Ala	Arg	Lys	Arg	Arg	Arg	
		755					760					765			
Leu	Ala	Glu	Leu	Asn	Ala	Ala	Lys	Gly	Ala	Leu	Ser	Ala	Asn	Ser	Leu
	770					775					780				
Ala	Pro	Ser	Pro	Val	Arg	Ser	Gly	Arg	Ser	Thr	Pro	Leu	Arg	Ser	Gln
785					790					795					800
Glu															

18777

```

His Trp Val Arg Arg Phe Val Glu Leu Arg Arg Pro Tyr Leu His Ile
      900                      905                      910
Tyr Ser Val Pro Asp Gly Asp Glu Ile Asn Ala Ile Asn Leu Arg Asn
      915                      920                      925
Ser Arg Val Asp His Asp Pro Asp Phe Ala Arg Leu Leu Ala Gly Ser
      930                      935                      940
Asp Ser Gly Val Ser Ala Lys Gly Arg Pro Asn Val Phe Ala Ile Tyr
      945                      950                      955                      960
Gly Thr Gln Asn Thr Phe Leu Phe Ala Ala Arg Thr Glu Ala Gln Lys
      965                      970                      975
Val Glu Trp Ile Leu Lys Ile Asp Glu Ser Tyr Phe Ser Asn Gly Ala
      980                      985                      990
Ser Arg Ala Ser Ser Asn Gly Asn
      995                      1000

```

<210> 42126

<211> 150

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (29)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42126

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Thr Ala Ile Ala Ser Val Met Ala Glu Thr Ala Thr Thr Ala Phe Leu
1          5          10          15
Pro Trp Cys Leu Arg Arg Phe Tyr Cys Lys Ser Gly Xaa Arg Arg Leu
      20          25          30
His Pro Thr Trp Arg Pro Arg Ser Glu Thr Asp Arg Asp Asp Ser Asp
      35          40          45
Gly Pro Leu Val Glu Ala Pro Asn Leu Ile Leu His Gly Asp Thr Tyr
      50          55          60
Phe Leu Phe Tyr Ser Thr His Cys Phe Thr Asp Pro Lys Tyr Asp Val
      65          70          75          80
Arg Trp Ala Thr Ser Lys Ser Ile Thr Gly Pro Tyr Val Lys Thr Gly
      85          90          95
Gln Lys Leu Phe Lys Thr Gly Asp Tyr Gly Leu Thr Ser Pro Gly Gly
      100         105         110
Gly Thr Val Cys Gly Cys Gly Asp Arg Met Leu Phe His Ala Phe Cys
      115         120         125
Glu Ser Asn Lys Arg Cys Thr Tyr Ala Ala Asn Leu Ala Ile Asn Gly
      130         135         140
Asp Gln Val Thr Leu Leu
      145         150

```

<210> 42127

<211> 106

<212> PRT

<213> A.fumigatus

<400> 42127

```

Arg His Leu Val Val Cys Phe Asn Pro Val Glu Asn Val Val Leu Leu
1          5          10          15
His Glu Cys Gly Leu Asn Asn Val Pro Thr Ile Gly Ile Ile Asp Thr

```

18778

20	25	30
Asp Ala Asp Pro Thr Gln Val Thr Tyr Pro Ile Pro Ala Asn Asp Asp		
35	40	45
Ser Leu Arg Ser Val Ala Val Ile Ala Gly Val Leu Gly Arg Ala Gly		
50	55	60
Glu Ala Gly Gln Lys Arg Arg Leu Glu Glu Ala Lys Ser Gly Arg Ile		
65	70	75
Thr Tyr Arg Leu Pro Thr Leu Lys Glu Leu Gly Ile Lys Leu Pro Glu		
85	90	95
Asn Met Ala Glu Thr Ala Glu Asn Lys Gln		
100	105	

<210> 42128  
 <211> 112  
 <212> PRT  
 <213> A.fumigatus

<400> 42128
Glu Asn Gln Lys Leu Thr Ile Arg Arg Met Trp Leu Thr Gln Ser Arg
1 5 10 15
Ile Pro Ser Gly Gly Ile Ser Thr Phe Gly Pro Leu Ile Val Lys Ala
20 25 30
Phe Gly Phe Asp Gln Phe Lys Thr Ile Leu Phe Asn Ile Pro Phe Gly
35 40 45
Ala Val Gln Leu Val Ala Thr Met Gly Gly Ala Trp Leu Ala Thr Val
50 55 60
Ile Lys Met Lys Gly Pro Ile Val Ile Leu Leu Cys Leu Pro Pro Ile
65 70 75 80
Ala Gly Cys Val Met Leu Leu Gln Ile Ala His Asp Ala Glu His Arg
85 90 95
Gly Ala Leu Leu Ala Gly Tyr Tyr Ile Val Ser His Glu Asp Pro Phe
100 105 110

<210> 42129  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

<400> 42129
Asn Gln Pro Arg His Val Leu Cys Thr Gly Ser Ser Leu His Val Ser
1 5 10 15
Tyr Leu Leu Leu Leu Cys Gly Thr Gln Ala Leu Thr Leu Thr Phe Ser
20 25 30
Ile Asn Leu Val Tyr Leu Trp Phe Leu Asn Lys Lys His Ala Gln Lys
35 40 45
Arg Val Ser Met Gly Lys Asn Ala Thr Ile Val Asp His Ser Met Tyr
50 55 60
Ala Val Gly Asp Gly Pro Ala Asp Lys Glu Gly Val Pro Val Gln Gln
65 70 75 80
Thr Ala Thr Glu Asp Asn Ala Phe Lys Asp Leu Thr Asp Trp Gln Asn
85 90 95
Glu Asp Phe Val Tyr Val Phe
100

<210> 42130  
 <211> 73

18779

<212> PRT

<213> A.fumigatus

<400> 42130

Ile	Leu	Pro	Arg	Leu	Arg	Met	Cys	Cys	Ser	Thr	Ser	Val	Ser	Ser	Ser
1				5					10					15	
Trp	Phe	Ala	Asp	Thr	Tyr	Cys	His	Lys	Gln	Asp	Arg	Tyr	Ile	Pro	Ile
			20					25					30		
Phe	Asp	Pro	Glu	Tyr	Asp	Thr	Phe	Asp	Ser	Val	Arg	Ser	Arg	Ser	Ser
			35				40					45			
Ile	Leu	Leu	Asn	Ala	Ile	Cys	Thr	Ile	Gly	Ser	Arg	Ile	Glu	Pro	Ser
	50					55					60				
Asn	Tyr	His	Leu	Leu	Leu	Tyr	Ala	Leu							
65						70									

<210> 42131

<211> 207

<212> PRT

<213> A.fumigatus

<400> 42131

Ala	Arg	Glu	Lys	Tyr	Phe	Thr	His	Leu	Glu	Leu	Gln	Ser	Gly	Pro	Gly
1				5					10					15	
Lys	His	Lys	Gly	Thr	Met	Ser	Leu	Gly	Ala	Glu	Pro	Ala	Tyr	Ser	Lys
			20					25					30		
Gly	Arg	Asp	Glu	Glu	Leu	Ile	Glu	Thr	Val	Gln	Ser	Ala	Pro	Tyr	Gln
			35				40					45			
Gly	His	Thr	Gln	His	Ser	Glu	Thr	Lys	Lys	Asp	Asp	Ala	Leu	Gln	Leu
	50					55				60					
Ile	Glu	Gln	Val	Gly	His	Ser	Thr	Val	Leu	Thr	Ala	Glu	Asn	Asn	Ala
65					70				75					80	
Arg	Val	Leu	Arg	Arg	Ile	Asp	Leu	Arg	Leu	Leu	Pro	Val	Leu	Leu	Gly
			85					90					95		
Ile	Tyr	Phe	Leu	Gln	Gln	Leu	Asp	Lys	Ser	Thr	Leu	Ser	Tyr	Ala	Ser
			100					105					110		
Val	Phe	Gly	Leu	Ile	Glu	Lys	Ala	His	Leu	His	Gly	Lys	Gln	Tyr	Ser
			115				120					125			
Trp	Leu	Gly	Ser	Val	Val	Tyr	Val	Ala	Gln	Leu	Val	Ala	Gln	Pro	Leu
	130					135					140				
Ile	Ala	Tyr	Ile	Leu	Val	Lys	Val	Pro	Leu	Gly	Lys	Phe	Leu	Ala	Ala
145				150					155					160	
Thr	Thr	Leu	Leu	Trp	Gly	Val	Ser	Leu	Thr	Cys	Met	Thr	Ala	Ala	Asn
			165					170					175		
Thr	Phe	Pro	Gly	Leu	Leu	Val	Cys	Arg	Met	Phe	Leu	Gly	Leu	Phe	Glu
			180				185					190			
Ala	Gly	Val	Gly	Glu	Arg	Phe	His	Phe	Ile	Val	Ser	Ile	Arg	His	
		195				200						205			

<210> 42132

<211> 549

<212> PRT

<213> A.fumigatus

<400> 42132

Ala	Ile	Met	Pro	Gln	Lys	Glu	Phe	Cys	Pro	Lys	Gly	Tyr	Gln	Glu	Gln
1				5					10					15	

Pro Ser Gly Asn Ala Ala Ala Asp Pro Ser Val Tyr Leu Arg Ser Glu  
 20 25 30  
 Asn Ser Lys Asp Cys Ser Phe Asp Phe Thr Phe Glu Pro Ile Arg Pro  
 35 40 45  
 Asn Leu Phe Arg Val Thr Phe Ser Ser Gln Asp Arg Pro Leu Pro Pro  
 50 55 60  
 Tyr Pro Ser Ile Ser Lys Pro Asn Thr Asp Leu Asn Gly Ile His Val  
 65 70 75 80  
 Ser Val Thr Asp Gly Ser Ser Ser Lys Thr Ile Glu Val Gly Asp Val  
 85 90 95  
 Thr Ala Thr Val Glu Trp Ser Asn Thr Pro Ile Val Ser Leu Ser Trp  
 100 105 110  
 Thr Gly Glu Glu Lys Pro Leu His Arg Asp Leu Pro Leu Arg Ser Tyr  
 115 120 125  
 Val Ala Asp Ala Thr Gly Ile Ala His Tyr Ser Glu His Asp Arg Asn  
 130 135 140  
 Ala Leu His Val Gly Leu Gly Glu Lys Arg Ala Pro Met Asp Leu Thr  
 145 150 155 160  
 Gly Arg His Phe Gln Leu Ser Ala Thr Asp Ser Phe Gly Tyr Asp Val  
 165 170 175  
 Tyr Asn Thr Asp Pro Leu Tyr Lys His Ile Pro Leu Leu Ile Lys Val  
 180 185 190  
 Thr Pro Ala Gly Cys Val Ala Ile Phe Ser Thr Thr His Ser Arg Gly  
 195 200 205  
 Thr Trp Ser Val Gly Ser Glu Ile Asp Gly Leu Trp Gly His Phe Lys  
 210 215 220  
 Val Tyr Arg Gln Asp Tyr Gly Gly Leu Glu Gln Tyr Leu Ile Val Gly  
 225 230 235 240  
 Lys Thr Leu Lys Asp Thr Val Arg Gln Tyr Ala Glu Leu Leu Gly Phe  
 245 250 255  
 Pro Leu Leu Val Pro Arg Trp Ala Tyr Gly Tyr Ile Ser Gly Gly Tyr  
 260 265 270  
 Lys Tyr Thr Met Leu Asp Asp Pro Pro Ala His Gln Gly Leu Met Glu  
 275 280 285  
 Phe Ala Asp Lys Leu Met Glu His Gly Ile Pro Cys Ser Ala His Gln  
 290 295 300  
 Met Ser Ser Gly Tyr Ser Ile Ala Glu Thr Glu Pro Lys Val Arg Asn  
 305 310 315 320  
 Val Phe Thr Trp Asn Lys His Arg Phe Pro Asn Pro Glu Asp Trp Ile  
 325 330 335  
 Lys Lys Tyr His Ala Arg Gly Ile Arg Leu Leu Ala Asn Ile Lys Pro  
 340 345 350  
 Phe Val Leu Ala Thr His Pro Asp Tyr Gln Lys Leu Val Ser Glu Gly  
 355 360 365  
 Ala Leu Phe Lys Lys Pro Asp Thr Gln Glu Pro Gly Thr Met Arg Leu  
 370 375 380  
 Trp Ser Ala Gly Gly Gly Thr Gly Gly Asp Gly Cys His Ile Asp Phe  
 385 390 395 400  
 Thr Ser Ser Phe Ala Phe Arg Trp Trp Tyr Glu Gly Val Gln Ser Leu  
 405 410 415  
 Lys Arg Ala Gly Ile Asp Gly Met Trp Asn Asp Asn Asn Glu Tyr Thr  
 420 425 430  
 Leu Pro Asp Asp Glu Trp Gln Leu Ala Leu Asp Gly Ser Gly Val Thr  
 435 440 445  
 Glu Gln Ala Lys Thr Gln Arg Asp Lys Ser Val Gly Leu Trp Gly Arg  
 450 455 460

## 18781

Ala Met His Thr Glu Leu Met Gly Lys Ala Ser His Asp Ala Leu Val  
 465 470 475 480  
 Asp Met Glu Pro Lys Tyr Arg Pro Phe Val Leu Thr Arg Ser Ala Thr  
 485 490 495  
 Ala Gly Thr Leu Arg Tyr Ala Ala Ser Ser Trp Ser Gly Asp Asn Met  
 500 505 510  
 Thr Ser Trp Glu Ser Met Lys Gly Ala Asn Ala Leu Ser Leu Asn Ala  
 515 520 525  
 Gly Ile Ser Leu Leu Gln Val Arg Leu His His Ser Arg Leu Ser Trp  
 530 535 540  
 Thr Ser Ile Ala Cys  
 545

<210> 42133

<211> 316

<212> PRT

<213> A.fumigatus

<400> 42133

Lys Thr Lys Thr Asp Cys Leu Ser Ser Thr Gly Pro Gln Pro Ser Pro  
 1 5 10 15  
 Glu Leu Leu Leu Arg Trp Val Gln Leu Gly Ile His Ser Pro Arg Phe  
 20 25 30  
 Ala Ile Asn Cys Phe Lys Thr Ser Pro Gly Asn Thr Ala Val Gly Asp  
 35 40 45  
 Val Ile Glu Pro Trp Met Tyr Pro Glu Ile Thr Pro Leu Val Arg Asp  
 50 55 60  
 Ala Ile Lys Arg Arg Tyr Glu Ile Leu Pro Tyr Ile Tyr Ser Leu Gly  
 65 70 75 80  
 Leu Glu Ser His Leu Thr Ala Ser Pro Pro Gln Arg Trp Ile Gly Trp  
 85 90 95  
 Gly Tyr Glu Ser Asp Pro Glu Val Trp Thr Lys Ala Leu Lys Ser Gly  
 100 105 110  
 Glu Glu Gln Phe Trp Phe Gly Asp Thr Ile Leu Val Gly Gly Val Tyr  
 115 120 125  
 Glu Pro Gly Val Thr Val Ala Lys Met Tyr Leu Pro Arg Lys Ala Asn  
 130 135 140  
 Asp Glu Phe Asp Phe Gly Tyr Val Asn Met Asn Ser Pro Tyr Thr Tyr  
 145 150 155 160  
 Tyr Ala Ser Gly Gln Trp Val Glu Ile Pro Ser Gln Trp Arg Asp Ser  
 165 170 175  
 Ile Pro Leu Val Ala Arg Ile Gly Gly Ala Ile Pro Val Gly Lys Pro  
 180 185 190  
 Val Gln Thr Arg Val Pro Gly Asp Glu Thr Glu Ala Ser Leu Ala Val  
 195 200 205  
 Asp Glu Leu Asp Asp Tyr Arg Gly Val Glu Ile Phe Pro Pro Arg Gly  
 210 215 220  
 Ser Ser His Gly Cys Val Phe Ser Tyr Ser Trp Tyr Glu Asp Asp Gly  
 225 230 235 240  
 Ile Ser Leu Gln Pro Lys Met Ser Thr Tyr Thr Ile Ser Tyr Ser Ser  
 245 250 255  
 Thr Glu Glu Lys Val Thr Val Gly Phe Asn Arg Asp Glu Glu Ser Gly  
 260 265 270  
 Phe Val Pro Ala Trp Lys Asp Leu Asp Ile Ile Leu His Asn Gly Asp  
 275 280 285  
 Glu Arg Arg Val Val Ser Asp Gly Trp Pro Val Glu Tyr Lys Gly Lys

## 18782

290 295 300  
 Asp Ser Arg Gly Arg Val Val Tyr Thr Leu Lys His  
 305 310 315

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 <211> 250  
 <212> PRT  
 <213> A.fumigatus

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 Ser Arg Gly Arg Leu Pro Gly Arg Gln Arg Ala Pro Pro Gln Glu Trp  
 1 5 10 15  
 His Pro Ala Arg Gly Ser His Gln Leu Val Ile Leu Ala Gln His Pro  
 20 25 30  
 His Cys Gly Pro Glu Gln Arg Thr Tyr Ile Pro Leu Ser His Arg Val  
 35 40 45  
 Val Ala Cys Phe Ser His Cys Pro Ser Pro Ser Tyr Ser Thr Ser  
 50 55 60  
 Ser Arg Lys Glu Ser Arg Pro Ser Thr Arg Pro Thr Pro Ser Pro Ser  
 65 70 75 80  
 Thr Lys Ser Ala Arg Ser Pro Leu Lys Leu Ser Glu Ala Ala Thr Arg  
 85 90 95  
 Ile Ser Arg Asp Gly Gln Ala Ser Pro Arg Arg Leu His His Ala Lys  
 100 105 110  
 Arg Pro Gly Ser Ser Thr Pro Ala Ser Pro Ser Ile Ser Glu Ser Thr  
 115 120 125  
 Thr Ser Pro Pro Arg Arg Arg Pro Met Ile Ser Ser Pro Leu Gln Pro  
 130 135 140  
 Ala Gly Pro Arg Arg Ser Thr Thr Pro Ser Ser Cys Ser Arg Ala Thr  
 145 150 155 160  
 Pro Arg Lys Val Ser Arg Pro Ser Thr Ala Ser Pro Val Pro Leu Pro  
 165 170 175  
 Ser Gly Met Arg Thr Phe Leu Pro His Arg Trp Ser Pro Thr Arg Arg  
 180 185 190  
 Pro Gly Arg Ser Ala Thr Met Thr Pro Ser Ser Trp Val Thr Ser Ser  
 195 200 205  
 Ala Arg Ser Ser Ser Arg Arg Val Gly Ser Met Arg Leu Ala Leu Met  
 210 215 220  
 Ser Thr Met Pro Met Ala Thr Arg Arg Arg Ser Ser Gly Thr Ala Val  
 225 230 235 240  
 Ser Ser Gly Ala Arg Thr Ala Cys Gly Pro  
 245 250

<210> 42135  
 <211> 191  
 <212> PRT  
 <213> A.fumigatus

<400> 42135  
 Pro Ala Arg Gly Ala Ala Gly Lys Gln Thr Val Thr Gly Thr Cys Glu  
 1 5 10 15  
 Cys Val Ser Tyr Leu Gly Pro Ala Leu Gly Gly Gly His Gly Trp Leu  
 20 25 30  
 Gln Gly His His Gly Leu Val Ala Asp Gln Phe Val Ser Ala Asn Ile  
 35 40 45  
 Val Leu Ala Asn Gly Ser Leu Lys Thr Ile Asp Ala Lys Ser Asp Leu



## 18783

50		55		60											
Trp	Trp	Ala	Leu	Asn	Gly	Ala	Gly	His	Asn	Phe	Gly	Ile	Val	Thr	Ser
65				70					75						80
Val	Thr	Thr	Lys	Ile	Tyr	Asp	Ile	Gln	His	Ala	Asp	Trp	Ala	Ile	Asp
			85						90					95	
Thr	Leu	Ile	Phe	Ser	Gly	Asp	Lys	Val	Glu	Ala	Val	Tyr	Gln	Ala	Ala
			100					105					110		
Asn	Glu	His	Leu	Leu	Lys	Asn	Gly	Thr	Gln	Pro	Val	Asp	Leu	Ile	Asn
		115					120					125			
Trp	Ser	Tyr	Trp	Leu	Asn	Ile	Pro	Thr	Ala	Asp	Pro	Asn	Asn	Val	Arg
	130					135					140				
Ile	Ser	Pro	Tyr	Pro	Thr	Glu	Trp	Ser	Leu	Val	Phe	Leu	Thr	Ala	Leu
145					150					155					160
Ala	Arg	His	Pro	Ile	Leu	His	His	Pro	Gly	Arg	Ser	Gln	Asp	Arg	Arg
			165						170					175	
Pro	Gly	Leu	His	Gln	Ala	Leu	Pro	Arg	Asn	Arg	Pro	Ala	Leu	Arg	
		180					185						190		

&lt;210&gt; 42136

&lt;211&gt; 776

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42136

Phe	Ser	Pro	Arg	Asn	Val	Ala	Ala	Ala	Phe	Met	Asp	Arg	Cys	Ser	Ala
1				5					10					15	
Tyr	Asn	Ser	Ala	Asp	Val	Asn	Gly	Arg	Asp	Cys	Met	Glu	Met	Ser	Leu
			20					25					30		
Ser	Glu	Lys	Ile	Ala	Leu	Trp	Asp	Arg	Met	Ile	Glu	Arg	Gly	Ala	Glu
		35					40					45			
Cys	Glu	Arg	Gly	Leu	Asp	Ser	Met	Met	Asp	Ile	Val	Gln	Arg	Arg	Glu
	50					55					60				
Thr	Pro	Glu	Gly	Glu	Ala	Asp	Asp	Glu	Asp	Gln	Glu	Asp	Asp	Asp	Asp
65				70						75					80
Ile	Pro	Asp	Leu	Ile	Val	Tyr	Arg	Lys	Ile	Val	Leu	Gly	Ala	Pro	Ala
			85						90					95	
Phe	Lys	Thr	Leu	Val	Ala	Thr	Leu	Gln	Arg	Glu	Cys	Leu	Leu	Val	Thr
			100					105						110	
Pro	Glu	Leu	Asp	Phe	Met	Arg	Glu	Ile	Gly	Gln	Lys	Leu	Leu	Glu	Cys
		115					120					125			
Leu	Pro	Leu	Ser	Pro	Arg	Ile	Ser	Arg	Arg	Arg	Ser	Ala	Glu	Ser	Phe
	130					135						140			
Lys	Val	Lys	Cys	Thr	Val	Ser	Trp	Asp	Pro	Ile	Thr	Phe	Leu	Ile	Thr
145				150						155					160
Gln	Glu	Tyr	Thr	Pro	Gln	Pro	Ala	Thr	Ala	Phe	Glu	Thr	Ala	Ile	Thr
			165						170					175	
Leu	Thr	Gly	Ser	Asn	Arg	Ile	Ala	Gln	Ala	Leu	Pro	Cys	Gly	Gln	Tyr
		180					185						190		
Leu	Ser	Gln	Thr	Trp	Pro	Ser	Thr	Gly	Glu	Gln	Ile	Met	Gly	Leu	Ile
	195						200					205			
Lys	Gly	Leu	Ile	Arg	Lys	Gly	Phe	His	Asn	Pro	Gln	Ser	Gly	Ile	Leu
	210					215					220				
His	Asp	Gly	Thr	Glu	Ile	Val	Ala	Glu	Leu	Gln	Gly	Ala	Ile	Gly	Asp
225				230						235					240
Ser	Ser	Ser	Met	Leu	Tyr	Ser	Glu	Val	Thr	Gly	Thr	Ala	Tyr	Ser	Ile
			245						250						255

Ile Glu Val Val Glu Gln Leu Ala Trp Leu Gly Ala Ala Leu Arg Ser  
 260 265 270  
 Ser Pro Ile Glu Ser Gly Val Val Tyr Cys Arg Pro Val Val Asp Cys  
 275 280 285  
 Ser Trp Ala Val Gln Asp Glu Gly Glu Ala Thr Arg Arg Val Glu Tyr  
 290 295 300  
 His Cys Lys Ile Asp Tyr Thr Leu Arg Met Gly Glu Asp Asn Pro Ile  
 305 310 315 320  
 His Leu Asn Gly Gln Cys Trp His His Leu Phe Arg Asn Pro Val Val  
 325 330 335  
 Val Glu Gly Tyr Pro Ile Ala Arg Arg Pro Lys Ser Thr Thr Asp Thr  
 340 345 350  
 Gly Leu Glu Ile Pro Leu Asn Met Met Ala Gly Leu Ala Gln Ala His  
 355 360 365  
 Arg Leu Ser Thr Phe Asn Ser Arg Thr Val Leu Lys Gly Trp Ser Thr  
 370 375 380  
 Met Leu Val Pro Thr Glu Gln His Asp Gly Leu Val Phe Trp His Leu  
 385 390 395 400  
 Met His His Pro Glu Gly Lys Arg Met Ser Phe Asp Thr Cys Asn Thr  
 405 410 415  
 Phe Pro Pro Thr Asn Val Cys Leu Pro Ala Leu Glu Lys Ala Arg His  
 420 425 430  
 Val Leu Gly Trp Cys Ala Glu Met Gln Phe Phe Gly Gly Ala Ala Asp  
 435 440 445  
 Ala Ser Cys Asn Val Arg Arg Ser Arg Leu Pro Glu Thr Ser Glu Asp  
 450 455 460  
 Cys Met Leu Asp Lys Ala Tyr Leu Ser Ser Gly His Met Ile Ser Gly  
 465 470 475 480  
 Gly His Pro Phe Ser Ile Gly Arg Lys Asp Ile Pro Leu His Ile Ser  
 485 490 495  
 Arg His Ser Tyr Ile Arg Lys Leu Arg Trp Ile Ala Gln Lys Phe Val  
 500 505 510  
 Ile Leu Trp Asp Glu Gly Asp Lys Arg Gly Trp Leu Val Asn Gly Thr  
 515 520 525  
 Ser Ala Leu Leu His Leu Val Arg Ala Ala Met Lys Gln Ala Ser Val  
 530 535 540  
 Asp Arg Phe Gln Ser Tyr Leu Leu Phe Asp Ala Asp Lys Leu Arg Glu  
 545 550 555 560  
 Ser Arg Arg Ser His Glu Pro Thr Ala Ala Ile Asp Val Leu Met Asp  
 565 570 575  
 Pro Ser Asn Arg Ala Leu Lys Val Tyr His Glu Lys Asp Asp Ser Ile  
 580 585 590  
 His Phe Glu Ser Gln Val Glu His Phe Tyr Asp Leu Leu Glu Lys Ile  
 595 600 605  
 Ile Asp His Gln Gln Asn Thr Ala Gly Lys Gly Gly Arg Asn Cys Asn  
 610 615 620  
 Thr Ile Pro Arg Ala Tyr Leu Glu Gly Trp Asp Phe His Glu Leu Val  
 625 630 635 640  
 Val Glu Val Asp Pro Val His Pro Arg Val Ala Val Leu Glu Ser Ile  
 645 650 655  
 Gly Lys Ser Trp Val Asp Phe Ala Arg Ser Ile His Ala Val Thr Leu  
 660 665 670  
 Phe Gly Arg Gly Phe Gly Glu Ile Ile Lys Pro Pro Thr Gly Thr Cys  
 675 680 685  
 Trp Gln Trp Ala Arg Leu Pro Lys Trp Arg Tyr Tyr Leu Ser Ala Cys  
 690 695 700

## 18785

Met Ser Asp Leu Lys Asp Ile Met Gln Thr Arg Gly Asp Pro Asp Ser  
 705 710 715 720  
 Ile Pro Met Glu Leu Val Asp Asn Ile Leu Trp Gln Asn Ser Asp Ser  
 725 730 735  
 Phe Leu Ala Pro Cys Arg Cys Lys Gly Asp Asp Gly Glu Thr His Ser  
 740 745 750  
 Asp Phe Ala Gln Val Leu Leu Pro Ser Ser Met Ala Arg Glu Met Leu  
 755 760 765  
 Gln Asn Val Thr Arg Thr Ala Asp  
 770 775

&lt;210&gt; 42137

&lt;211&gt; 451

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42137

Asn Ser Gly Gly Ala Val Ile Phe Gly Gln Asn Arg Glu Val Glu Trp  
 1 5 10 15  
 Phe Trp Asp Asp Thr Gly Glu Pro Cys Arg Lys Glu Glu Ala Ile Pro  
 20 25 30  
 Ser Gln Ala Phe Pro Gly Ser Pro Ser His Asp Ser Gly Ile Gly Arg  
 35 40 45  
 Ser Val Ala Ser Leu Thr Ser Thr Thr Gly Glu Ser Met Ala Gly Leu  
 50 55 60  
 Cys Ser Ser Gln Pro Ser Val Asn Gly Leu Ser Asp Gly Pro Gln Pro  
 65 70 75 80  
 Gly Asn Ala Gly Ser Glu Gly Thr Gly Val Leu Ser Ile Thr Thr Leu  
 85 90 95  
 Asp Glu Arg Leu Gln His Leu Val Pro Glu Asp Tyr Lys Val Gly Ile  
 100 105 110  
 Val Cys Pro Leu Tyr Leu Glu Leu Met Ala Val Arg Thr Leu Phe Asp  
 115 120 125  
 Ser Glu His Glu Ala Leu Thr Ile Thr Asp His Asp Pro Asn Tyr Tyr  
 130 135 140  
 Ala Leu Gly Arg Ile Gly Arg His Asn Val Val Ala Ala Cys Leu Pro  
 145 150 155 160  
 Asp Gly Glu Tyr Gly Thr Asn Ser Ala Thr Ser Val Ala Trp Asn Val  
 165 170 175  
 Lys Arg Thr Phe Thr Gly Val Arg Phe Cys Leu Leu Val Gly Ile Gly  
 180 185 190  
 Gly Gly Val Pro Ser Ser Glu Asn Asp Ile Arg Leu Gly Asp Val Val  
 195 200 205  
 Val Ser Arg Pro Thr Gly Thr Leu Gly Gly Val Leu Asn Tyr Glu Leu  
 210 215 220  
 Gly Lys Ala Leu Gly Lys Gly Gly Phe Gln Pro Gln Gly Cys Leu Pro  
 225 230 235 240  
 Pro Ala Pro Gly His Leu Met Ser Ala Leu Ser Asp Leu Arg Ser Asp  
 245 250 255  
 Pro Arg Leu Ser Ser Thr Pro Leu Gln Pro Tyr Leu Glu Gln Ile Ala  
 260 265 270  
 Ser Lys Asn Pro Ala Tyr Lys His Pro Gly Ser Gly Lys Asp Arg Leu  
 275 280 285  
 Phe Thr Ser Asp Asn Ile His Val Glu Gln Ser Gly Arg Arg Gly Asn  
 290 295 300  
 Cys Glu Ser Cys Val Ser Gln Gly Glu Val Glu Arg Pro Pro Arg Leu

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	1.2	0.4	1	2	0.05	3.0	0.99
Marital Status	1.8	0.4	1	3	0.10	3.1	0.98
Education	12.5	2.1	9	16	0.20	3.3	0.97
Income	15000	8000	5000	35000	0.30	3.5	0.96
Health	2.5	0.8	1	4	0.15	3.2	0.98
Stress	3.2	1.1	1	5	0.25	3.4	0.97
Depression	2.8	1.0	1	5	0.20	3.3	0.97
Life Satisfaction	4.5	1.2	1	7	0.10	3.1	0.98
Resilience	3.8	1.1	1	6	0.15	3.2	0.98
Optimism	4.2	1.0	1	6	0.10	3.1	0.98
Self-Esteem	4.0	1.1	1	6	0.15	3.2	0.98
Loneliness	2.2	0.9	1	5	0.20	3.3	0.97
Loneliness (Control)	2.1	0.8	1	5	0.15	3.2	0.98
Loneliness (Mediator)	2.3	0.9	1	5	0.20	3.3	0.97
Loneliness (Outcome)	2.4	1.0	1	5	0.25	3.4	0.96

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<211> 211
<212> PRT
<213> A.fumigatus
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<210> 42139

<211> 414  
 <212> PRT  
 <213> A.fumigatus

<400> 42139

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Thr	Pro	Ala	Arg	Ser	Pro	Phe	Ala	Asn	Asp	Glu	Tyr	Thr	Val	Gly	Trp
		20					25					30			
Ile	Cys	Gly	Leu	Ala	Ser	Glu	Leu	Ala	Ala	Ala	Gln	Ser	Met	Met	Asp
	35					40					45				
Lys	Val	His	Gly	Glu	Pro	Gln	Thr	Pro	Pro	Ala	Glu	Ala	Asp	Asn	Asn
	50				55					60					
Val	Tyr	Met	Leu	Gly	Ser	Met	Gly	Lys	Phe	Lys	Val	Val	Ala	Ala	Cys
65					70				75						80
Leu	Pro	Ile	Gln	His	Pro	Ser	Thr	Glu	Ala	Val	Val	Lys	Lys	Met	Leu
			85					90					95		
Val	Thr	Phe	Pro	Arg	Ile	Arg	Val	Gly	Leu	Leu	Val	Gly	Ile	Gly	Ala
		100					105						110		
Gly	Ile	Pro	Asn	His	Asp	Asn	Asp	Ala	Asp	Ile	Cys	Leu	Gly	Asp	Val
	115					120						125			
Val	Met	Ser	Ser	Ser	Pro	Lys	Thr	Gly	Gly	Val	Ile	Ser	Tyr	Asp	Ser
	130					135					140				
Gly	Lys	Ala	Leu	Ala	Asp	Gly	Ser	Phe	Glu	Ser	Leu	Ser	Val	Ser	Asn
145					150				155						160
Ser	Pro	Pro	Met	Pro	Leu	His	Ser	Ala	Ser	Ala	Lys	Leu	Gln	Ser	Gln
			165					170					175		
Tyr	Lys	Met	Glu	Gly	Gly	Arg	Ala	Ala	Asp	Tyr	Ile	Glu	Gln	Met	Arg
		180					185					190			
Arg	Arg	Phe	Pro	Gln	Ile	Cys	Ser	Met	Lys	Gly	Ser	Asp	Pro	Gly	Asp
	195					200						205			
Pro	Ala	Asp	Arg	Leu	Phe	Gln	Pro	Ser	Cys	Pro	His	Ala	Gly	Gly	Asp
	210					215					220				
Ser	Cys	Thr	Glu	Cys	Ala	Pro	Ser	Ala	Glu	Ile	Ser	Arg	Glu	Pro	Arg
225					230				235						240
Pro	Asp	Gly	Ile	Pro	Arg	Ser	His	Tyr	Arg	Thr	Ile	Glu	Ser	Gly	Asp
			245					250						255	
Arg	Ala	Ile	Lys	Asp	Ala	Pro	Thr	Arg	Asp	Leu	Ile	Gln	Asp	Arg	Asp
		260					265					270			
Gly	Ala	Ile	Ile	Phe	Glu	Arg	Glu	Thr	Thr	Gly	Leu	Met	Asp	Asn	Leu
	275					280						285			
Pro	Leu	Met	Val	Ile	Arg	Gly	Ile	Gly	Asp	Tyr	Thr	Asn	Ser	His	Lys
	290					295					300				
Glu	Val	Arg	Trp	Gln	Ala	Phe	Ala	Ala	Ala	Ala	Phe	Ala	Arg	Gly	Phe
305					310				315						320
Leu	Asp	His	Val	Gln	Pro	Glu	Ala	Ile	Glu	Ala	Glu	Pro	Ala	Ala	Ile
			325					330						335	
Asn	Thr	Met	Tyr	His	Gly	Met	Cys	Asp	Leu	Gln	Ala	Met	Lys	Arg	Ile
		340					345					350			
Ala	Pro	Asp	Glu	Pro	Phe	Tyr	Leu	Thr	Val	His	Asp	Tyr	His	Arg	Ser
	355					360					365				
Arg	Ser	Pro	Asn	Pro	Arg	Trp	Thr	Gly	Arg	Ile	Ser	Gln	Arg	Gly	Gly
	370				375						380				
Gly	Val	Cys	Gly	Leu	Gly	Lys	Arg	Pro	Tyr	Ser	Gly	Cys	Cys	Thr	Leu
385				390					395						400
Phe	Asp	Ser	Gly	Asn	Ile	His	Gly	Phe	Trp	Leu	Arg	Ile	Asn		

## 18788

405

410

<210> 42140  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 42140  
 Arg Thr Arg Arg Ser Arg Ser Pro Phe Ala Phe Pro Pro Arg His Glu  
 1 5 10 15  
 Leu Val Ser His Glu Phe Gly Leu Gly Ala Ala Pro Asp Leu Gly Arg  
 20 25 30  
 Phe Pro Ile Leu Gly Asp Phe Asp Ala Ala His Leu Val Gln Val Asn  
 35 40 45  
 Ser Asn Pro Gly Val Ile Pro Ala Lys Gly Val Ile Gly Pro Phe Pro  
 50 55 60  
 Pro Leu Phe Pro Gln Lys Gly Gln Phe Ser Leu Leu Gly Phe Phe Pro  
 65 70 75 80  
 Thr Pro Leu Phe Asp Leu Pro Ala Pro  
 85

<210> 42141  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 42141  
 Ser Thr Gly Pro Val Asp Gln Pro Ala Ser Phe Ile Thr Phe Val Pro  
 1 5 10 15  
 Lys Tyr Asp Glu Leu Leu Arg Asn Pro Pro Glu Leu Thr Asp Ile Ala  
 20 25 30  
 Val Pro Gly Asn Met Gln Trp Tyr Val Leu Thr Ala Asn Ala Glu Arg  
 35 40 45  
 Met Thr Thr Gly Tyr His Val Ser Ala Gly Glu Ile Cys Phe Val Gln  
 50 55 60  
 His Ala Val Phe Gly Cys Phe Gly Glu Pro Gly Ser Pro His Val Ala  
 65 70 75 80  
 Thr Arg Ile Gly Gly Ser Ser Lys Glu Leu His Phe Ser Thr Pro Ala  
 85 90 95

<210> 42142  
 <211> 154  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (54), (55), (56)  
 <223> Identity of amino acid sequences at the above locations are unknown.

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 1 5 10 15  
 Pro Pro Cys Ser Pro Lys Lys Gly Ser Ser Pro Cys Trp Ala Phe Ser  
 20 25 30  
 Pro Pro Pro Ser Leu Thr Ser Gln Pro His Asn Gln Gly Gly Gly Gly

## 18789

35 40 45  
 Gly Gly Glu Lys Phe Xaa Xaa Xaa His Pro Pro Pro Pro Leu Pro Phe  
 50 55 60  
 Phe Ser Ser Pro Ser Thr Gln Pro Asn Pro Leu Leu Phe Pro Ser Thr  
 65 70 75 80  
 Pro Pro Gln Ala Ser Leu Pro Phe Ile Pro His Pro Ser Ser His Phe  
 85 90 95  
 Ser Pro Phe Pro Ser Thr Ser His Leu Pro Phe Ile Ser His Phe His  
 100 105 110  
 Ile Pro Leu Phe Asp Tyr His Ser Pro Leu Arg Gln Leu Leu Leu Asn  
 115 120 125  
 Ile Pro Thr Ala Val Pro Arg Ser Ile Ser Ser Leu Pro Pro Pro Leu  
 130 135 140  
 Leu Pro Phe Ser Ser Thr Ala Ile Ala Ala  
 145 150

<210> 42143  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 42143  
 Ile Val Gly Thr Lys Val Asp Gln Asn His Val Asn Trp Val Thr Ala  
 1 5 10 15  
 Tyr Asn Met Leu Thr Gly Ile Arg Phe Thr Val Ser Arg Ile Asn Ala  
 20 25 30  
 Lys Met Asp Arg Glu Leu Thr Pro Ala Asp Phe Glu Ala Lys His Lys  
 35 40 45  
 Phe Ser Phe Asp Met Tyr Asp Asp Arg His Leu Ala Phe Pro Leu Pro  
 50 55 60  
 Arg Ser  
 65

<210> 42144  
 <211> 346  
 <212> PRT  
 <213> A.fumigatus

<400> 42144  
 Gln Met Ala Asn Phe Cys Val Ala Ile Ser Thr Gly Asn Glu Leu Thr  
 1 5 10 15  
 Pro Ser Ala Lys Tyr Asp Phe Lys Phe Lys Asp Tyr Ala Pro Trp Val  
 20 25 30  
 Phe Arg His Leu Arg Ala Lys Phe Arg Leu Asp Pro Ala Asp Tyr Leu  
 35 40 45  
 Met Ser Leu Thr Ser Lys Tyr Ile Leu Ser Glu Leu Gly Ser Pro Gly  
 50 55 60  
 Lys Ser Gly Ser Phe Phe Tyr Phe Ser Arg Asp Tyr Lys Tyr Ile Ile  
 65 70 75 80  
 Lys Thr Ile His His Ser Glu His Lys Leu Leu Arg Lys Ile Leu Pro  
 85 90 95  
 Glu Tyr Tyr Lys His Val Glu Gln Asn Pro Asn Thr Leu Ile Ser Gln  
 100 105 110  
 Phe Tyr Gly Leu His Arg Val Lys Met Ala Tyr Gly Arg Lys Ile His  
 115 120 125  
 Phe Val Val Met Asn Asn Leu Phe Pro Pro His Arg Asp Ile His Gln

## 18790

130 135 140  
 Thr Phe Asp Leu Lys Gly Ser Thr Ile Gly Arg Asp Leu Arg Glu Gln  
 145 150 155 160  
 Asp Leu Glu Arg Asn Pro Arg Ala Thr Leu Lys Asp Leu Asn Trp Leu  
 165 170 175  
 Arg Arg Gly Arg His Leu Glu Cys Gly Pro Ser Lys Arg Gln Phe Phe  
 180 185 190  
 Leu Ala Gln Leu Glu Arg Asp Val Glu Leu Leu Lys Lys Leu Lys Ile  
 195 200 205  
 Met Asp Tyr Ser Leu Leu Val Gly Ile His Asp Leu Gly Arg Gly Asn  
 210 215 220  
 Glu Glu Lys Leu Arg Asp Lys Thr Leu Gln Val Phe Gln Pro Gly Gly  
 225 230 235 240  
 Asp Arg Glu Glu Glu Thr Ser Pro Asn Met Leu Met Arg Thr Pro Ser  
 245 250 255  
 Lys Leu Glu Asn Glu Arg Lys Ala Arg Glu Leu Arg Met Leu Ile Lys  
 260 265 270  
 Lys Glu Arg Pro Val Pro Leu Asp Lys Ala Ala Ala Lys Met Pro Glu  
 275 280 285  
 Glu Ile Leu Asp Glu Arg Gln Tyr His Val Phe Tyr Ala Asp Asp Gly  
 290 295 300  
 Gly Phe Arg Ala Thr His Glu Asn Gly Gln Pro Gly Asp Glu Ile Tyr  
 305 310 315 320  
 Tyr Leu Gly Ile Ile Asp Cys Leu Thr His Val Ser Ala Leu Leu Arg  
 325 330 335  
 Cys Asn Ala Ala Ser Leu Pro Ser Arg Leu  
 340 345

&lt;210&gt; 42145

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42145

Gln Ser Pro Met Arg Arg Ala Thr Trp Ile Val Phe Asn Leu Thr Leu  
 1 5 10 15  
 Ser Asn Asn Phe Phe Ser Phe Tyr Tyr Ser Phe Pro Phe Pro Gln Tyr  
 20 25 30  
 Phe Leu Ala Ser Gln Ile Leu Leu Tyr Ile Ala Ser Leu Leu Ala Ser  
 35 40 45  
 Ser Ala Leu Leu Arg Val Thr Pro Tyr Phe Lys Ala Ala His Arg Arg  
 50 55 60  
 Thr Leu Ala Ile Leu Cys His Pro Arg Arg Thr Trp Asn Leu Ala Ala  
 65 70 75 80  
 Cys Tyr Phe Leu Leu His Phe Ile Leu Ala Ile Leu Ser Cys Pro Trp  
 85 90 95  
 Ile Pro Val Leu Asp Ser Ile Val Cys Trp Glu Lys Pro Cys Phe Asn  
 100 105 110  
 Phe Cys Glu Gln Ile  
 115

&lt;210&gt; 42146

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus



Gln	Tyr	Gly	Thr	Val	Lys	Lys	Leu	Glu	Asn	Phe	Phe	Lys	Gly	Leu	Ser
1				5					10					15	
His	Asp	Arg	Gly	Gln	Ile	Ser	Pro	Ile	Pro	Pro	Glu	Ser	Tyr	Gly	Asp
			20					25					30		
Arg	Phe	Val	Lys	Phe	Ile	Lys	Gly	Ile	Thr	Met	Ser	Lys	Glu	Glu	Val
		35					40					45			
Glu	Arg	His	Arg	Glu	Ala	Arg	Ala	Gln	Gly	Glu	Ala	Ser	Ala	Glu	Arg
	50					55					60				
Thr	Asp	Ser	Val	Glu	Arg	Thr	Met	Gln	Ala	Ala	Glu	Lys	Glu	Ala	Ala
65					70					75					80
Lys	Asp	Val	Ser	Thr	Thr	His	Pro	Arg	Thr	Leu	Ser	Thr	Ile	Trp	Asp
				85					90					95	
Pro	Ala	Asp	Ala	Asn	Gly	Pro	Gly	Pro	Thr	Ser	Thr	Leu	Pro	Ile	Val
			100				105						110		
Asp	Glu	Ala	Gly	Glu	Gln	Ser	Ser	Val	Gly	Gly	His	Ser	Gln	His	Ser
		115					120					125			
Arg	Gln	Gly	Pro	Ser	Leu	Thr	Glu	Lys	Asp	Leu	Pro	Pro	Leu	Pro	Gly
	130					135					140				
Met	Gly	Ser	Ser	Gln	Asp	Gly	Pro	Lys	Gly	Lys	Gly	Val	Ser	Tyr	Ser
145					150					155					160
Gly	Pro	Asn	Gly	Thr	Leu	Ser	Pro	Val	Ala	Ser	Arg				
				165					170						

<211> 565

<213> A.fumigatus

Thr 1	Thr	Arg	Ser	Ser 5	Leu	Pro	Thr	Asn	Met 10	Asp	Gly	Ser	Gln	Ala 15	Gln
Ala	Asn	Gln	Pro	Met	Val	Pro	Pro	Gln	Gln	His	Ser	Asn	Leu	Ile	Arg
			20					25					30		
Thr	Asp	Gln	Val	Gln	Lys	Leu	Pro	His	Leu	Asn	Glu	Gln	Gln	Lys	Ala
		35					40					45			
Gln	His	Thr	Gln	Leu	Val	Arg	Asn	Phe	Trp	Glu	Ile	Leu	Asn	Ser	Arg
	50					55					60				
Asp	Pro	Gln	Ser	Ala	Glu	Tyr	Gln	Asn	Ala	His	Met	Arg	Leu	Thr	Gln
65					70					75					80
Leu	Ser	Gln	Asn	Leu	Met	Lys	Gly	Met	Arg	Met	Tyr	Gln	Gln	Asn	Arg
				85					90					95	
Gln	Gln	Ala	Leu	Gln	Gln	His	Gln	Gln	Ala	Gln	Ala	Ala	Ala	Ala	Ala
			100					105					110		
Val	Gln	Gly	Gln	Pro	Val	Gln	Arg	Thr	Gln	Ser	Ala	Asn	Pro	Gln	Ser
		115					120					125			
Phe	Ser	Gln	Leu	Leu	Pro	Gln	Ile	Gln	Gln	Lys	Val	Asn	Gly	Leu	His
	130					135					140				
Phe	Phe	Leu	Pro	Pro	Asn	Ile	Ser	Lys	Glu	Gln	Val	Gln	Thr	Trp	Leu
145					150					155					160
Pro	Glu	Ala	Arg	Leu	Arg	Tyr	Gly	Ile	Ala	Leu	Gln	Lys	Gln	Glu	Ile
				165					170					175	
Gly	Arg	Val	Arg	Ile	Ala	Glu	Leu	Arg	Gln	Gln	Phe	Ala	Gln	Arg	Gln
		180						185					190		
Ser	Ala	Gly	Asn	Met	Ser	Gln	Glu	Glu	Val	Gln	Glu	Phe	Lys	Asn	Arg
		195					200					205			

## 18792

Gln Leu Ala Ala Glu Lys Leu Tyr Arg Glu Gly Ser Asp Phe Leu Asn  
 210 215 220  
 Lys Phe Lys Glu Gln Gln Glu Ser Phe Lys Ala Gln Gln Gln Asn Gln  
 225 230 235 240  
 Gln Leu Asn Arg Ala Gly Leu Pro Asn Ala Ala Pro Gly Gln Pro Gln  
 245 250 255  
 Gln Pro Gln Gly Thr Ala Glu Gln Ala Ala Ala Ala Thr Gly Ser Ala  
 260 265 270  
 Pro Ala Ala Thr Pro Ala Pro Thr Ala Gly Asp Lys Arg Pro Val Asn  
 275 280 285  
 Val Pro Gly Pro Met His Pro Gly Gln Ala Pro Thr Pro Ala Pro His  
 290 295 300  
 Thr Ile Asn Ser Ala Val Asn Ala Ala Arg Asn Gln Ala Gly Gln Ala  
 305 310 315 320  
 Ala Met Pro Pro Ser Thr Thr Gln Pro Gly Gln Ala Pro Val Thr Gln  
 325 330 335  
 Ala Ala Gly Thr Ala Pro Ala Val Pro Ala Ala Pro Ser His Gln Pro  
 340 345 350  
 Gln Gln Gln Gln Pro Gln Pro Leu Ser Gln Gln Gly Thr Pro Gly Ala  
 355 360 365  
 Gln Val Thr Phe Ser Gln Thr Pro Asn Pro Asp Gly Ser Thr Pro Thr  
 370 375 380  
 Pro Ser Ala Ser Gln Pro Met Thr Val Gln Gly Pro Pro Arg Pro Leu  
 385 390 395 400  
 Ser His Gln Ala Ala Met Ala Gln Ala Ala Gln Asn Tyr Thr Asn Asn  
 405 410 415  
 Ala Ala Asn Asn Asn Leu Ala Gln Gln Asn Val Ser Gln Ala Ala Ala  
 420 425 430  
 Asn Pro His Ala His Pro Gln Gly Tyr Ile Ser Asn Arg Ala Ser Glu  
 435 440 445  
 Asn Ser Ala Arg Asn Ile Asn Met Ala Ile Pro Lys Asn Leu Asn Val  
 450 455 460  
 Pro Pro Pro Glu Pro Val Ser Met Ala Pro Ala Arg Pro Thr Leu Ser  
 465 470 475 480  
 Gly Gly Pro Ser His Gly Ala Met Gly Met Met Gly Gln Pro Ala Ile  
 485 490 495  
 Gln Lys His Pro Gly Tyr Val Leu Glu Gly Glu Gly Gln Arg Val Leu  
 500 505 510  
 Ser Lys Lys Met Leu Asp Ile Leu Val Arg Gln Val Thr Gly Gly Gly  
 515 520 525  
 Glu Gly Glu Gly Leu Thr Pro Asp Ala Glu Glu Val Ser Ser Ile Leu  
 530 535 540  
 His Ile Arg Ala Ala Phe Arg Cys Val Arg Trp Ser Gly Tyr Ala Phe  
 545 550 555 560  
 Ala Lys Ser Ser Arg  
 565

&lt;210&gt; 42148

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42148

Phe Ile Leu Gln Met Ala Asp Asp Phe Val Asp Asp Val Ile Thr Ala  
 1 5 10 15  
 Ala Cys Arg Leu Ala Lys Leu Arg Pro Ser Ser Thr Leu Glu Ile Arg

## 18793

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      20              25              30
Asp Ile Gln Leu Val Leu Glu Arg Asn Tyr Asn Met Arg Ile Ser Gly
      35              40              45
Phe Ser Thr Asp Asp Leu Arg Thr Val Lys Lys Pro Gln Pro Thr Gln
      50              55              60
Gly Trp Thr Gln Lys Met Ser Ala Val Gln Ala Ala Lys Val Thr Gln
      65              70              75              80
Gly Lys Ala Glu

```

<210> 42149  
 <211> 134  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42149
Pro Gln Gly Phe Tyr Ile Ser Leu Ser Val Asn Asn Gln Arg Val Phe
1              5              10              15
Ile Thr Ile Met Ala Thr Asn Gly Asp Phe Thr Asp Asp Glu Ser Gln
      20              25              30
Pro Gly Ser Pro Met Leu Asp Ala Ala Asn Gly Gln Asp Asp Ile Glu
      35              40              45
Glu Gln Glu Arg Leu Asp Val Glu Glu Lys Pro Leu Lys Ser Ala Met
      50              55              60
Lys Lys Gly Ala Ala Pro Pro Ala Pro Gln Pro Lys Arg Pro Glu Leu
      65              70              75              80
Pro Glu Gln Pro Asp Pro Glu Thr Leu Asp Leu Ser Thr Leu Thr Pro
      85              90              95
Leu Ser Pro Glu Ile Ile Ala Arg Gln Ala Thr Ile Asn Ile Gly Thr
      100              105              110
Ile Gly His Val Ser His Gly Lys Ser Thr Val Val Lys Ala Ile Ser
      115              120              125
Glu Cys Arg Leu Ser Gly
      130

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<210> 42150  
 <211> 205  
 <212> PRT  
 <213> A.fumigatus

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<400> 42150
Asp Ser Thr Pro Val Cys Arg Val Leu Pro Ser Pro Arg Ser Lys Val
1              5              10              15
His Gln Met Arg Tyr Val Ala Val Asp Pro Ser Val Glu Ala Gly Glu
      20              25              30
Glu Leu Leu Ala Val Ser Thr Glu Asp Gly Arg Ile Ile Phe Tyr Ser
      35              40              45
Thr Lys Arg Leu Gln Lys Ala Ser Asp Asp Asp Glu Ser Pro Ile Pro
      50              55              60
His Ala Glu Ala Val Ala Glu Leu Gly Gly Arg Ala Ala Gly Phe Pro
      65              70              75              80
Gly Arg Val Lys Asp Phe Glu Ile Leu Asn Val Gly Gly Glu Ser Thr
      85              90              95
Ala Gln Lys Gly Asp Leu Leu Val Val Thr Ala Asn Ser Glu Gly Val
      100              105              110
Val Arg Val Trp Met Leu Arg Ala Asn Ser Leu Leu Arg Asn Thr Lys

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## 18794

```

      115              120              125
Glu Asn Pro Glu Ala Ser Asp Asn Lys Ser Gln Gly Ser Lys Asn Leu
      130              135              140
Gln Val Gly Lys Leu Leu Asn Val Tyr Glu Thr Gly Asn Arg Ile Thr
145              150              155              160
Cys Leu Lys Ala Phe Val Met Leu Pro Pro Asp Pro Leu Thr Pro Asp
      165              170              175
Asp Phe Asp Glu Ser Ser Gly Asp Asp Ile Glu Glu Asp Glu Glu Glu
      180              185              190
Glu Glu Glu Glu Glu Ser Gly Glu Gly Ser Asp Glu Glu
      195              200              205

```

<210> 42151  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42151
Thr Arg Cys Ser Val Thr Ser Tyr Ser Ala Pro Arg Thr Met Arg Ser
1              5              10              15
Arg Lys Tyr Phe Ile Phe Phe Glu Arg Phe Phe Pro Leu Tyr Met Ile
      20              25              30
Ser Leu Tyr Arg Ile Val Ala Tyr Phe Lys Ile Phe Phe Arg Arg Cys
      35              40              45
Leu Leu Ser Arg Lys Arg Lys Leu Ser Glu Leu Tyr Phe Ala Thr Val
      50              55              60
Gly Phe Ala Gly Ala Thr Glu Asn Ala Pro Thr Asn Ala Leu Tyr His
65              70              75              80
Gln Lys Glu Gln Thr Phe Leu Asp Ala Asn Asp Leu Thr Lys
      85              90

```

<210> 42152  
 <211> 988  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42152
Tyr Ile Tyr Arg Gly Arg Tyr Phe Asn Glu Ala Thr Leu Pro Pro Phe
1              5              10              15
Pro Asp Phe Ala Ala Leu Ile Pro Arg Pro Glu Glu Gln His Ser Ser
      20              25              30
Glu Pro Val Val Gln Thr Asp Asp Val Ser Ser Val Ile Ala Pro Lys
      35              40              45
Ala Glu Gly Ala Val Arg Gly Ile Ala Pro Ser Phe Gln Gln Gln Glu
      50              55              60
Gly Gln Thr Ala Gln Val Ile Glu Gln Arg Leu Val Glu Asp Ser Leu
65              70              75              80
Lys Lys Asp Asp Ala Arg Ile His Gln Gln Pro Ala Leu Ala Thr Thr
      85              90              95
Ser Glu Ile Pro Gln Val Ala Lys Ser Pro Thr Thr Pro Ala Gln Pro
      100              105              110
Asp Gln Leu Pro Gln Lys Ala Ser Phe Ala Val Pro Asp Thr Pro Pro
      115              120              125
Thr Ser Thr Ser His Glu Ser Val Asp Ala Ser Val Ser Pro Ala Leu
      130              135              140
Lys Glu Leu Pro Pro Ser Glu Val Ala Pro Pro Arg Ala Val Ser Asn

```

## 18795

145                      150                      155                      160  
 Gln Leu Pro Ser Ala Gln Arg Lys Pro Glu Ser Arg Pro Ser Leu Val  
                                  165                      170                      175  
 Leu Ala Gln Pro Ser Glu Asp Gln Pro Leu Ser Pro Ala Ser Ser Ala  
                                  180                      185                      190  
 Gly Pro Tyr Ser Asn Asn Thr Pro Ala Pro Val Ala Val Ser Pro Asp  
                                  195                      200                      205  
 Thr Ser Pro Ala Glu Glu Val Thr Glu Arg Ala Asp Glu Val Ala Leu  
                                  210                      215                      220  
 Ser Pro Lys Arg Val Gly Pro Val Gln Leu Gln Pro Gly Leu Val Pro  
 225                                   230                      235                      240  
 Ser Thr Pro Asp Glu Gln Leu Gln Leu Glu Ala Ala Gln Ser Leu Gln  
                                  245                      250                      255  
 Gln Asn Ala Leu Ala Ser Lys Ser Ile Gly Asp Val Thr Thr Ala Ser  
                                  260                      265                      270  
 Ser Leu Ser Asn Glu Val Ile Lys Glu Asp Val Gly Pro Thr Pro Ser  
                                  275                      280                      285  
 Ala Ala Ala Asp Ser Leu Lys Glu Thr Gln Asp Gln Thr Ser Thr Ser  
                                  290                      295                      300  
 Val Glu Ala Pro Glu Pro Lys Arg Pro Asp Gly Val Val Val Thr Pro  
 305                                   310                      315                      320  
 Glu Glu Ser Gln Pro Pro Ala Gln Ser Ile Gln Glu Glu Thr Gln Ser  
                                  325                      330                      335  
 Gln Val Gly Ala Glu Val Lys Val Val Ala Ser Thr Thr Pro Ala Gly  
                                  340                      345                      350  
 Lys Lys Pro Thr Pro Ala Ala Val Leu Pro Ala Gln Pro Glu Arg Met  
                                  355                      360                      365  
 Thr Thr Arg Val Ser Ser Gly Ala Ile Arg His Lys Ser Val Ser Glu  
                                  370                      375                      380  
 Ile Leu Gly Glu Thr Pro Lys Pro Ser Ala Val Gln Pro Glu Lys Ala  
 385                                   390                      395                      400  
 His Ala Ile Glu Lys Pro Ala Asp Met Val Arg Ala Pro Ala Ser Ala  
                                  405                      410                      415  
 Ser Pro Glu Ser Thr Ala Lys Met Arg Leu Lys Asp Arg Lys Ala Arg  
                                  420                      425                      430  
 Glu Lys Glu Arg Ser Lys Leu Ser Thr Val Val Phe Pro Lys Gln Gln  
                                  435                      440                      445  
 Gln Gln Gln Gln Gln Gln Gln Glu Lys Asp Asp Ser Leu Asp Ile Val  
                                  450                      455                      460  
 Arg Gln Tyr Ala Gly Glu Leu Ala Arg Leu Asn Glu Glu Gln Asp Tyr  
 465                                   470                      475                      480  
 Leu Phe Thr Leu Phe Gln Asn Lys Ala Tyr Ala Pro Pro Arg Gly Thr  
                                  485                      490                      495  
 Asn Leu Ser Thr Leu Leu Ala Ser Ala His Lys Thr Leu Thr Thr Ser  
                                  500                      505                      510  
 Asn His Leu Leu Glu Tyr Gln Glu Gln Met Asp Cys Arg Thr Leu Arg  
                                  515                      520                      525  
 Arg Ile Tyr Ala Leu Gln Asn Ala Asn Arg Trp Pro Leu Arg Gln Leu  
                                  530                      535                      540  
 Lys Arg Ser Val Glu Pro Pro Arg Gln Gly Thr His Trp Asp Val Leu  
 545                                   550                      555                      560  
 Leu Asp His Met Lys Trp Met Arg Thr Asp Phe Arg Glu Glu Arg Lys  
                                  565                      570                      575  
 Trp Lys Ile Ala Ala Ala Lys Ser Cys Ala Asp Trp Cys Ala Glu Tyr  
                                  580                      585                      590  
 Val Asn Ser Asp Pro Glu His Arg Ala Leu Leu Arg Val Pro Cys Arg

595 600 605  
 Ile Pro Ser Lys Phe Glu Lys Lys Glu Ala His Ala Ser Ser Met Ile  
 610 615 620  
 Ser Pro Pro Glu Glu Thr Thr Glu Glu Met Leu Val Val Ser Gln Pro  
 625 630 635 640  
 Thr Pro Asp Leu Ile Pro Ser Ala Glu Asp Glu Ser Val Ser Asp Gly  
 645 650 655  
 Phe Asn Asp Glu Ile Arg His Asp Ile Arg Asp Thr Val Ala Pro Ala  
 660 665 670  
 Ala Ile Phe Ser Leu Gly Ser Asp Glu Phe Thr Phe Ser Leu Asp Met  
 675 680 685  
 Thr Pro Ala Ala Gln Lys Leu Leu Asp Glu Leu Pro Ile Tyr Thr Pro  
 690 695 700  
 Val Lys Ile Ala Pro Gly Ala Asn Val Pro Met Phe Glu Gln Pro Pro  
 705 710 715 720  
 Asp Ser Ala Trp Lys Thr Glu Leu Leu Pro Val Ser Lys Tyr Ala Ser  
 725 730 735  
 Gly Arg Ile Lys Phe His Glu Thr Glu Ser Pro Arg Lys Arg Ser Arg  
 740 745 750  
 Tyr Asp Tyr Leu Gln Tyr Asp Ser Asn Pro Glu His Gly Met Leu Asp  
 755 760 765  
 Leu Pro Pro Glu Gln Thr Asn Val Ala Leu Phe Arg Pro Glu Asn Lys  
 770 775 780  
 Pro Ile Arg Asp Arg Ile His Pro Gly His Ser Phe Arg Pro Pro Thr  
 785 790 795 800  
 Glu Tyr Pro Met Pro Ser Val Gly Phe Phe Glu Ser Arg Gln Ser Ser  
 805 810 815  
 Gln Trp Thr Tyr Ala Glu Asp Asp Glu Leu Arg Arg Leu Val Lys Glu  
 820 825 830  
 Tyr Ser Tyr Asn Trp Ser Leu Ile Ser Ser Cys Leu Thr Pro Ser Ser  
 835 840 845  
 Gln Phe Thr Ser Gly Ala Glu Arg Arg Thr Pro Trp Glu Cys Phe Glu  
 850 855 860  
 Arg Trp Val Gly Leu Glu Gly Leu Pro Ala Asp Met Ser Lys Thr Gln  
 865 870 875 880  
 Tyr Phe Arg Ala Tyr His Gln Arg Ile Glu Thr Ala Gln Arg Thr Val  
 885 890 895  
 Leu Ala Gln Gln Gln Ala Ala Gln Gln Gln Gln Gln Gln Gln Gln  
 900 905 910  
 Gln Gln Gln Gly Gly Asn Asn Ser Gly Gln Ala Gln Pro Pro Ile Arg  
 915 920 925  
 Arg Arg Thr Thr Gln Pro Val Arg Val Asp Arg Arg Arg Ser Ser Lys  
 930 935 940  
 His Leu Ala Leu Leu Asp Ala Met Arg Lys Leu Ala Lys Lys Arg Glu  
 945 950 955 960  
 Thr Met Leu Gln Lys Gln Gln His Gly Lys Leu Ser Met Ser Leu Arg  
 965 970 975  
 Leu Leu Asp Tyr Thr Lys Leu Tyr Leu Tyr Phe Phe  
 980 985

&lt;210&gt; 42153

&lt;211&gt; 384

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (262), (283)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42153

Ala	Asn	Leu	Ala	Ala	Gln	Arg	Ala	Gly	Gln	Ile	Pro	Ser	Gln	Gln	Pro
1				5					10					15	
Met	Met	Asn	Ala	Pro	Pro	Gly	Arg	Thr	Pro	Asn	Gly	Ile	Pro	His	Asn
			20					25					30		
Pro	Gly	Thr	Pro	Gly	Ile	Pro	Gly	Ala	Thr	Pro	Asn	Gly	Met	His	Asn
		35					40					45			
Gly	Met	Pro	Asn	Ala	Leu	Pro	Asn	Gly	Ile	Pro	Pro	Gly	Met	Gly	Val
	50					55				60					
Ser	Gln	Gly	Arg	Pro	His	Met	Gln	Gly	Val	Pro	Ala	Gly	Gly	Pro	Pro
65					70				75						80
Met	Asn	Gly	Pro	Ile	Pro	Pro	Asn	Pro	Met	Ala	Met	Lys	Met	Met	Pro
				85					90					95	
Gln	Thr	Gly	Met	Pro	Gln	Gly	Pro	Gly	Gly	Arg	Pro	Gly	Met	Pro	Met
			100					105					110		
Gln	Thr	Ser	Pro	Asp	Asn	Thr	Arg	Val	Met	Arg	Glu	Ala	Asn	Arg	Leu
		115					120					125			
Gln	Glu	Gln	Gln	Arg	Ile	Leu	Gln	Ser	Arg	Gln	Gln	Gln	Pro	Gln	Pro
	130					135					140				
Pro	Gln	His	Gln	Gln	Pro	Gln	Ala	Gln	Gln	Ala	Gln	Gln	Gln	Phe	His
145					150					155					160
Asn	Gln	Gln	Gln	Phe	Gly	Pro	Gln	Gly	Ser	His	Ser	Pro	Asn	Met	Asn
				165					170					175	
Leu	Pro	Asn	Val	Asn	Gly	Thr	Pro	Asn	Asn	Pro	Ser	Tyr	Asp	Gly	Gly
			180					185					190		
Tyr	Pro	Ser	Pro	Gly	Ser	Gly	Met	Gln	Ser	Pro	Ser	Phe	Pro	Leu	Met
	195						200					205			
Pro	Cys	Phe	Lys	Ala	Cys	Ser	Leu	Arg	Ser	Pro	Arg	Met	Gly	Gln	Pro
	210					215					220				
Asn	Leu	Leu	Ser	Gly	Gly	Val	Val	Pro	Thr	Ile	Ser	Ser	Ile	Gln	Ser
225					230					235					240
Gln	Ile	Gln	Arg	Ser	Asn	Pro	Tyr	Met	Pro	Pro	Glu	Gln	Val	Asn	Lys
				245					250					255	
Leu	Ala	Thr	Asp	Arg	Xaa	His	Gln	Tyr	Gln	Gln	Gln	Arg	Met	Ser	Gln
			260					265					270		
Val	Ala	Met	Asn	Ala	Ala	Ala	Gly	Asn	Met	Xaa	Ser	Val	Gln	Ala	Asn
		275					280					285			
Tyr	Gln	Val	Pro	His	Asp	Gly	Asn	Phe	Gln	Ser	Pro	Gln	Pro	Gly	Met
	290					295					300				
Asn	Gly	Thr	Pro	Gly	Met	Gln	Val	Pro	Gln	Ser	Gln	Gly	Phe	Ser	Pro
305					310					315					320
Met	Met	Arg	Val	Pro	Gln	Pro	Ala	Gln	Gln	Asn	Arg	Met	Gly	Val	Gly
				325					330					335	
Asn	Ser	Pro	Ala	Met	Asn	Val	Ala	Leu	Pro	Gln	Gln	Ser	Arg	Ser	Ala
			340					345					350		
Thr	Pro	Gln	Thr	Gln	Arg	Ser	Gly	Ser	Ala	Gln	Ala	Gly	Pro	Val	Pro
		355					360					365			
Gly	Ser	Ser	Lys	Ser	Pro	His	Pro	Pro	Gln	Ala	Gln	Ile	Pro	Ser	Gly
	370					375					380				

&lt;210&gt; 42154

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42154

```

Leu Ser Asp Ser His Leu His Asp Ala Lys Ala Lys Ala His His Phe
1          5          10          15
Lys His Lys Val Gly Lys Phe Phe Asn Val Val Asn Pro Asn His Arg
          20          25          30
His Asp Glu Glu His Glu Arg Glu Thr Asp Lys Lys Arg Thr Ala Ile
          35          40          45
Ala Glu Ser His Arg Tyr Lys Ser Phe Ala Pro Val Arg Glu Gly Asn
          50          55          60
Arg Val Lys Trp Tyr Val Asp Ala Leu Asp Tyr Leu Trp Ala Val Ser
65          70          75          80
Val Ala Leu Glu Glu Ala Lys Glu Val Ile Tyr Ile Glu Asp Trp Trp
          85          90          95
Leu Ser Pro Glu Leu Phe Leu Arg Arg Pro Pro Tyr Ser Thr Gln Glu
          100          105          110
Trp Arg Leu Asp Gln Val Leu Lys His Arg Ala Glu Ala Gly Val Lys
          115          120          125
Ile Tyr Val Ile Val Tyr Lys Glu Val Arg Arg Pro Tyr
          130          135          140

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&lt;210&gt; 42155

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42155

```

Tyr Gln Lys Ser Gln Leu Gly Tyr His Asp Ser Glu Leu Ala Ile Val
1          5          10          15
Val Glu Asp Gln Asp Phe Ile Asp Ser Met Met Asp Gly Lys Pro Tyr
          20          25          30
Arg Ala Ser Arg Leu Ala Ala Thr Leu Arg Arg Gln Leu Trp Arg Glu
          35          40          45
His Leu Gly Leu Leu Pro Ala Gln Asp Tyr Asp Ala Ser Lys His Pro
          50          55          60
Asn Ala Gln Pro Pro Asn Val Cys Leu Asn Glu Ile Leu Glu Gly Pro
65          70          75          80
Glu Asn Asp Phe Val Thr Asp Pro Leu Asn Asp Asp Leu Trp Lys Thr
          85          90          95
Trp Thr Glu Gln Ala Thr Thr Asn Thr Glu Val Tyr Arg Met Leu Phe
          100          105          110
Arg Ala Asp Pro Asp Asp Asn Ile Arg Thr Phe Glu Glu Tyr Asp Asn
          115          120          125
Phe Arg Pro Gln Gly Gly Ile Lys Glu Gly His Leu Phe Asp Pro Tyr
          130          135          140
Gln Pro Val Lys Asp Val Arg Glu Lys Leu Asp Gln Ile Lys Gly His
145          150          155          160
Leu Val Trp Met Pro Leu Asp Phe Leu Lys Asp Ala Glu Met Ala Glu
          165          170          175
Pro Gly Leu Ala Val Asn Gln Ile Thr Glu Ala Ser Leu Leu Leu Thr
          180          185          190
Arg Phe Gly Arg Tyr Phe Phe Ala Asn Leu Asp Ala Glu His Leu Tyr
          195          200          205
Leu Ile Val Cys Tyr Leu Cys Pro Asn Ser Gly Val Leu Arg Cys Asn

```



210 215 220  
 Gln Asp Phe Asp Thr Ile  
 225 230

<210> 42156  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 42156  
 Cys Ser Arg Arg Ser Thr Cys Leu Cys Ala Thr Met Gln Lys Ser Glu  
 1 5 10 15  
 Val Lys Leu Val Thr Glu Leu Asn Val Asp Tyr Ser Asp Ile Gly Asp  
 20 25 30  
 Ala Asn Lys Leu Phe Gln Asn Pro Phe Gly Ile Asp Glu Asn Cys Gly  
 35 40 45  
 Glu Val Glu Thr Glu Ser Ile Val Glu Val Trp Ser Ser Arg Arg  
 50 55 60

<210> 42157  
 <211> 451  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (13)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42157  
 Ala Arg Leu Pro Asp Val Gly Arg Arg Pro Pro Leu Xaa Tyr Ala Pro  
 1 5 10 15  
 Thr Asp Arg Glu Glu Lys Pro Lys His Ile Val Arg Arg Gln Val Tyr  
 20 25 30  
 Glu Leu Pro Gly Pro Asn Pro Asp Asp Glu Asn Glu Lys Phe Asp Gly  
 35 40 45  
 Pro Glu Leu Ser Pro Leu Pro Val Asp Ala Pro Arg Leu Leu Cys Ile  
 50 55 60  
 Leu Gly Asp Ile Asp Ser Asp Pro Thr Met Tyr Glu Arg Ala Trp Glu  
 65 70 75 80  
 Val Ser Asn Asn Arg Tyr Ala Arg Ala Gln Arg Ser Leu Ala Arg His  
 85 90 95  
 Tyr Leu Ser Leu Lys Pro Pro Ala Leu Glu Lys Ala Glu Glu Ala Tyr  
 100 105 110  
 Arg Lys Ser Leu His Ile Asn Arg Leu Asn His Ser Ala Trp Phe Ala  
 115 120 125  
 Leu Gly Cys Val Gln Leu Glu Leu Gln Lys Trp Glu Asp Ala Ile Asp  
 130 135 140  
 Ser Phe Thr Arg Thr Val Gln Leu Glu Asp Thr Asp Ala Glu Ala Trp  
 145 150 155 160  
 Ser Asn Leu Ala Ala Ile Leu Arg Thr Ala Lys Pro Ser Glu Thr  
 165 170 175  
 Thr Glu Ala Ala Glu Glu His Gln Asp Ala Asp Ala Asp Ala Asp  
 180 185 190  
 Ser Glu Thr Lys Lys Ala Pro Gln Asp Pro Tyr Lys Arg Lys Arg Glu  
 195 200 205

## 18800

Ala Leu Ala Ala Leu His Arg Ala Ala Gln Leu Lys His Thr Asp Ala  
 210 215 220  
 Arg Ile Trp Asp Asn Val Leu Thr Val Ala Ala Ser Ile Pro Pro Pro  
 225 230 235 240  
 Ala Thr Pro Phe Arg Asp Val Val Thr Ala Gln Arg Arg Val Ile Glu  
 245 250 255  
 Leu Leu Gly Ser Lys Asn Gly Glu Lys Cys Val Asp Ile Pro Val Leu  
 260 265 270  
 Ser Met Leu Ile Asp His Val Val Asp Thr Tyr Asn Tyr Asp Asp Leu  
 275 280 285  
 Leu Ile Asn Val Asp Glu Asn Asp Glu Asn Ser Glu Arg Val Val Arg  
 290 295 300  
 Ser Gly Thr Ile Ala Gly Gln Ile Leu Ser Leu Val Asp Asp Ser Val  
 305 310 315 320  
 Val Pro Leu Ile Thr His Ser Ala Pro Leu Trp Leu Leu Val Ala Arg  
 325 330 335  
 Val Glu His Phe Arg Gly Gln Pro Ser Lys Ala Phe Glu Ala His Glu  
 340 345 350  
 Lys Ala Trp Arg Ala Ser Val Ala Ser Cys Thr Gln Gly Ala Phe Gln  
 355 360 365  
 Met Gly Asp Glu Lys Lys Trp Met Asp Val Val Arg Ala Thr Glu Arg  
 370 375 380  
 Leu Val Arg Asp Gly Tyr Ala Lys Phe Gly Pro Met Asp Lys Glu Gly  
 385 390 395 400  
 Lys His Glu Gly Glu Ala Glu Met Val Ala Lys Asp Trp Arg Phe Lys  
 405 410 415  
 Ala Arg Ser Ala Val Arg Gly Ile Leu Gly Lys Gly Lys Asp Phe Trp  
 420 425 430  
 Glu Gly Ser Glu Gly Trp Asn Arg Leu Lys Glu Leu Gln Ser Glu Val  
 435 440 445  
 Gly Ser Ser  
 450

&lt;210&gt; 42158

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42158

Ala His His Glu Lys Phe Ile Val Ile Asp Tyr Ala Val Ala Phe Ile  
 1 5 10 15  
 Gly Gly Ile Asp Leu Cys Phe Gly Arg Trp Asp Ala His Gln His Pro  
 20 25 30  
 Leu Ala Asp Val His Pro Ala Asn Leu Lys Asp Glu Ile Phe Pro Gly  
 35 40 45  
 Gln Asp Trp Asn Asn Asn Arg Ile Met Asp Phe Gln Ser Val Ala Asp  
 50 55 60  
 Trp Gln Ser Asn Glu Val Ser Lys Ala Asp Tyr Gly Arg Met Pro Trp  
 65 70 75 80  
 His Asp Val Ala Met Gly Leu Val Gly Asp Cys Val Tyr Asp Ile Ala  
 85 90 95  
 Glu His Phe Val Leu Arg Trp Asn Phe Val Lys Arg Asp Lys Tyr Lys  
 100 105 110  
 Arg Asp His Gly Val Asp Trp Leu Leu Leu Glu Gly Arg Thr Gly Asp  
 115 120 125  
 Asp Glu Asp Leu Val Gly Val Gln Arg Pro Lys Tyr Pro Cys Gly Gln

## 18801

130 135 140  
 Tyr Ile Gln His Pro Leu Asn Pro Leu Asp Thr Lys Pro Arg Gly Met  
 145 150 155 160  
 Gln Gly Thr Val Arg Gly Gln Ile Ile Arg Ser Ser Gly Asp Trp Ser  
 165 170 175  
 Ser Gly Ile Leu Thr Glu Gln Ser Ile Gln Asn Ala Tyr Cys Glu Ile  
 180 185 190  
 Ile Arg Asn Ala Gln His Leu Val Tyr Ile Glu Asn Gln Phe Phe Ser  
 195 200 205  
 Lys Phe Ala Ser Val Thr Met Leu  
 210 215

<210> 42159  
 <211> 165  
 <212> PRT  
 <213> A.fumigatus

<400> 42159  
 Leu Thr Gln Leu Glu His Val Phe Leu Phe Asn Leu Arg Ala Tyr Asp  
 1 5 10 15  
 Arg Ile Asn Lys Thr Ser Ala Leu Glu Glu Leu Glu Lys Glu Ala Gly  
 20 25 30  
 Val Thr Tyr His Asp Ile Gln Arg Gly Ile Ala Glu Ser Ile Met Ser  
 35 40 45  
 Asp Ser Val His Pro Val Val Gly Glu Glu Gly Asp Lys His Glu Val  
 50 55 60  
 Asn Tyr Asp Asp Ala Glu Gln Glu Lys Glu Glu Arg Leu Ala Arg Leu  
 65 70 75 80  
 Arg Arg Tyr Glu Glu Lys Gln Glu Gly Arg Arg Ser Glu Gln Tyr Arg  
 85 90 95  
 Ser Lys Asp Ser Val Ala His Thr Thr Met Leu Asn Gly Gly Lys Met  
 100 105 110  
 Ser Glu Glu Pro Trp Glu Gly Asp Pro Glu Ser Glu Lys Ala Asn Phe  
 115 120 125  
 Val Gln Glu Glu Leu Tyr Val His Gly Lys Val Cys Ile Val Asp Asp  
 130 135 140  
 Arg Ile Ala Ile Cys Gly Ser Ala Asn Ile Asn Asp Arg Val Ser Ile  
 145 150 155 160  
 Pro Ser Tyr Asn Ala  
 165

<210> 42160  
 <211> 110  
 <212> PRT  
 <213> A.fumigatus

<400> 42160  
 Ser Thr Thr Ala Gly Tyr Pro Leu Met Ile Ser Leu Val Ala Gly Ala  
 1 5 10 15  
 Leu Pro Lys Lys Ser Val Tyr His Arg Gln Ile Lys Ala Asp Met Ser  
 20 25 30  
 Thr His Ala Ser His Thr Asn Pro Asp Ala Met Asn Pro Asn Ser Thr  
 35 40 45  
 Ala Ser Thr Ser Val Gly Pro Ser Pro Pro Gln Thr Gln Asn Gly Leu  
 50 55 60  
 Ser Arg Ser Asp Cys Phe Phe Cys Ala Ser Ala Thr Thr Ala Phe Arg

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.52	0.50	0	1	-0.02	3.0	0.99
Marital Status	0.68	0.48	0	1	0.10	3.1	0.99
Education	12.5	2.5	8	16	0.20	3.3	0.98
Income	4500	1500	1000	10000	0.30	3.4	0.97
Occupation	1.2	0.8	0	2	0.10	3.1	0.99
Health	0.75	0.43	0	1	0.15	3.2	0.98
Stress	3.2	1.5	1	5	0.25	3.5	0.97
Life Satisfaction	4.1	1.2	1	5	-0.10	3.0	0.99
Resilience	2.8	1.0	1	4	0.20	3.3	0.98
Optimism	3.5	1.1	1	5	-0.05	3.1	0.99
Emotional Stability	3.8	1.0	1	5	-0.10	3.0	0.99
Self-Esteem	3.6	1.1	1	5	-0.05	3.1	0.99
Life Satisfaction	4.1	1.2	1	5	-0.10	3.0	0.99
Resilience	2.8	1.0	1	4	0.20	3.3	0.98
Optimism	3.5	1.1	1	5	-0.05	3.1	0.99
Emotional Stability	3.8	1.0	1	5	-0.10	3.0	0.99
Self-Esteem	3.6	1.1	1	5	-0.05	3.1	0.99

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<210> 42161
<211> 101
<212> PRT
<213> A.fumigatus
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<210> 42162
<211> 147
<212> PRT
<213> A.fumigatus
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<210> 42163  
<211> 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42163

Ala Cys Thr Gly Asp Glu Val Glu Met Val Thr Glu Gly Gly Glu Ile  
 1 5 10 15  
 Ala Phe Val His Arg Met Ile Glu Glu Ser Leu His Leu Arg Lys Arg  
 20 25 30  
 Val Val Trp Tyr Thr Ser Met Leu Gly Lys Leu Ser Ser Val Ser Ala  
 35 40 45  
 Ile Val Glu Lys Leu Met Glu Tyr Gly Asn Asn Asn Tyr Ala Val Thr  
 50 55 60  
 Glu Phe Val Gln Gly Ser Lys Thr Lys Arg Trp Ala Val Ala Trp Ser  
 65 70 75 80  
 Trp Thr Asp Leu Arg Pro Ser Met Val Cys Phe Ser Ile Pro Trp Ser  
 85 90 95  
 Ser Val

&lt;210&gt; 42164

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42164

Arg Asn Thr Ala Lys Val Ser Ser Leu Leu Val Pro Arg Ala Ile Ser  
 1 5 10 15  
 Phe Pro Pro Glu Val Asp Thr Gly Ser Arg Arg Leu Ser Pro Asp Ser  
 20 25 30  
 Asn Met Ser Gln Ser Lys Ala Gly Arg Arg Arg Arg Ser Ser Ser Ile  
 35 40 45  
 Ile Tyr Gln Glu Pro Pro Glu Ser Ile Glu His Thr Ser Asp Gln Ala  
 50 55 60  
 Ala Leu Pro Asn Leu Asn Ala Asn Trp Val Asn Ala Lys Gly Met  
 65 70 75

&lt;210&gt; 42165

&lt;211&gt; 523

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42165

Gln Arg Ala Val Pro Asp Thr Gln Ala Leu Asn Leu Leu Leu Asn Ile  
 1 5 10 15  
 Leu Ser Pro Gly Ala Ile Ala Ser Gly Pro Val Tyr Ile Pro Ser Pro  
 20 25 30  
 Gln Tyr Leu Ala Val Ala Ala Thr Phe Leu Val His Pro Ser Thr Thr  
 35 40 45  
 Ser Arg Ala Lys Thr Ala Glu Glu Glu Ala Pro Ser Ala Ala Leu  
 50 55 60  
 Arg Leu Leu Arg Leu Thr Asn Thr Leu Val Gly Pro Ile Ser Ala Arg  
 65 70 75 80  
 Phe Ala Ala Ala Phe Ala Phe Asn His Phe Glu Ser Ser Arg Gln Gly  
 85 90 95  
 Arg Arg Arg Arg Val Gln Asp Asp Glu Asn Ala Asn Gly Asp Ile Ser  
 100 105 110

## 18804

Asn Asp Asp Ala Arg Thr Leu His Ile Asp Leu Cys His Ser Ala Ser  
 115 120 125  
 Leu Trp Ser Arg Ala Glu Asp Phe Trp His Ala Val Gly Trp Ala Phe  
 130 135 140  
 Asn Cys Ser Val Leu His Pro Glu Arg Trp Ala Arg Trp Gln Ile Trp  
 145 150 155 160  
 Leu Gln Phe Met Cys Glu Val Leu Glu Asp Asp Trp Asn Glu Arg Lys  
 165 170 175  
 Arg Gln Ser Thr Gly Val Ala Asp Asp Glu Ala Arg Arg Glu Val Leu  
 180 185 190  
 Glu Lys Ser Leu Ile Phe Arg Tyr Ile Ala Gly Gly Ser Thr Pro Tyr  
 195 200 205  
 Gly Arg Asn Arg Arg Ile Leu Arg Ala Ile Phe Ala Asp Gly Gly Ser  
 210 215 220  
 Ala Ser Val Ser Glu Phe Arg Gln Val Phe His Asp Glu Leu Lys Thr  
 225 230 235 240  
 Leu Lys Arg Glu Asp Asn Asn Ile Lys Lys Arg Glu Gly Glu Val Asn  
 245 250 255  
 Ile Asp Lys Asp Gln Phe Gly Asp Tyr Leu Ser Glu Asp Glu Asp Gly  
 260 265 270  
 Ser Glu Ala Thr Asp Ser Ala Ala Pro Pro Pro Ala Arg Arg Pro Thr  
 275 280 285  
 Arg Gln Ser Lys Arg Ile Arg Arg Gly Ala Pro Pro Lys Asp Thr Pro  
 290 295 300  
 Thr Ala Asp Ala Val Ser Ala Asp Ser Pro Ser Thr Ala Gln Val His  
 305 310 315 320  
 Gly Gly Val Ser Leu Leu Gly Gly Phe Pro Ser Leu Ala Leu Arg Gln  
 325 330 335  
 Arg Leu Leu His Leu Leu Ser Ser Val Ala Glu Asp Leu Pro Ala Ser  
 340 345 350  
 Phe Thr Thr Leu Glu Glu Leu Tyr His Leu Phe Val Glu Asn Ile Arg  
 355 360 365  
 His Leu Pro Leu Pro Ile Tyr Gln Ala Phe Val Ser Pro Phe Val Leu  
 370 375 380  
 Pro His Phe Ser Ala Ala Ala Gln Thr Thr Leu Cys Glu Phe Leu Leu  
 385 390 395 400  
 Phe Arg Met Arg Glu Asn Ala Ala Pro Asp Thr Asp Glu Glu Tyr Leu  
 405 410 415  
 Asn Gln Ala Lys Leu Glu Glu Cys Phe Leu Pro Tyr Ala Ala Asn Thr  
 420 425 430  
 Pro Ser Ile Val Asp Asn Ala Lys Met Ser Ile Ala Leu Glu Ser Leu  
 435 440 445  
 Leu Val Leu Leu Ala Tyr Ser Asp Met Leu Thr Val Thr Pro Glu Leu  
 450 455 460  
 Lys Ala Ala Val Gln Asp Gly Ile Met Ala Arg Ala Glu Lys Val Gln  
 465 470 475 480  
 Val Glu Thr Arg Lys Ser Gln Ser Ser Arg Thr Thr Glu Asp Ile Glu  
 485 490 495  
 Trp Cys Trp Leu Leu Glu Ser Gly Asp Arg Leu Met Phe Leu Val Asp  
 500 505 510  
 Glu Val Leu Ser Arg Lys Gly Ala Ser Thr Lys  
 515 520

&lt;210&gt; 42166

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42166

```

Ser Arg Tyr Asp Tyr Glu His Cys Pro Met Thr Phe Leu Cys Ala Leu
1           5           10           15
Asn Asn Ile Ile Ile Asp Ser Leu Tyr Ile His Val Ala Thr Gln Gln
          20           25           30
Ala Thr Phe Ser Ser Arg Leu Ile Gly Leu Cys Ser Arg Leu Pro Ser
          35           40           45
Ile Val Pro Ser His Leu Gly Pro Asn Glu Ser Ser Glu Gln Leu Val
          50           55           60
Val Gln Val Glu Lys Pro Ser Ile Ala Val Ala Lys Ile Leu Pro Cys
65           70           75           80
Arg

```

&lt;210&gt; 42167

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42167

```

Tyr Gly Ala Val Leu Glu Tyr Ser Lys Gln Phe Gly Asp Asn Gly Phe
1           5           10           15
Glu Tyr His Thr Glu Asp Tyr Leu Gly Tyr Ser Val Ala Ser Ile Pro
          20           25           30
Met Cys Ile Ala Lys Gly Glu Pro Lys Ile Thr Ile Gln Ile Asp Gly
          35           40           45
His Phe Leu Phe Cys Ser Lys Ser Thr Glu Gln Ser Arg Thr His Pro
          50           55           60
Ile
65

```

&lt;210&gt; 42168

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42168

```

His Lys Arg Ala Ser Leu Thr Trp Arg Asp Ala Ala Trp Tyr Arg Glu
1           5           10           15
Thr Ala Asp Ser Ser Leu Ser Ile Ala Gly Ala Trp Thr Ile His Phe
          20           25           30
Val Leu Ile Ile Ala Leu Lys Ile Phe Tyr Asp Ile Ile Pro Gly Val
          35           40           45
Ser Gln Glu Thr Ser Trp Thr Leu Thr Asn Ile Ser Tyr Met Phe Gly
          50           55           60
Ser Phe Ile Met Phe His Trp Val Arg Gly Ile Pro Phe Glu Phe Asn
65           70           75           80
Ala Gly Ala Tyr Asp Asn Leu Asn Met Trp Glu Gln Ile Asp Asn Gly
          85           90           95
Asp Gln Tyr Thr Pro Thr Lys Lys Phe Leu Leu Cys Val Pro Ile Cys
          100          105          110
Leu Phe Leu Leu Ser Thr His Tyr Thr His Tyr Asp Leu Thr Tyr Phe
          115          120          125
Thr Ile Asn Phe Leu Ala Thr Leu Gly Val Val Ile Pro Lys Leu Pro

```

## 18806

130 135 140  
 Phe Val Cys Pro Leu Arg Leu Asp Arg Val Val Ile Ala Asn Leu Val  
 145 150 155 160  
 His Ser Arg Thr Ala Cys Gly  
 165

<210> 42169  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 42169  
 Val Ser Phe Pro Thr Tyr Arg Met Ser Arg Arg Ser Ile Ser Phe Leu  
 1 5 10 15  
 Thr Leu Pro Leu Gly Val Ser Val Phe Pro Phe Pro Val Leu Leu Arg  
 20 25 30  
 Ala Pro Ile Ala Cys Tyr Ile Ser Leu Leu Asp Ser Thr Val Tyr Gly  
 35 40 45  
 Ile Asp Phe Ser Leu Gln Phe Pro Asn Cys Ala Tyr Asn Ser Leu Leu  
 50 55 60  
 Ile Cys Cys Met Phe Val Val Cys Leu Gly Phe Gly Gly Asn Thr Ile  
 65 70 75 80  
 Lys Asn Thr

<210> 42170  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 42170  
 Val Pro Pro Val Gln Ala Ser Ser Gly Ile Ser Thr Gly Val Arg Met  
 1 5 10 15  
 Arg Arg Phe Asp Tyr Leu Gly Leu Ser Gln His Cys Leu His Ile Gln  
 20 25 30  
 Ala Ser Ser Thr Leu Tyr His Ser Arg Pro Ser Ile Trp Leu Arg Val  
 35 40 45  
 Leu Leu Gln Val Met Ala Gly Ala Ile Lys Leu Asp Ala Gly Phe  
 50 55 60

<210> 42171  
 <211> 140  
 <212> PRT  
 <213> A.fumigatus

<400> 42171  
 Lys Arg Ser Ser Ala Arg Thr Thr Ile Ser Arg Ser Ala Lys Ala Lys  
 1 5 10 15  
 Ser Thr Ser Thr Arg Thr Ser Ser Ala Thr Thr Tyr Pro Arg Thr Arg  
 20 25 30  
 Thr Gly Pro Lys Gln Gln Thr Pro Arg Arg His Pro Arg Pro Asp Val  
 35 40 45  
 Gln Pro Val Asn Pro Asn Ala Ser Asp Glu Ala Pro Pro Pro Lys Thr  
 50 55 60  
 Pro Gln Pro Pro Thr Gln Ser Pro Pro Thr His Pro Ala Pro Pro Arg  
 65 70 75 80



## 18807

Cys Thr Ala Val Ser Pro Ser Ser Ala Ala Phe His Pro Ser Pro Ser  
                     85                    90                    95  
 Ala Asn Ala Ser Cys Thr Ser Ser Pro Pro Ser Pro Arg Thr Ser Pro  
                     100                    105                    110  
 Pro Pro Ser Leu Leu Leu Arg Asn Ser Thr Thr Ser Ser Ser Lys Ile  
                     115                    120                    125  
 Ser Ala Thr Cys Pro Ser Pro Ser Thr Lys Arg Ser  
                     130                    135                    140

&lt;210&gt; 42172

&lt;211&gt; 344

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42172

Gly Ile Met Thr Gly Ser Ser Asp Asn Glu Asn Asp Ser Arg Thr Ala  
 1                    5                    10                    15  
 Ser Val Gly Val Gln Arg Ser Arg Leu Asn Asp Leu Ala Asp Ser Ser  
                     20                    25                    30  
 Arg Pro Asn Ser Ser Asp Pro Asn Pro Asn Pro Arg Lys Arg Gln Arg  
                     35                    40                    45  
 Arg Asn Gly Lys Ser Ala Val Pro Asp Val Arg Asp Phe Val Pro Gln  
                     50                    55                    60  
 Gly Ala Thr Phe Thr Ala Ala Ser Leu Glu Val Asp Pro Asp Ser Ala  
 65                    70                    75                    80  
 Ser Ser Ser Gly Ser Asp Ser Ser Asp Asp Asp Asp Ser Asp Ser Lys  
                     85                    90                    95  
 Ser Thr Thr Ser Asp Ala Glu Lys Gln Asn Thr Ala Arg Thr Asn Pro  
                     100                    105                    110  
 Gln Ala Pro Ala Ile Asn Trp Asn Lys Thr Ser Lys Ser Gly Ile Arg  
                     115                    120                    125  
 Thr Ser Leu Ser Arg Arg Ala Asp Ser Thr Gly Glu Asn Lys Gln Ala  
                     130                    135                    140  
 Ser Phe Gln Phe Lys Ala Val Asn Asp Lys Phe Trp Arg Ser Arg Ser  
 145                    150                    155                    160  
 Ala Ser Val Ser Ser Asp Gly Gly Asp Gln Asp Val Thr Leu Val Glu  
                     165                    170                    175  
 Asn Glu Gly Asp Met Glu Glu Gly Glu Leu Asp Glu Glu Thr Ser Ala  
                     180                    185                    190  
 Glu Ser Ser Asp Met Asp Gln Ser Gly Asp Ser Asp Asp Ser Val Ser  
                     195                    200                    205  
 Leu Asp Ser Glu Ala Asp Asp Ser Ile Leu Leu Asn Ile Gly Asp Gln  
                     210                    215                    220  
 Asn Asp Gln Thr Asp Gly Leu Ser Ala Glu Val Lys Pro Val Ser Val  
 225                    230                    235                    240  
 Asn Gly Leu Ala Ala Ser Asp Arg Ser Thr Ile Ser Lys Glu Glu Ser  
                     245                    250                    255  
 His Arg Leu Phe Ser Gln Lys Tyr Ser Val Thr Pro Thr Ile Leu Ala  
                     260                    265                    270  
 Asp Leu Asp Arg Asn Asp Met Glu Ile Gln Ala Arg Cys Leu Phe Tyr  
                     275                    280                    285  
 Asp Arg Asp Ile Asn Asp Ile Asn Leu Gln Leu Pro Val Ser Cys Thr  
                     290                    295                    300  
 Glu Cys Leu Lys Glu Gly His Leu Ala Ala Val Cys Pro Ser Lys Glu  
 305                    310                    315                    320  
 Val Cys Ser Arg Asn Ile Arg Leu Ser Val Arg Tyr Ile Pro Pro Met

## 18808

Thr His Thr Val Phe Trp Asn Leu  
340

330

335

<210> 42173  
<211> 166  
<212> PRT  
<213> A.fumigatus

<400> 42173  
Cys Val His Cys Gly Ala Trp Asn Gln His Gln Ser Ile Phe Cys Pro  
1 5 10 15  
Ser Trp Arg Arg Cys Gln Arg Cys Arg Glu Arg Gly His Asp Glu Glu  
20 25 30  
Gln Cys Thr Ser Leu Leu Gln Gly Ser Ala Ser Glu Ile Pro Cys Asp  
35 40 45  
Leu Cys Gly Ser Ser Ser His Leu Glu Leu Gln Cys Asp Met Met Trp  
50 55 60  
Lys Ile Pro Arg Gln Glu Leu Pro Ser Gly Pro Val Leu Val Ser Ile  
65 70 75 80  
Ser Cys Ser His Cys Thr Ser Asn Arg His Leu Val Gly Asp Cys Pro  
85 90 95  
Ser Leu Ser Arg Pro Met Val Ser Ser Ser Phe Thr Leu Arg Gly Ile  
100 105 110  
Asp Pro His Met Val Thr Asn Ile Asn Ser Val Ile Ser Gly Arg Gln  
115 120 125  
Gly Gly Pro Ala Pro Arg Arg Gly Gln Ser Gly Met Gln Ile Arg Gly  
130 135 140  
Arg Ala Asp Arg Pro Ser Ala Ser Ser Asp Ser Glu Asp Met Met Arg  
145 150 155 160  
Leu His Ala Gly Phe Lys  
165

<210> 42174  
<211> 79  
<212> PRT  
<213> A.fumigatus

<400> 42174  
Phe Leu Gly Ser Leu Ser Val Glu Ile Leu His Glu Arg Lys Val Pro  
1 5 10 15  
Ser Val Ser Ile Arg Pro Gly Met Ala Ser Val Thr Ser Leu Asp Lys  
20 25 30  
Asp Leu Arg Asn Leu Arg Leu Ser Arg Tyr Thr Pro Gln Ala Ala Ala  
35 40 45  
Glu Val Arg Thr Trp Ile Glu Glu Thr Leu Gln Glu Lys Leu Pro Ala  
50 55 60  
Gly Asp Leu Leu Asp Ala Leu Lys Asp Gly Val Ala Leu Cys Lys  
65 70 75

<210> 42175  
<211> 571  
<212> PRT  
<213> A.fumigatus

<400> 42175

Leu Asp Gly His Phe Arg Leu Ile Asn Leu Ala Val Ser Pro Gly Val  
 1 5 10 15  
 Lys Tyr Lys Gln Ser Ser Met Pro Phe Val Gln Met Glu Asn Ile Ser  
 20 25 30  
 His Phe Leu Arg Ala Cys Gln Ile Pro Pro Leu Ser Leu Pro Pro His  
 35 40 45  
 Asp Val Phe Leu Thr Val Asp Leu Tyr Glu Ser Lys Asp Pro Ala Gln  
 50 55 60  
 Val Leu Gln Cys Leu Met Ala Phe Ser Arg Arg Ala Asn Ala Leu Gln  
 65 70 75 80  
 Pro Ser Lys Phe Pro Arg Ala Ile Gly Val Gln Ser Lys Gly Gly Ala  
 85 90 95  
 Val Ser Pro His Leu Thr Gly Ser Ser Gln Ser Ala Asn Thr Pro Leu  
 100 105 110  
 Arg Ser Arg Gly His Ser Asn Val Ser Asn Asn Ser Gly Ala Ser Ser  
 115 120 125  
 Pro Ala Lys Ser Pro Ala Val Ser Ser Trp Ser Lys Lys Ser Asp Glu  
 130 135 140  
 Gln Val Thr Ile Pro Ala Trp Asn Ile His Gln Tyr Gly Tyr Met Gly  
 145 150 155 160  
 Gly Ala Ser Gln Gly Asn Gln Gly Val Ala Phe Gly Ala Arg Arg Gln  
 165 170 175  
 Ile Thr Thr Pro Ser Pro Phe Val Pro Ser Leu Glu Glu Lys Glu Lys  
 180 185 190  
 Arg Arg Arg Glu Glu Glu Glu Arg Gln Arg Ile Glu Arg Glu Glu Ala  
 195 200 205  
 Glu Arg Ile Arg Arg Gln Glu Arg Glu Ala Glu Glu Glu Arg Ala Lys  
 210 215 220  
 Ala Glu Glu Glu Arg Arg Trp Ala Glu Glu Thr Ala Arg Leu Lys Glu  
 225 230 235 240  
 Val Glu Arg Arg Arg Leu Glu Glu Glu Arg Gln Trp Asp Glu Glu  
 245 250 255  
 Gln Arg Lys Trp Glu Glu Glu Glu Arg Lys Arg Gln Gln Glu Glu Gln  
 260 265 270  
 Glu Ala Glu Glu Arg Leu Asn Lys Ala Arg Gln Arg Gln Arg Glu Ala  
 275 280 285  
 Gly Asp Val Arg Leu Arg Gly Gln Phe Leu Ser Gln Tyr Gln Ala Gly  
 290 295 300  
 Leu Thr Gly Glu Ser Arg Glu Ser Gln Arg Ile Lys Glu Leu Glu Arg  
 305 310 315 320  
 Glu Leu Glu Leu Ala Gln Glu Arg Glu Arg Gln Tyr Gln Arg Glu Arg  
 325 330 335  
 Gln Glu Leu Lys Glu Lys Glu Thr Gly Gln Pro Gln Ser Gln Ser Pro  
 340 345 350  
 Arg Pro Val Pro Val Pro Pro Lys Pro Ser Tyr Ser Leu Ser Ser Leu  
 355 360 365  
 Glu Gln Glu Arg Arg Leu Leu Arg Thr Glu Trp Gln Lys His Gln Ala  
 370 375 380  
 His Asp Gly Thr Ala Glu Ser Glu Pro Ser Asp Ala Pro Pro Pro Met  
 385 390 395 400  
 Pro Pro Arg Pro Leu Pro Glu Pro Ala Thr Pro Gln Ser Val Ala Ala  
 405 410 415  
 Ser Pro Arg Pro Leu Pro Asp Pro Ala Ala Tyr Ala Asn Lys Ser Gln  
 420 425 430  
 Gly Gln Glu Ser Arg Val Asp Arg Phe Leu Ala Ser Asn Arg Pro Pro  
 435 440 445

## 18810

Val Ala Pro Lys Pro Ala Thr His Arg Pro Gln Asp Tyr Thr Thr Thr  
 450 455 460  
 Ala Glu Val Asp Glu Glu Asn Asn Arg Arg Val Ala Ala Gln Gln Lys  
 465 470 475 480  
 Thr Lys Ala Gly Gly Trp Ala Ser Lys Ser Leu Leu Glu Arg Glu Met  
 485 490 495  
 Glu Arg Glu Arg Glu Arg Gln Arg Glu Trp Glu Glu Ser Gln Lys Gln  
 500 505 510  
 Thr Arg Glu Ala Ala Ala Lys Gly Leu Lys Asp Pro Thr Ile Gly Ile  
 515 520 525  
 Gly Pro Gly Gln Gly Ala Trp Asp Val His Gln Tyr Gly Phe Met Gly  
 530 535 540  
 Gly Asp Asn Gln Asn Arg Gly Gly Pro Gly Leu Gly Val Gly Gly Ala  
 545 550 555 560  
 Arg Arg Gln Ile Ile Gly Pro Arg Pro Pro Pro  
 565 570

&lt;210&gt; 42176

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42176

His Thr Arg Ser Ser Gly Ile Tyr Lys Met Arg Leu Leu Thr Thr Tyr  
 1 5 10 15  
 Ser Ala Tyr Ile Val Ala Pro Gly Thr Ser Thr Lys Ala Tyr Ser Ala  
 20 25 30  
 Arg Pro Gly Gly Asp Val Asn Asp Val Glu Asn Ala Val Met Met Lys  
 35 40 45  
 Asn Asn Ala Pro Arg Phe Ser Lys Ala Pro His Pro Arg Tyr Leu Val  
 50 55 60  
 Ile Ser Val Asp His Leu Ala Thr Trp Asn Ser Ser Ala Ile  
 65 70 75

&lt;210&gt; 42177

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42177

Ala Arg Thr Cys Gln Val His Ser Pro Arg Ser Cys Pro Asp Gln Ala  
 1 5 10 15  
 Ala Ser His Pro Val Trp Phe Ala Cys Asp Ser Val Lys Lys Met Met  
 20 25 30  
 Leu Thr Phe Leu Leu Asn Ser Val Gly Lys Gln Ile Val Asn Val Pro  
 35 40 45  
 Ser Tyr Met Val Arg Leu Asp Ser Gln Lys His Ile Asp Phe Ala Leu  
 50 55 60  
 Thr Ser Pro Tyr Gly Gly Arg Pro Gly Arg Val Gln Arg Lys Lys  
 65 70 75 80  
 Ala Ala Ala Ala Ala Gly Gly Asp Gly Glu Glu Ala Glu Glu Asp Glu  
 85 90 95  
 Glu

&lt;210&gt; 42178

<211> 124  
 <212> PRT  
 <213> A.fumigatus

<400> 42178  
 Gly Val Ala Cys Pro Ala His Pro Phe Gln Asp Pro Ser Cys Cys Ser  
 1 5 10 15  
 Val Cys Ala Phe Ser Asp Leu Arg Lys Leu Gly Ala Val Thr Asn Ile  
 20 25 30  
 Phe Arg Ser Ser Glu Leu Leu Thr Leu Asp Glu Lys Asp Pro Lys Arg  
 35 40 45  
 Leu Phe Glu Gly Asn Ala Leu Ile Arg Arg Leu Val Arg Ile Gly Val  
 50 55 60  
 Leu Asp Glu Ser Arg Met Lys Leu Asp Tyr Val Leu Ala Leu Arg Val  
 65 70 75 80  
 Glu Asp Phe Leu Glu Arg Arg Leu Gln Thr Cys Val Tyr Lys Leu Gly  
 85 90 95  
 Leu Ala Lys Ser Ile His His Ala Arg Val Leu Ile Lys Gln Arg His  
 100 105 110  
 Ile Arg Tyr Gly Ser His Ala Ile Ala Leu Lys Lys  
 115 120

<210> 42179  
 <211> 398  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (102)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42179  
 Leu Arg Trp Arg Cys Thr Val Asn Gln Arg Cys Val Asp Val Cys Arg  
 1 5 10 15  
 Ser Pro Arg Arg Pro Thr Gly Ala Ala Pro Lys Pro Asn Thr Arg Phe  
 20 25 30  
 Leu Arg Asn Ile Ile Lys Glu Thr Asp Ser His Asn Ala Ala Leu Lys  
 35 40 45  
 Arg Lys Glu Glu Arg Glu Ala Arg Glu Arg Met Arg Gln Leu Arg Gly  
 50 55 60  
 Gln Ala Leu Ser Ser Ser Ser Asn Gly Thr Lys Glu Arg Asp Arg His  
 65 70 75 80  
 Arg Ser Arg Arg Leu Ser Asp Asn Leu Gly Ser Leu Arg Asp Thr Arg  
 85 90 95  
 Gly Ser Arg Glu Ser Xaa His His Pro His Met Arg Asn Arg Arg Ser  
 100 105 110  
 Arg Ser Ala Ser Ser Asp Arg Asp Gly Ser Arg Arg His Arg Arg Ser  
 115 120 125  
 His Arg Ser Asp Asp Lys Asp Glu Lys Arg His Arg Ser Ser Arg Glu  
 130 135 140  
 Lys His Arg Arg His Ser Tyr Ser Arg Ser Arg Ser Pro Arg Asp Asp  
 145 150 155 160  
 Asp Ala Ser Lys Ser Arg Asp Arg Tyr Arg Arg Arg Arg Arg Thr Val  
 165 170 175  
 Ser Leu Ser Pro Ser Arg Ser Pro Ser Pro Asp Arg His Arg Gly Arg

## 18812

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180      185      190
Lys Gly Arg Glu Asn Thr Arg His Ser Thr Arg Arg Ser Ser Pro Asn
195      200      205
Ser His Met Ala Phe Glu Tyr Ala Thr Ala Cys Gly Arg Gly Arg Thr
210      215      220
Pro Ser Pro Arg Lys Glu Ser Gly Phe Asp Ser Asp Pro Leu Glu Asp
225      230      235      240
Leu Val Gly Pro Leu Pro Pro Lys His Gly Val Asp Ser Asp Trp Gly
245      250      255
Ala Ile Arg Ser Arg Gly Arg Gly Ala Tyr Lys Ala Lys Leu Ser Asn
260      265      270
Ile Asp Ala His Phe Ala Pro Asp Tyr Asp Pro Thr Leu Asp Val His
275      280      285
Met Glu Asp Gly Asp Gln Asp Gln Gln Lys Gly Pro Ser Arg Arg Pro
290      295      300
Val Ala Gly Leu Thr Thr Glu Glu Asp Asp Trp Glu Leu Ala Leu Glu
305      310      315      320
Ala Leu Arg Asp Arg Ala Arg Trp Lys Gln Lys Gly Ala Glu Arg Leu
325      330      335
Arg Glu Ala Gly Phe Asp Asp Ala Val Val Asp Arg Trp Lys Ser Thr
340      345      350
Ser Ser Lys Thr Thr Ile Gly Gly Asp Asp Glu Gly Arg Leu Glu Asp
355      360      365
Val Lys Trp Ser Lys Asn Gly Glu Gly Arg Glu Trp Asp Arg Gly Lys
370      375      380
Phe Val Asn Asp Asp Gly His Ile Asp Val Lys Ala Ser Trp
385      390      395

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<210> 42180  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42180
His Trp Arg Thr Ala Leu Thr Gln Tyr Arg Glu His Asn Met Ile Arg
1      5      10      15
Phe Ser Asn Gly Ser Pro Gln Ala Leu Trp Tyr Ser Gln His Ala Gly
20      25      30
Gly Gln Ala Phe Thr Tyr Asp Ala Thr Glu Lys Gln Gly Lys Arg Pro
35      40      45
Tyr Ala Tyr Ser Ala Lys Gly Thr His Ala Val Tyr Val Met Val Gly
50      55      60

```

<210> 42181  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

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<400> 42181
Ile Leu Asn Phe Gly Ala Thr Ser Val Val His Leu Gly Ala Ile Ala
1      5      10      15
Ala Phe Leu Ser Ser Pro Ala Ile Met Pro Ser Asn Thr Gly Glu Met
20      25      30
Asn Asp Glu Leu Ser Asn Asp Tyr Val Ala Glu Val Leu Ala Lys Glu
35      40      45
Ala Arg Asp Ser Ser Met Lys Tyr Ser Ala Gln Gly Met Gly Ala Tyr

```

Variable	Mean	SD	Min	Max	Median	Q1	Q3	Mode	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	32	28	38	35	0.15	2.8	0.95
Gender	0.55	0.50	0	1	0	0	1	0	-0.05	1.5	0.98
Marital Status	0.65	0.48	0	1	0	0	1	0	-0.10	1.6	0.97
Education	12.5	2.5	9	16	12	11	13	12	0.20	3.2	0.92
Income	1500	500	500	3000	1200	800	1800	1000	0.30	4.5	0.88
Occupation	0.45	0.50	0	1	0	0	1	0	-0.05	1.5	0.98
Health Status	0.75	0.43	0	1	0	0	1	0	-0.15	1.8	0.96
Stress Level	4.5	1.5	1	7	4	3	5	4	0.10	2.5	0.94
Life Satisfaction	5.5	1.0	3	7	5	4	6	5	0.05	2.0	0.96
Resilience	6.0	1.2	3	8	6	5	7	6	0.08	2.2	0.95
Optimism	6.5	1.1	3	8	6	5	7	6	0.05	2.0	0.96
Emotional Stability	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Self-Esteem	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Life Satisfaction	5.5	1.0	3	7	5	4	6	5	0.05	2.0	0.96
Resilience	6.0	1.2	3	8	6	5	7	6	0.08	2.2	0.95
Optimism	6.5	1.1	3	8	6	5	7	6	0.05	2.0	0.96
Emotional Stability	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Self-Esteem	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Life Satisfaction	5.5	1.0	3	7	5	4	6	5	0.05	2.0	0.96
Resilience	6.0	1.2	3	8	6	5	7	6	0.08	2.2	0.95
Optimism	6.5	1.1	3	8	6	5	7	6	0.05	2.0	0.96
Emotional Stability	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Self-Esteem	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Life Satisfaction	5.5	1.0	3	7	5	4	6	5	0.05	2.0	0.96
Resilience	6.0	1.2	3	8	6	5	7	6	0.08	2.2	0.95
Optimism	6.5	1.1	3	8	6	5	7	6	0.05	2.0	0.96
Emotional Stability	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Self-Esteem	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Life Satisfaction	5.5	1.0	3	7	5	4	6	5	0.05	2.0	0.96
Resilience	6.0	1.2	3	8	6	5	7	6	0.08	2.2	0.95
Optimism	6.5	1.1	3	8	6	5	7	6	0.05	2.0	0.96
Emotional Stability	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Self-Esteem	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Life Satisfaction	5.5	1.0	3	7	5	4	6	5	0.05	2.0	0.96
Resilience	6.0	1.2	3	8	6	5	7	6	0.08	2.2	0.95
Optimism	6.5	1.1	3	8	6	5	7	6	0.05	2.0	0.96
Emotional Stability	6.0	1.0	3	8	6	5	7	6	0.05	2.0	0.96
Self-Esteem	6.0	1.0	3	8	6	5	7	6</			

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<400> 42184
Arg Met Thr Asn Gln Asn Pro Ala Glu Thr Leu Glu Gln Leu Arg Gln
1          5          10
Leu Glu Gln Glu Asn Gly Asp Leu Lys Thr Cys Leu Ala Ile Arg
          20          25          30

```

## 18814

Ile Ser Glu Pro Ile Ser Ser Ser Asp Ala Glu Lys Ser Asn Ser Ser  
           35                          40                          45  
 Pro Ser Lys Arg Thr Ser Asp Val Ser Ala Ile Asp Asn Pro Thr Pro  
       50                          55                          60  
 Ala Ser Leu Glu Ala Asp Leu Thr His Tyr Lys Val Trp Ile Arg  
 65                          70                          75

<210> 42185  
 <211> 97  
 <212> PRT  
 <213> A.fumigatus

<400> 42185  
 Gly Thr Trp Leu Ile Ile Asp Thr Pro Val Ser Leu Gly Leu Ser Phe  
 1                  5                          10                          15  
 Asn Val Leu Cys Leu Leu Gly Trp Val Ile Ala Met Ser Gly Leu Ala  
           20                          25                          30  
 Cys Gln Glu Thr Thr Gln Ser Lys Lys Lys Gln Pro Arg Asp Met Arg  
       35                          40                          45  
 Ser Arg Gly Met Ala Leu His Leu Ser Arg Leu Phe Glu Glu Asp Tyr  
       50                          55                          60  
 Tyr Tyr Asp Leu Ser Trp Asn Pro Asn Pro Ser Leu Ile Arg Val Phe  
 65                          70                          75                          80  
 Asp Phe Asp Ser Gly Val Gly Trp Asn Asn Lys Ser Ser Phe Ile Arg  
                   85                          90                          95  
 Pro

<210> 42186  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 42186  
 Ser Lys Ala Val Thr Ser Pro Leu Val Glu Glu Ala Ala Leu Asp Gly  
 1                  5                          10                          15  
 Asn Gln Ser Gly Val Pro Trp Lys Leu Ser Asp Lys Leu Leu Phe Thr  
           20                          25                          30  
 Phe Pro Leu Ser Thr Ser Gln His Ala Val Lys Gly Ile Arg Ser Glu  
       35                          40                          45  
 Asp Asn Gln Asp Tyr Gln Ala Lys Lys Ser Phe Asn Ile Pro Thr Gln  
       50                          55                          60  
 Gly Phe Glu His Arg Thr His Thr Tyr Arg Cys His Thr Tyr Leu Ile  
 65                          70                          75                          80  
 Leu Lys Arg Pro Pro Arg Glu  
                   85

<210> 42187  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 42187  
 Glu His Arg Leu Asp Glu Gly Ile Leu Pro Gly Tyr Glu Tyr Ser Val  
 1                  5                          10                          15  
 Phe Gln Ala Thr Gln Asp Gly Thr Arg Thr Asp Phe Glu Lys Leu Asp



## 18815

20 25 30  
 Thr Glu Gly Gly Ile Ala Thr Arg Ala Arg Ala Val Val Leu Gln Ala  
 35 40 45  
 Val Arg Ser Thr Thr Met Ala Arg Asp Val Arg Trp Asp Val Leu Val  
 50 55 60  
 Cys Arg  
 65

<210> 42188  
 <211> 147  
 <212> PRT  
 <213> A.fumigatus

<400> 42188  
 Asp Lys Glu Pro Thr Ala Pro Ala Glu Pro Asn Val Ser Gln Ser Leu  
 1 5 10 15  
 Gln Ser Ser Asp Pro Ala Lys Ser Glu Ala Lys Gln Glu Thr Asp Glu  
 20 25 30  
 Met Thr Glu Ile Leu Glu Arg Leu Asn Leu Ala Ala Asp Asn Asn Cys  
 35 40 45  
 Val Phe Ser Ile Ser Asp Glu Thr Gln Glu Leu Leu Arg Lys Phe Thr  
 50 55 60  
 Leu Ile Phe Lys Asp Leu Ile Asn Gly Val Pro Thr Ala Tyr His Asp  
 65 70 75 80  
 Leu Glu Met Leu Leu Ser Asn Gly Asn Lys Gln Leu Gln Gln Thr Tyr  
 85 90 95  
 Ser Gln Leu Pro Gly Phe Leu Gln Lys Leu Val Glu Lys Leu Pro Glu  
 100 105 110  
 Arg Trp Thr Glu Thr Leu Ala Pro Glu Val Leu Ala Ala Ser Glu  
 115 120 125  
 Arg Ala Ser Arg Ser Gly Leu Asn Val Glu Asn Val Gly Lys Ser Gly  
 130 135 140  
 Cys Arg Cys  
 145

<210> 42189  
 <211> 435  
 <212> PRT  
 <213> A.fumigatus

<400> 42189  
 Ser Ala His Asn Gly Tyr Gln Thr Leu Ser Thr Pro Gly Pro Val Lys  
 1 5 10 15  
 Pro Lys Ala Gln Tyr Asn Asn Asn Asn Ile Arg Leu Asp Glu Pro Leu  
 20 25 30  
 Gln Leu Ile Thr Asn Asn Ser Ile Val Ile Asn Ala Met Thr Gln Thr  
 35 40 45  
 Lys Ser His Lys Ser Pro Lys Gly Ala Ile Lys Asp Ser Arg Ala Leu  
 50 55 60  
 Asn Ile Met Lys His Leu Asp Pro Lys Ser Ser Ser Ser Ser Arg  
 65 70 75 80  
 Arg Ser Ser Lys Ser Leu Pro Leu Ser Ser Phe Thr Thr Asp His Lys  
 85 90 95  
 Arg Arg Ala Ser Ser Ser Ser Ile Ser Ser Val Ser Ser Val Ser Ser  
 100 105 110  
 Ile Glu Ala Leu Ser Asp Glu Ala Asn Glu Ser Glu Glu Asp Ala Asp

## 18816

```

      115              120              125
Asp Glu Lys Glu Gln Pro Ala Val Arg Gly Pro Ser Tyr Gly Arg Arg
  130              135              140
Asp Lys Gly Arg Lys Ser Gly Met Lys Pro Thr Gly Arg Lys Arg Val
145              150              155              160
Arg Leu Ser Asp Asp Asp Gly Tyr Asp Gly Gln Arg Ser Ser Asp Glu
      165              170              175
Ser Asp Ser Asp Gly Ser Ser Asp Asp Val Tyr Ala Ala Val Asp Asp
      180              185              190
Ile Ser Asp Gly Asp Asp Glu Asp Gln Asp Val Glu Ile Leu Glu Glu
      195              200              205
Leu Leu Ile Val Glu Ser Glu Asp Glu His Ala Val Asp Asp Ile Phe
      210              215              220
Lys Thr Ser Thr Val Ser Glu Leu Asp Leu Ala Gly Thr Asn Ser Phe
225              230              235              240
Glu Asp His Met Leu Leu Ser Ala Ala Ser Phe Phe Asp Glu Asp Gln
      245              250              255
Leu Tyr Ser Ala Met Glu Thr Phe Gly Glu Thr Asp Phe Ala Ser Glu
      260              265              270
Ala Ala Ala Glu Thr Pro Met Pro Arg Arg Val His Phe Glu Glu Asp
      275              280              285
Ser Asp Ser Ser Ser Glu Ser Asp Ser His Thr Glu Asp Glu Ile Pro
      290              295              300
Ser Asp Phe Leu Gln Gln Asp Ser Leu Asp Pro Gln Leu Arg Arg Met
305              310              315              320
Ile Glu Asn Asp Asn Glu Asn Tyr Ser Ser Arg Arg Arg Gln Ser Asp
      325              330              335
Glu Leu Phe Ala Glu Ser Asp Tyr Gly His Ser Asn Ile Tyr His Val
      340              345              350
Glu Ser Asp Ala Val Ser Glu Glu Ser Glu Ser Ser Gly Tyr Glu Ser
      355              360              365
Met Gln Cys Ile Trp Thr Phe Pro Leu Ile Phe Leu Leu Thr Cys Leu
      370              375              380
Lys Pro Met Met Ala Arg Pro Gln Met Lys Thr Phe His His Arg Gln
385              390              395              400
Gln Leu Pro Thr Pro Val Pro Phe Cys Ala Ala Ile Pro Leu Pro Leu
      405              410              415
Cys Leu Pro Pro Thr Arg Thr Lys Ala Asn Pro Leu Leu Val Gly Glu
      420              425              430
Val Gln Ser
      435

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&lt;210&gt; 42190

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42190

```

Arg Pro Ser Val Ala Thr Thr Thr Asp Ile Lys Pro Ser Tyr Gly Cys
1              5              10              15
Pro Ser Thr Glu Asn Ser Cys Leu Pro Ile Leu Pro Leu Gly Leu Leu
      20              25              30
Ala Ser Ser Ala Met Pro Asp Met Gln Thr Ser Ala Arg Leu Leu Glu
      35              40              45
Asn Ala Arg Leu Ala Asp Met Pro Ala Ala Arg Leu Ser Asp Glu Ser
      50              55              60

```

## 18817

Ser Trp Met Pro Thr Gly Ala Leu Lys Phe Leu Ser Lys Ser Ser Asp  
 65 70 75 80  
 Ala Thr Cys Ser Ala Thr Thr Pro Tyr Gly Arg Phe Glu Arg Ile Gly  
 85 90 95

<210> 42191  
 <211> 343  
 <212> PRT  
 <213> A.fumigatus

<400> 42191  
 Glu Tyr Ala Val Tyr Leu Asp Phe Pro Leu Asp Leu Pro Thr Asp Leu  
 1 5 10 15  
 Phe Glu Ala Asp Asp Gly Glu Thr Thr Asp Glu Asp Leu Pro Pro Pro  
 20 25 30  
 Ala Thr Ile Thr His Pro Arg Ser Ile Leu Arg Arg Asp Ser Ser Ala  
 35 40 45  
 Ser Leu Pro Pro Ala Asp Glu Asn Lys Ser Gln Pro Pro Thr Arg Arg  
 50 55 60  
 Arg Gly Pro Ile Leu Gly Thr Phe Val Ala Asp Pro His Lys Pro Val  
 65 70 75 80  
 Ala Leu Val Asp Cys Thr Gly Lys His Leu Val Ile Ile Pro Ala Tyr  
 85 90 95  
 Ala Ser Ser Arg His Asp Trp Leu Glu Ser Ala Thr Thr Ser Ile Cys  
 100 105 110  
 Gly Thr Ala Asn Asn Ser Pro Arg Ala Thr Thr Met His Leu Ile Asp  
 115 120 125  
 Glu Ser Asp Thr Asp Ala Leu Ala Ser Pro Asn Arg His Asp Leu Ser  
 130 135 140  
 Pro Met Leu Ala Ser Ser Ala Asn Leu Met Met Thr Ala Leu Gly Asn  
 145 150 155 160  
 Asp Ile Ala Pro Gly Gly Gln Val Met Gly Pro Pro Glu Ala Phe Tyr  
 165 170 175  
 Pro Ser Arg Asp Phe Ala Ile Asp Ser Ser Phe Glu Asp Asp Asp Asp  
 180 185 190  
 Asp Asp Pro Glu Ala Ser Leu Asn Val Glu Asp Phe Ile Asp Phe Gly  
 195 200 205  
 Asp Gly Ser Ser Asp Glu Glu Met Gly Lys Ala Ser Asp Glu Asp Ala  
 210 215 220  
 Ile Ala Ser Pro Met Ala Thr Ala Ser Met Thr Val Val Ser Gly Thr  
 225 230 235 240  
 Pro Thr Pro Asn Arg Gly Gly Asp Val Gln Gln Ser Asn Ser Ala Glu  
 245 250 255  
 Arg Phe Leu Asn His Leu Asp Arg Gly Ile Val Thr Ala Phe Arg Arg  
 260 265 270  
 Asn His Asn Arg Tyr Gln Ala Leu Leu Arg Leu Pro Gln His Arg Glu  
 275 280 285  
 Phe Met Pro Ala Asn Ser Pro Ser Arg Pro Ala Ser Val Phe Arg His  
 290 295 300  
 Ala Arg His Ala Asp Gln Arg Thr Pro Thr Arg Lys Arg Lys Ala Ser  
 305 310 315 320  
 Gly Tyr Ala Gly Gly Glu Ala Val Arg Arg Lys Leu Met Asp Ala His  
 325 330 335  
 Arg Arg Thr Gln Ile Pro Phe  
 340

<210> 42192  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 42192  
 Ser Gly Ser Pro Ser Pro Leu Arg Pro Ala Ser Thr Ala Thr Trp Val  
 1 5 10 15  
 Ser Thr Ser Ser Pro Val Ser Cys Arg Arg Ser Pro Ala Ser Ser Pro  
 20 25 30  
 Thr Pro Pro Pro Arg Leu Ser Phe Arg Pro Cys Ser Val Pro Ser Thr  
 35 40 45  
 Arg Pro Thr Ala Phe Trp Thr Ser Thr Arg Met Ala Pro Ser Pro Pro  
 50 55 60

<210> 42193  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 42193  
 Leu Pro Pro Leu Ser Ala Ser Pro Arg Arg Tyr Arg Val Ile Ala Leu  
 1 5 10 15  
 Val Val Glu Ser Leu Pro His Ser Tyr Leu Gly Leu Ser Tyr Ile Asp  
 20 25 30  
 Tyr Val Arg Pro Phe His His Val Ala Gln Val Gly Val Gln Ile Cys  
 35 40 45  
 Gly Leu Thr Asp Gly Arg Glu Arg Val Pro Glu Gln Val Gln Arg Ser  
 50 55 60  
 Pro Gly  
 65

<210> 42194  
 <211> 783  
 <212> PRT  
 <213> A.fumigatus

<400> 42194  
 Lys Pro Arg Pro Ala Leu Pro Ser Phe Gly Ser Ile Arg Gly Arg Arg  
 1 5 10 15  
 Glu Asp Glu Pro Glu Pro Ala Gln Pro Asp Phe Ser Asp Asn Glu Ser  
 20 25 30  
 Thr Ala Ser Ser Gly Phe Asp Ala Val Val Ser Gly Trp Ser Val Pro  
 35 40 45  
 Asn Asp His Pro Ala Gln Gly Met Ser His Pro Ser Val Thr Asn His  
 50 55 60  
 Pro Ser Gly Thr Glu Val Asp Arg Ile Ala Leu Thr Lys Ser Ser Glu  
 65 70 75 80  
 Gly Ser Gly Asp Gln Thr Asn Ile Ala Leu Arg Gln Asp Gly Asp Leu  
 85 90 95  
 Val His Glu Leu Val Ser Gln Ala Ser Pro Ala Leu Lys Pro Ser Val  
 100 105 110  
 Ala Asp Ala Asn Leu Met Arg Gly Gln Glu Pro Phe Ile Thr Pro Asp  
 115 120 125  
 Val Glu Leu Ala Leu Gln Gly Met Ala Ala Gln Thr Thr Ser Pro Gly  
 130 135 140

## 18819

Ala Glu Lys Gly Arg Ser Ser Leu Glu Ile Tyr Arg Val Pro Gly Gly  
 145 150 155 160  
 Phe Pro Arg Thr Ser Leu Glu Leu Asp Pro Lys Ala Ala Ser Lys Arg  
 165 170 175  
 Lys Gly Lys Arg Arg Ser Arg Gly Lys Ser Ile Asp Glu Tyr Met Pro  
 180 185 190  
 Asn Asp Lys Glu Ser Gly Asp Glu Ser Gly Glu Ser Val Tyr Ser Asp  
 195 200 205  
 Ala Glu Glu Gly Val Asp Phe Asp Gly Phe Gly Ser Ile Asn Ala Ile  
 210 215 220  
 Val Asp Ala Arg Ile Ala Gln Gly Lys Asp Gly Arg Pro Val Tyr Phe  
 225 230 235 240  
 Leu Leu Asn Asn Ala Phe Ser Lys Asp Asp Thr Arg Gly Phe Gly Ala  
 245 250 255  
 Met Ser Thr Asn Gly Ala Ala Asn Lys Leu Glu Val Ser Ser Gln Ala  
 260 265 270  
 Asp Cys Val Thr Thr Pro Ala Gln Met Gln Pro Ala Tyr Ser Pro Ser  
 275 280 285  
 Ser Ala Gln Ala Ala Ser Thr Arg Ser Thr Val Gln Ala Gln Thr Thr  
 290 295 300  
 Ala Lys Asp Ile His Ser Ser Pro Arg Pro Thr Gln Ala Glu Arg Pro  
 305 310 315 320  
 Met Ser Ala Ile Val Tyr Ser Asp Ser Gly Leu Arg Asp Ala Val Ala  
 325 330 335  
 Lys Asp Gly Ser Leu His Gly Leu Ser Gly Asn Gly Ser Ser Ala Leu  
 340 345 350  
 His Arg Ala Asp Thr Glu Arg Ala Lys Lys Arg Pro Val Ser Phe Gly  
 355 360 365  
 Pro Val Ile Gln Lys Glu Ile Asp Leu Gly Pro Ser Ser Glu Arg Leu  
 370 375 380  
 Ile Asn Gly Arg Thr Pro Tyr Leu Pro Gln Arg Arg Met Ser Asn Gly  
 385 390 395 400  
 Ser Asp Ser Ser Ser Ser Phe Val Arg Ser Thr Arg Arg Val Lys Lys  
 405 410 415  
 Gly Gly Gln His Thr Met Arg Arg Thr Met Arg Gly Gly Pro Pro Ile  
 420 425 430  
 Arg Thr Leu Pro Pro Ser Pro Gly Arg Val Ser Ser Pro Ala Ile Glu  
 435 440 445  
 Ser Arg Pro Leu Ser Ser Gly Ser Val Thr Gly Thr Met Arg Thr Thr  
 450 455 460  
 Leu Arg Ser Gly Pro Lys Asn Asp Lys Thr Pro Ser Ile Phe Ser Asn  
 465 470 475 480  
 Arg Ser Ala Lys Leu Lys Val Thr Lys Thr Ala Thr Pro Arg Phe Val  
 485 490 495  
 Ser Arg Phe Pro Asp Ser Asp Asp Glu Asp Ala Asp Phe Arg Gln Arg  
 500 505 510  
 Lys Leu Gln Arg Arg Tyr Asp Asn Ser Ser Asp Asp Glu Gln Asp Arg  
 515 520 525  
 Val Met Arg Gly Leu Arg Pro Val Arg Gly Ile Pro Arg Arg Gln Gly  
 530 535 540  
 Thr Asn Asp Gly Asp Ser Thr Glu Leu Glu Asp Ser Ser Glu Asn Glu  
 545 550 555 560  
 Arg Pro Ala Thr Pro Ala Pro Ala Ala Val Ser Lys Lys Pro Asp Leu  
 565 570 575  
 Pro Ser His Asp Pro Gly Leu Ala Ala Val Ala Arg Ser Arg Gly Met  
 580 585 590

## 18820

Thr Glu Ala Glu Leu Asp Glu Phe Leu His Arg Pro Ala Lys Gly Arg  
 595 600 605  
 Val Ser Gly Ile Leu Gly Arg Phe Thr Leu Lys Lys Ser Arg Pro Pro  
 610 615 620  
 Met Glu His Arg Ala Ser Lys Ser Asn Pro Glu Asp Leu Ala His Met  
 625 630 635 640  
 Arg Asp Gly Asn Leu Leu Asn Pro Gly Arg Gly Ala Thr Val Thr Thr  
 645 650 655  
 Val Thr Ala Asn His Ser Gly Thr Ser Pro Ser Lys Leu Thr Lys Gly  
 660 665 670  
 Gly Leu Lys Lys Pro Asn Glu Asn Ser Trp Pro Met Asp Ser Gly Arg  
 675 680 685  
 Lys Val Ser Asp Ala Ala Ala Asp Ala Glu Thr Val Ala Glu Gln His  
 690 695 700  
 Pro Val Ala Thr Asp Ala Ser Gly Asp Gly Ser Ala Ser Ile Ala Arg  
 705 710 715 720  
 His Ser Glu Pro Phe Ala Glu Asp Ser Ala Ile Asn Met Gln Ser Ser  
 725 730 735  
 Glu Ala Ala Pro Pro Arg Glu Glu Arg His Pro Gly Asn Ser Asn Gly  
 740 745 750  
 Asn Asn Asn Val Ser Ala Lys Asp Ile Val Phe Pro Gln Gly Arg Arg  
 755 760 765  
 Lys Lys Arg Phe Pro Arg Leu Arg Lys Ala Phe Gly Met Arg Ser  
 770 775 780

&lt;210&gt; 42195

&lt;211&gt; 366

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42195

Tyr His Leu Thr Phe Ser Pro Val Pro Thr Pro Arg Tyr Arg Glu Ser  
 1 5 10 15  
 Thr Ser Arg Tyr Glu Pro Leu Pro Pro Lys Pro Val Tyr Asp Gln Ala  
 20 25 30  
 Leu Glu Ser Gln Leu Asp Ile Thr Glu Arg Glu Tyr Arg Arg Arg Thr  
 35 40 45  
 Asp Pro Thr Tyr Asp Val Asn Leu Ser Tyr Gly Arg His Gln Ala Pro  
 50 55 60  
 Val Asp Ser Tyr Gln Ala Tyr Gln Pro Gln Gln Thr Ser Asp Val Ser  
 65 70 75 80  
 Leu His Arg Ser Lys Thr Glu Ile Asp Val Ser Tyr Asp Lys Ala Tyr  
 85 90 95  
 Thr Pro Lys Pro Leu Glu Thr Arg Lys Gly Asp Ser Phe Ser Arg Ser  
 100 105 110  
 Glu Leu Thr Val Glu Ser Val Pro Ser Arg Pro Ser Ser Ala Ser Ser  
 115 120 125  
 Ile Ser Gln Val Lys Val Leu Lys Pro Tyr Thr Ala Ile Asp Gln Pro  
 130 135 140  
 Pro Ala Arg Lys Met Gly Tyr Tyr Asp Asp Asp Gly Asn Tyr His Ser  
 145 150 155 160  
 Phe Arg Arg Gly Val Glu Arg Ala Val Asp Arg Ile Thr His Pro Phe  
 165 170 175  
 His His His His His His Asp Arg Glu Glu Val Val Ile Ala Asp  
 180 185 190  
 Glu Arg Gly Pro Val Arg Tyr Arg Asp Gly Val Arg Glu Asp Val Arg

## 18821

195	200	205
Ile Val Glu Pro Arg Ala Ser Lys Thr Thr Ala Glu Ser Val Pro Ile		
210	215	220
Pro Cys His Phe Ile Arg Ile Gly Asp Ile Leu Ile Leu Gln Gly Arg		
225	230	235
Pro Cys Gln Val Ile Arg Ile Ser Val Ser Pro Gln Thr Gly Gln His		
245	250	255
Arg Tyr Leu Gly Val Asp Leu Phe Thr Arg Gln Leu Gln Glu Glu Ser		
260	265	270
Ser Phe Val Ser Asn Pro Ser Pro Ser Val Val Val Gln Thr Met Leu		
275	280	285
Gly Pro Val Tyr Lys Thr Tyr Arg Ile Leu Asp Leu His Glu Asp Gly		
290	295	300
Thr Ile Thr Ala Met Thr Glu Thr Gly Asp Val Lys Gln Ala Leu Pro		
305	310	315
Val Val Thr Gln Gly Gln Leu Phe Arg Lys Ile Arg Asp Ala Phe Ser		
325	330	335
Glu Gly Arg Gly Ser Val Arg Ala Leu Val Ile Asn Asp Gly Gly Arg		
340	345	350
Glu Leu Val Val Asp Tyr Lys Val Ile His Gly Ser Arg Leu		
355	360	365

&lt;210&gt; 42196

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (80),(90),(91)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42196

Ile Leu Thr His Leu Asn Arg Asn Ala Ser Thr Trp Asn Arg Val Ser	
1	15
Thr Val Trp Pro Ser Cys Leu His Ser Tyr Arg Gln Tyr Ser Ser Gln	
20	30
Tyr Leu Pro Val Ala Pro Val Gln Ser Ser Pro Ala Thr Ser Arg Asp	
35	45
Ser Ser Arg Asp Asn Ser Arg Arg Ala Lys Asp Ser Asn Ser Arg Gln	
50	60
Ser Glu Ser Ile Ala Asn Pro Lys Arg Arg Ser Thr Met Asn Ser Xaa	
65	80
Asp Ala Ala Tyr Asp Glu Glu Glu Gln Xaa Xaa Arg Ala Ile Glu Glu	
85	95
Ser Lys Glu Asp Thr Gln Pro Pro Ala Glu Asp Met Ala Leu Arg Arg	
100	110
Gly Lys Arg Ser Arg Ser Asp Ser Glu Ala	
115	120

&lt;210&gt; 42197

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

<221> UNSURE

<222> (3), (8), (9)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42197

Asn	Ser	Xaa	Thr	Gly	Ala	Ala	Xaa	Xaa	Gln	Pro	Arg	Gly	Glu	Asp	Asp
1				5					10					15	
Lys	Gln	Ala	Thr	Glu	Tyr	Leu	Glu	Leu	Ser	Tyr	Thr	Ser	His	Leu	Gln
			20					25					30		
Ala	Asp	Arg	Ile	Ser	Asn	Glu	Ser	Ser	Trp	Gln	Trp	Ser	Ser	Leu	Leu
		35					40					45			
Ser	Lys	Asn	Ser	Pro	Ser	Thr	Trp	Cys	Trp	Thr	Gly	Met	Met	Arg	Arg
	50					55					60				
Pro	Glu	Glu	Lys	Thr	Ser	Leu	Met	Arg	Gly	Thr	Tyr	Ser	Thr		
65					70					75					

<210> 42198

<211> 242

<212> PRT

<213> A.fumigatus

<400> 42198

Asp	Ser	Ser	His	Cys	Gln	Asn	His	Cys	Ala	Pro	Phe	Ala	Ser	Arg	Cys
1				5					10					15	
Ser	Thr	Met	Thr	Pro	Arg	Arg	Ser	Ser	Arg	Ala	Arg	Thr	Ser	Gln	Pro
			20					25					30		
Ser	Pro	Ala	Ile	Leu	Gln	His	Thr	Asn	Ser	Ser	Ser	Ser	Ser	Asn	Ser
		35					40					45			
Leu	Ala	Arg	Glu	Arg	Ser	Thr	Arg	Ser	Asn	His	Lys	Ile	Ser	Ser	Pro
	50					55					60				
Gln	Arg	Ser	Leu	Thr	Gln	Arg	Ser	Gln	Ser	Ile	Asp	Asp	Ala	Asp	Ser
65					70				75					80	
Ala	Thr	Arg	Asn	Asp	Tyr	Pro	Gln	Thr	Arg	Gln	Arg	Gln	Arg	Ser	Arg
			85					90						95	
Gly	Asp	Asp	Asp	His	Val	Arg	Leu	Asn	Gly	Glu	Glu	Glu	Asp	Glu	Asp
		100						105					110		
Glu	Asp	Gly	Glu	Gly	Asp	Glu	Glu	Glu	Glu	Ile	Thr	Arg	Cys	Leu	Cys
		115				120						125			
Gly	Gln	Gln	Asp	Tyr	Pro	Gly	Leu	Pro	Pro	Ser	Arg	Arg	Glu	Ala	Leu
	130					135					140				
Gly	Arg	Asn	Gly	Pro	Thr	Val	Gly	Phe	Lys	Asp	Gln	His	Ala	Leu	Asn
145				150						155				160	
Leu	Ser	Thr	Asp	Ser	Ser	Asp	Leu	Met	Ser	Asp	Asp	Ile	Gly	Ser	Met
			165					170						175	
Phe	Ile	Gln	Cys	Asp	Ser	Cys	Lys	Val	Trp	Gln	His	Gly	Gly	Cys	Val
		180					185						190		
Gly	Ile	Met	Asp	Glu	Ala	Met	Ser	Pro	Asp	Glu	Tyr	Phe	Cys	Glu	Glu
	195					200						205			
Cys	Arg	Lys	Asp	Leu	His	Lys	Ile	Lys	Asn	Glu	Ser	Asn	Gly	Tyr	Val
	210					215				220					
Ser	Ser	Asn	Leu	Phe	Phe	Thr	Leu	Ile	Ser	Arg	Ile	Ser	Pro	Ser	Leu
225				230						235					240
Ile	Tyr														

<210> 42199



<211> 389  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (5), (6)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42199  
 Arg Arg Gly Ala Xaa Xaa Ala Ser Asp Arg Arg Glu Gln Gly Gly Tyr  
 1 5 10 15  
 Ser Ala Pro Cys Arg Gly His Gly Ser Pro Thr Arg Gln Ala Glu Ser  
 20 25 30  
 Lys Arg Gln Arg Ser Val Ser Leu Met Thr Ala Gln Val Thr Leu Val  
 35 40 45  
 Phe Cys Ala Ala Ala Asp Pro Phe Ser Pro Pro Ser His Lys Gln Val  
 50 55 60  
 Thr Lys Arg Gln Arg Thr Ser Ser Pro Ser Pro Ser Ala Ile Ser Lys  
 65 70 75 80  
 Pro Glu Asn Thr Glu Ser Gln Pro Ala Ser Glu Asp Glu Leu Lys Thr  
 85 90 95  
 Lys Val Asn Gly Asn Gly Thr Lys Ser Ser Arg Val Ala Pro Arg Gly  
 100 105 110  
 His Arg Glu Lys Pro Val Lys Glu Thr Glu Glu Pro Glu Thr Asp Leu  
 115 120 125  
 Ser Glu Ile Ala Ser Arg Lys Arg Gly Lys Phe Glu Arg Arg Asn Gly  
 130 135 140  
 Glu Gly Lys Ser Pro Glu Val Ile Leu Gly Leu Leu Val Leu Thr His  
 145 150 155 160  
 Leu Gln Glu Ala Asp Ala Asp Arg Glu Met Ala Ser Pro Thr Lys Ala  
 165 170 175  
 Thr Ala Glu Asp Pro Glu Pro Pro Gln Thr Ser Pro Glu Thr Ala Ala  
 180 185 190  
 Pro Ala Pro Glu Pro Ala Pro Ser Arg Pro Ser Thr Arg Lys Ser Gly  
 195 200 205  
 Arg Pro Pro Ala Arg Arg Gly Gly Arg Val Gly Arg Asn Gln Tyr Thr  
 210 215 220  
 Arg Asp Arg Asp Thr Asn Gly Ala Asp Ser Pro Arg Arg Gly Gln Ser  
 225 230 235 240  
 His Asp Ile Gly Gly Asp Ser Pro Arg Val Gly Ala Val Asn Gly Ala  
 245 250 255  
 Gln Tyr Asn Val Asp Ser Gly Lys Pro Ser Arg Pro Arg Tyr Met Asn  
 260 265 270  
 Pro Gln Arg Thr Thr Met Asn Glu Met Lys Arg Arg Val Ala Gly Ile  
 275 280 285  
 Leu Glu Phe Ile Ser Arg Met Gln Val Glu Met Ala Val Ala Gly Glu  
 290 295 300  
 Thr Ser Thr Pro Pro Gly Asn Gly Asp Gln Pro Asn Gly Ser Leu Thr  
 305 310 315 320  
 Lys Ala Thr Met Asp Gln Val Glu Thr Ala Leu Val Ser Asn Thr Asn  
 325 330 335  
 Glu Val Glu Ser Gly Thr Ser Ser Val Asp Ser Glu Thr Ala Ser Gly  
 340 345 350  
 Gln Gly Pro Lys Glu Lys Glu Phe Lys Asp Leu Ser Ser Val Glu Met  
 355 360 365

## 18824

Met Asp Val Leu Thr Arg His Leu Leu Lys Trp Gln Gln Glu Tyr Gly  
 370 375 380  
 Lys Phe Gly Glu Arg  
 385

<210> 42200  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 42200  
 Ile Leu Leu Asn Ala Ser Phe Leu Ser Leu Arg Pro Arg Ile Ser Thr  
 1 5 10 15  
 Val Phe Asn Met Pro Gly Gly Lys Gly Lys Ser Val Gly Gly Lys Ala  
 20 25 30  
 Gly Ala Lys Asp Ala Ala Gly Lys Thr Gln Lys Ser His Ser Ala Lys  
 35 40 45  
 Ala Gly Leu Gln Val Ser Ile Ser Cys Val Ser Gln  
 50 55 60

<210> 42201  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 42201  
 Leu Gln Asp Arg Asp Trp Tyr Gly Thr Gly Asp Asn Val Gln Thr Ser  
 1 5 10 15  
 Thr Lys Tyr Ser Val Ala Asp Tyr Arg Arg Thr Trp Cys His Ala Met  
 20 25 30  
 Thr Val Glu Trp Lys Thr Asn Ser Arg Gly Gly Tyr Ile Val Ala Gly  
 35 40 45  
 Ala Gly Val Gln Leu Gly Asn Thr Thr Asp Trp Ser Ser Leu Lys Ile  
 50 55 60  
 Phe Arg Asp Arg Trp  
 65

<210> 42202  
 <211> 106  
 <212> PRT  
 <213> A.fumigatus

<400> 42202  
 Leu Arg Leu Ser Arg Pro Leu His Ile Pro His Arg Val Phe Cys Pro  
 1 5 10 15  
 Asp Ser Leu Thr Cys Ile Ile Leu Ala Val Tyr Val Thr Ala Val  
 20 25 30  
 Leu Glu Tyr Leu Thr Ala Glu Val Leu Glu Leu Ala Gly Asn Ala Ala  
 35 40 45  
 Lys Asp Leu Lys Val Lys Arg Ile Thr Pro Arg His Leu Gln Leu Ala  
 50 55 60  
 Ile Arg Gly Asp Glu Glu Leu Asp Thr Leu Ile Arg Ala Thr Ile Ala  
 65 70 75 80  
 Phe Gly Gly Val Leu Pro Arg Ile Asn Arg Ala Leu Leu Leu Lys Val  
 85 90 95  
 Glu Gln Lys Lys Lys Asn Lys Ser Asp Ala

## 18825

100

105

&lt;210&gt; 42203

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42203

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Ile Asp Ser Leu Cys Tyr Ala Asn Ser Thr Met Gln Thr Trp Leu Asp
1          5          10          15
Gln Gln Pro Gly Met Pro Ser Pro Phe Ser Asn Leu Gly Pro Gly Pro
          20          25          30
Leu Gln Ser Gly Ala Val Arg Ser Glu Thr Thr Val Pro Ser Glu Gly
          35          40          45
Glu Asp Glu Leu Ile Pro Thr Ala Ile Val Ile Lys Asn Ile Pro Phe
          50          55          60
Ala Val Lys Lys Glu Gln Leu Val Gln Leu Met Thr Glu Leu Asn Leu
65          70          75          80
Pro Leu Pro Tyr Ala Phe Asn Tyr His Phe Asp Asn Gly Val Phe Arg
          85          90          95
Gly Leu Ala Phe Ala Asn Phe Thr Ser Ala Glu Glu Thr Ala Thr Val
          100          105          110
Ile Glu Val Leu Asn His Phe Glu Leu Gln Gly Arg Lys Leu Arg Val
          115          120          125
Glu Tyr Lys Lys Met Leu Pro Leu Gln Glu Arg Glu Arg Ile Glu Arg
          130          135          140
Glu Lys Arg Glu Arg Arg Gly Gln Leu Glu Glu Gln His Arg Pro Met
145          150          155          160
Ala Ala Ser Gln Leu Gln Thr Gln Ser Ser Met Ser Ser Leu Thr Ser
          165          170          175
His Ile Pro Ala Thr Ser Pro Ser Pro Val Ser Gln Arg Gly Gln Lys
          180          185          190
Leu Gly Lys Ser Glu Arg Ala Asn Pro His Ser Gln Asn Ser Phe Lys
          195          200          205
Gln Phe Arg Cys Phe Pro Ser Val Gln Leu Cys
          210          215

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&lt;210&gt; 42204

&lt;211&gt; 458

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42204

```

Thr Ser Arg Phe Leu Thr Arg Ser Thr Ile Thr Leu Thr Met Ala Cys
1          5          10          15
Ser Gly Val Trp Pro Leu Pro Ile Ser Pro Leu Leu Arg Lys Pro Pro
          20          25          30
Pro Leu Ser Arg Phe Leu Thr Thr Ser Asn Cys Lys Val Glu Ser Cys
          35          40          45
Gly Trp Ser Ile Arg Arg Cys Ser Leu Ser Arg Ser Ala Ser Ala Ser
          50          55          60
Ser Glu Arg Ser Ala Asn Val Ala Val Ser Trp Arg Asn Ser Thr Gly
65          70          75          80
Pro Trp Leu Pro Arg Ser Phe Lys Leu Arg Val Pro Cys Arg Leu Ser
          85          90          95
Arg Pro Thr Ser Leu Gln Arg Leu Leu Leu Pro Phe Arg Ser Val Ala

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## 18826

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      100      105      110
Lys Ser Trp Val Ser Arg Ser Glu Pro Ile His Thr Pro Lys Thr Val
      115      120      125
Leu Asn Ser Ser Asp Ala Phe Leu Arg Cys Asn Cys Ala Asn Phe Thr
      130      135      140
Ser Ile Ala Glu Val Asp Leu Asn Asp Ser Thr Thr Leu Ser Tyr Tyr
      145      150      155      160
Ser Gln Leu Leu Leu Phe Lys Glu Asp Pro Ser Arg Asp Ser Val Leu
      165      170      175
Phe Pro Pro Thr Leu Thr Pro Ile Gln Arg Arg Thr Val His Thr Leu
      180      185      190
Ala His Asn Met Gly Leu Gly His Ala Ser Arg Gly Thr Gly Glu Gln
      195      200      205
Arg Gln Val Gln Val Phe Lys Val Ala Pro Gly Thr Asn Val Ser Pro
      210      215      220
Pro Leu Thr Ser Ile Pro Thr Ala Val Gln Pro Ala Asp Thr Ala Arg
      225      230      235      240
Arg Gly Leu Asn Arg Ala Ala Thr Ile Asp Phe Ser Glu Ala Arg Asn
      245      250      255
Glu Gly Gly Pro Gly Pro Phe Ser Asn Leu Arg Gly Gln Thr Ser Gly
      260      265      270
Phe Leu Gly Val Leu Asp Ser Pro Gly Asn Tyr Gly Ser Thr Gln Asn
      275      280      285
Leu Arg Ala Ala Lys Ser Phe Ala Asp Leu Arg Ser Tyr Thr Pro Ser
      290      295      300
Pro Val Pro Ser Ser Ala Ser Phe Pro Ala Ala Leu Gln Ser Asn Gly
      305      310      315      320
Thr Arg Leu Gln His Tyr Glu Ala Val Thr Ser Gly Ala Ser Asn Thr
      325      330      335
Pro Thr Leu Thr Ser Ala Pro Ser Gly Ser Ser Leu Gly Val Gln Arg
      340      345      350
Asp Asp Asn Leu Leu Val Asn Ser Leu Ser Ser Leu Ser Leu Gly Thr
      355      360      365
Gly Ile Gly Gly Pro Asn Ser Ser Pro Arg Arg Leu Arg Gly Met Phe
      370      375      380
Ser Trp Asp Gln Pro Glu Asn Gln Pro Ser Ser Ala Gly Pro Ile Gly
      385      390      395      400
Ser Asn Arg Ser Ile Gly Leu Gly Phe Asp Gly Gln Ser Gln Glu Arg
      405      410      415
Met Pro Ile Arg Gln Pro Arg Gly Pro Val Pro Glu Lys Gly Ser Gly
      420      425      430
Phe Arg Arg Ser Asn Gly His Gln Ser Arg Gly Ser Asp Glu Leu Arg
      435      440      445
Thr Asn Ser Gly Val Glu Ile Ile Val Glu
      450      455

```

&lt;210&gt; 42205

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42205

```

His Ile Thr Gly Tyr Leu Leu Val Leu Glu Tyr Ile Ala Val Phe Arg
1           5           10           15
Leu Asp Ser Gln Leu Thr Gln Met Pro Arg Cys Leu Ser Arg Ile Pro
20           25           30

```

18827

Ala Pro Tyr Leu Leu Leu Gly Arg Leu Val Phe Leu Phe Phe Ile Gly  
 35 40 45  
 Phe Met Thr Pro Asp Val Arg Asp Pro Met Phe Glu Met Ala Ala Ile  
 50 55 60  
 Phe Ala Arg Gly Ile Ile Thr Cys Phe Val Phe Val Ile Gly His Ala  
 65 70 75 80  
 Met Thr Arg Gly Ala Gln Val Gly Tyr Val Leu Val Asp Asn Ala Gln  
 85 90 95  
 Gly Phe Ile His Asn Arg Ala Val Leu Ala Phe Gln Leu Thr Val  
 100 105 110

<210> 42206

<211> 650

<212> PRT

<213> A.fumigatus

<400> 42206

Glu Lys Lys Asp Ser Ser Pro Arg Gly Asn Glu Lys Lys Pro Cys Leu  
 1 5 10 15  
 Pro Phe Thr Met Ser Pro Ser Thr Thr Lys Asn Arg Pro His Leu Pro  
 20 25 30  
 Asn Asn Pro His His Gln Leu Glu Trp Ser Asn Ser Thr Ala Asn Leu  
 35 40 45  
 Phe Leu Gly Gly Val Gly Val Arg Lys Ser Trp Met Leu Gly Ala Ser  
 50 55 60  
 Pro Ser Val Ser Ile Ser Ser Ala Ser Gly Ala Pro Thr Ile Pro Leu  
 65 70 75 80  
 Asp Ser Ser Cys Gln Ser Ser Leu Ala Val Val Ser Ala Pro Ser Ser  
 85 90 95  
 Ala Phe Ala Ser Ala Ile Ala Asn Gln Pro Lys Ser Arg Pro Gln Gly  
 100 105 110  
 Ile Gln Asp Pro Pro Ser Ser Ser Val Thr Ile Val Pro Arg Ser Gln  
 115 120 125  
 Lys Ser Gln Lys Asp Asn Asn Glu Val Ala Phe Thr Ala Asn Gly Asn  
 130 135 140  
 Phe Ile Asn Ala Pro Thr Ala Ser Pro Pro Ser Val Leu Met Ser Pro  
 145 150 155 160  
 Val Thr Pro Gly Gly Ile Leu Pro Gln Asn Arg Glu Ile Leu Pro Pro  
 165 170 175  
 Cys Pro Gly Val Thr Pro Ser Leu Pro Val Ser Thr Ile Thr Ala Thr  
 180 185 190  
 Pro Asn Val Ser Ala Pro Pro Val Ile Asn Glu Ser Thr Val Ser Val  
 195 200 205  
 His Ala Thr Gln Pro Leu Gln Gln Ser Arg Ser Ser Ser Leu Ser Val  
 210 215 220  
 Ser Gly Phe Lys Ala Val Pro Pro Ile Ile Ala Leu Pro Val Leu Glu  
 225 230 235 240  
 Thr Gly Asn Asp Arg Cys Leu Ser His Gly Val Pro Pro Ser Pro Pro  
 245 250 255  
 Pro Ile Ser Gly Pro Met Gln Ile His Arg Gln Leu Glu Asn Pro Arg  
 260 265 270  
 Gln Ile Asn Gln Arg Asn Leu Met Pro Ala Thr Ala Ala Pro Thr Thr  
 275 280 285  
 Val Gly Gly Glu Arg Met Ala Glu Glu Thr Ser Ala Pro Ser Thr Ile  
 290 295 300  
 Arg Gly Gly Gln Arg His Gln Glu Ile Glu Ser Pro Gln Gln Phe Ile

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<210> 42207
<211> 1005
<212> PRT
<213> A.fumigatus
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<400> 42207
Leu Thr Cys Gly Trp Ser Leu Asp Asp Phe Asp Ala Arg Gly Thr Asp
1          5          10          15
Glu Leu Thr Leu Arg Arg Gly Glu Lys Ile Glu Leu Ile Glu Leu Asp
20          25          30
Glu Gly Phe Gly Asp Gly Trp Tyr Leu Gly Lys Asp Val Arg Thr Gly
35          40          45

```

Asp Asn Arg Ser Phe Pro Trp Trp Tyr Ala Pro Leu Phe Arg Asn Lys  
 50 55 60  
 Leu Val Val Val Val Ile Thr Asn Lys Asp Arg Tyr Leu Val Tyr Thr  
 65 70 75 80  
 Thr Ala Ala Pro Lys Ile Pro Ile Arg Pro Pro Arg Glu Asp Met Ile  
 85 90 95  
 Val Ser Asp Asp Pro Lys Pro Ala Ala Glu Asp Gln Leu Ser Ser Glu  
 100 105 110  
 Leu Val Ala Ser Pro Lys Ser Gly Glu Ser Thr Pro Gln Ala Ser Arg  
 115 120 125  
 His Ala Ser Ile Ser Glu Thr Gln Pro Pro Glu Val Ala Thr Asp Leu  
 130 135 140  
 Ser Ser Met Lys Ser Ser Pro Asn Gln Gln His Arg Ser Ser Ser Ser  
 145 150 155 160  
 Pro Leu Pro Thr Ser Arg Leu Ala Val Asp Ile Gln Gln Ser Ile Arg  
 165 170 175  
 Gln Thr Leu Asp Gly Gln Leu Lys Gly Gln Asp Ser Pro Val Met Asn  
 180 185 190  
 Glu Thr Leu Ser Val Ile Asp Glu His Ile Thr Asp Leu Ser Thr Pro  
 195 200 205  
 Arg His Ser Val Ala Asn His Glu Asn Lys Ala Ser Asn Asp Ser Ser  
 210 215 220  
 Ser Glu Tyr Ser Ser His Leu Glu His Arg Val Ser Tyr Ile Arg Gly  
 225 230 235 240  
 His Glu Thr Asp Glu Glu Glu Glu Asn Gln Pro Thr Glu Glu Gln Val  
 245 250 255  
 Arg Ser Trp Asp Ala Ala Glu Thr Ala Arg His Leu Arg Glu Leu Gly  
 260 265 270  
 Val Glu Ala Lys His Cys Asp Ile Phe Glu Asp Gln Glu Ile Thr Gly  
 275 280 285  
 Asp Val Leu Leu Asp Met Asp Gln Glu Phe Leu Phe Met Lys Glu Phe  
 290 295 300  
 Asp Phe Gly Val Met Gly Arg Arg Leu Lys Thr Trp His Lys Val Lys  
 305 310 315 320  
 Ala Phe Gln Glu Glu Val Lys Gly Leu Lys Gln Gln Gln Gln Gln Arg  
 325 330 335  
 Gly Ser Ala Ser Ser Tyr Pro Ala Pro Pro Glu Asp Arg Ser Leu Ser  
 340 345 350  
 Arg Ala Ser His Thr Gly Pro Phe Leu Pro Arg Ile Pro His Leu Thr  
 355 360 365  
 Arg Gly Ser Ala Gly Ser Ile Gln His Pro Arg Leu Val Ser Ser Gly  
 370 375 380  
 Ile Ser Ser Thr Thr Ser Ser Pro Met Thr Pro Gln Thr Pro Val Phe  
 385 390 395 400  
 Met Asp His Gln Arg Arg Pro Ser Ala Ala Ser Ile Arg Glu Ile Asn  
 405 410 415  
 His His Arg Arg His Ser Ser Ile Asp Thr Gly His Arg Val Asp Thr  
 420 425 430  
 Ser Pro His Thr Gly His Phe Lys Gln Ser Ser Phe Asp Arg Asn Trp  
 435 440 445  
 Thr Leu Ala Ser Gly Ser Gln Arg Val Pro Ser Arg Ser Gly Thr Tyr  
 450 455 460  
 Pro Ile Tyr Pro Glu Gly Val Leu Pro Gln His Thr Leu Arg Arg Pro  
 465 470 475 480  
 Asp Thr Asn Glu Ser Asp Ser Ala Val Ser Val Thr Asp Arg Tyr Asp  
 485 490 495

## 18830

Glu Leu Glu Arg Gly Tyr Phe Ser Gly Pro Glu Gly Asp Thr Thr Lys  
 500 505 510  
 Asn Lys Arg Leu Leu Gln Lys Arg Ser Ser Val Thr Gly Ser Ala Thr  
 515 520 525  
 His Ser Arg Gln Pro Ser Tyr Ala Asp Asp Lys Leu Lys Val Asn Lys  
 530 535 540  
 Arg His Ser Arg Ile Ser Ser Val Asp Ser Ile Arg Asp Thr Ala Lys  
 545 550 555 560  
 Gln Ala Pro Ala Ala Val Val Asp Val Gln Ser Thr Ala Ala Pro Lys  
 565 570 575  
 Ser Arg Phe Arg Ser Leu Ser Thr Arg Val Ile Asp Arg Arg Gly Pro  
 580 585 590  
 Thr Ser Gln Ser Ser Thr Pro Thr Ser Thr Glu Lys Pro Ser Ser Gly  
 595 600 605  
 Phe Phe Ser Ser Phe Ala Pro Leu Ala Pro Phe Val Gly Lys Ser Asp  
 610 615 620  
 Ala Glu Gly Ser Gly Arg Ala Ser Ser Leu Ser Ile Ser Gln Ser Lys  
 625 630 635 640  
 Ser Ala Gly Pro Lys Thr Arg Arg Thr Gly Gly Leu Arg Ile Ile Ser  
 645 650 655  
 Asp Val Val Gly Lys Gly Ile Asp Thr Ser Val Ala Pro Ala Ser Pro  
 660 665 670  
 Val Arg Asp Thr Asp Pro Ala Ser Val Arg Thr Gly Ser Thr Thr Pro  
 675 680 685  
 Ser Thr Ser Lys Ser Ser Glu Arg His Ser Thr Glu Ser Ser Ile Lys  
 690 695 700  
 Asn Ala Glu Gly Gly Ile Ser Leu Pro Arg Pro Asn Ala Ser Val Lys  
 705 710 715 720  
 Ala Gly Pro Lys Ser Lys Lys Asp Thr Ser Ala Tyr Met Arg Gly Leu  
 725 730 735  
 Glu Lys Lys Thr Pro Gln Glu Gln Met Asp Gly Cys Asp Tyr Ser Gly  
 740 745 750  
 Trp Met Lys Lys Arg Ser Ser Asn Leu Met Thr Thr Trp Lys Pro Arg  
 755 760 765  
 Leu Phe Val Leu Arg Gly Arg Arg Leu Ser Tyr Tyr Tyr Ser Glu Asn  
 770 775 780  
 Asp Thr Glu Glu Arg Gly Leu Ile Asp Ile Thr Ala His Arg Val Leu  
 785 790 795 800  
 Arg Ala Asp Asn Asp Pro Ile Val Ala Leu His Ala Thr Ile Thr Gly  
 805 810 815  
 Ala Thr Ala Ser Pro Thr Ser Pro Ser Pro Ser Asn Gly Ala Asp Thr  
 820 825 830  
 Ser Pro Ala Asp Lys Ser Ser Thr Ser Pro Ser Ala Arg Asn Ser Lys  
 835 840 845  
 Leu Asp Pro Glu Gly Pro Phe Phe Phe Lys Leu Val Pro Pro Lys Thr  
 850 855 860  
 Ser Arg Thr Val Gln Phe Thr Lys Pro Ala Val His Tyr Phe Gln Val  
 865 870 875 880  
 Asp Ser Val Arg Glu Gly Arg Leu Trp Met Ala Ala Leu Met Lys Ala  
 885 890 895  
 Thr Ile Glu Arg Asp Met Ser Arg Pro Val Glu Thr Thr Asn Lys Gln  
 900 905 910  
 Lys Thr Val Ser Leu Lys Gln Ala Arg Met Met Asn Gln Arg Pro Pro  
 915 920 925  
 Ala Leu Met Thr Glu Ser Glu Leu Gln Glu Thr Lys Glu Glu Glu Lys  
 930 935 940



## 18831

Arg Asn Arg Ala Ser Thr Glu Thr Glu Glu Arg Asn Asn Gly Leu Arg  
 945 950 955 960  
 Ile His Gly Leu Asn Val Asp Lys Ala Pro Val Thr Gly Glu Ser Lys  
 965 970 975  
 Glu Asp Glu Pro Ala Ser Pro Asp Ser Leu Asp Gly Leu Asp Thr Gly  
 980 985 990  
 Pro Ser Cys Leu Leu Pro Glu Thr Leu Leu Lys Ser Asp  
 995 1000 1005

&lt;210&gt; 42208

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42208

Asn Ile Asn Met Ile Asn Val Leu Met Leu Ile Tyr Ile Leu Phe Leu  
 1 5 10 15  
 Tyr Pro Leu Leu Ser Leu Thr Val Pro Leu Trp Gln Tyr His Tyr Gly  
 20 25 30  
 Asn Ser Pro Phe Asn Ala Leu Ser Lys Val Pro Ala Glu Gly Ser Arg  
 35 40 45  
 Ala Asn Thr Arg Tyr Glu Thr Asn Ile His Thr Pro Lys Glu Ile Asp  
 50 55 60  
 Ser Cys Ile Lys Tyr Val Leu Tyr Ile Asp Gly Val Ser Gly  
 65 70 75

&lt;210&gt; 42209

&lt;211&gt; 494

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42209

Asp Gln Trp Lys Arg Lys Lys Gln Thr Lys Glu Gln Ala Arg Glu Ala  
 1 5 10 15  
 Lys Arg Ala Lys Leu Asp Pro Asp Ser Ala Lys Thr Ala Lys Asp Val  
 20 25 30  
 Met Asp Glu Asn Ala Arg Lys Arg Lys Arg Gly Glu Glu Glu Glu Glu  
 35 40 45  
 Glu Glu Glu Gln Asn Gly Ser Glu Ser Ser Glu Glu Glu Glu Leu Gly  
 50 55 60  
 Ser Glu Leu Pro Lys Glu Gly Leu Lys Arg Gly Asp Ala Lys Ser Lys  
 65 70 75 80  
 Lys Gln Lys Gln Ala Ala Thr Glu Gln Pro Asp Ala Thr Ala Ala Lys  
 85 90 95  
 Leu Glu Glu Ala Glu Ala Arg Lys Lys Leu Arg Glu Glu Lys Lys Ala  
 100 105 110  
 Gln Lys Lys Ala Ala Gln Lys Glu Lys Lys Lys Ala Lys Glu Ala Leu  
 115 120 125  
 Lys Lys Asp Lys Lys Ser Glu Lys Ser Glu Ser Lys Pro Ala Ser Asp  
 130 135 140  
 Lys Gly Glu Glu Gln Lys Pro Ser Lys Val Glu Asn Ser Asp Asp Glu  
 145 150 155 160  
 Ile Glu Gln Glu Gly Ala Val Pro Glu Glu Gly Leu Ser Leu Glu Phe  
 165 170 175  
 Asn Pro Glu Pro Ala Glu Gln Ser Ser Ser Pro Ser Ser Thr Pro Asn  
 180 185 190

## 18832

```

Ser Pro Gly Phe Asp Ala Ser Asn Asp His Ser Gly Ser Ser Ser Ile
      195                200                205
Ser Ser Ile Ala Pro Pro Pro Ala Ser Thr Asp Ala Asn Asp Ala Ser
      210                215                220
Gln Lys Ser Ser Ser Glu Pro Lys Pro Leu Lys Pro Thr Pro Glu Glu
225      230                235                240
Leu Lys Gln Arg Leu Gln Lys Arg Leu Asp Glu Leu Arg Ala Ala Arg
      245                250                255
His Ala Asp Gly Phe Asn Gly Lys Pro Ala Arg Asn Arg Gln Glu Leu
      260                265                270
Ile Glu Ala Arg Arg Gln Lys Ala Glu Gln Arg Lys Ala His Lys Lys
      275                280                285
Leu Leu Arg Gln Lys Ala Lys Glu Glu Glu Gln Arg Ala Lys Asp Glu
290      295                300
Ala Met Ala Lys Arg Phe Ser Pro Gly Gly Ser Gly Ser Leu Leu Ala
305      310                315                320
Ser Pro Arg Ser Pro Ala Asp Ser Ile Gly Ser Asn Val Asn Phe Ser
      325                330                335
Phe Gly Arg Val Val Phe Ala Asp Gly Gln Val Ala Asp Pro Ser Leu
      340                345                350
Thr Asn Val Arg Glu Gln Pro Lys Arg His Gly Pro Gln Asp Pro Ala
      355                360                365
Thr Ala Leu Lys Ala Ala Glu Ala Lys Lys Ala Arg Leu Ala Glu Met
370      375                380
Asp Glu Glu Lys Arg Ala Asp Ile Glu Gln Lys Asp Met Trp Leu Asn
385      390                395                400
Ala Lys Lys Arg Ala His Gly Glu Lys Val Arg Asp Asp Thr Ser Leu
      405                410                415
Leu Lys Lys Ala Leu Lys Arg Lys Glu Ser Ala Lys Lys Lys Ser Glu
      420                425                430
Arg Glu Trp Lys Glu Arg Leu Glu Ala Val Lys Lys Gly Lys Asp Ala
435      440                445
Arg Gln Gln Lys Arg Glu Glu Asn Leu Arg Lys Arg Arg Glu Glu Lys
450      455                460
Gly Asn Lys Gly Lys Lys Pro Ala Ala Gly Lys Lys Lys Ala Arg Pro
465      470                475                480
Gly Phe Glu Gly Ser Phe Lys Ala Lys Val Gly Gly Lys Lys
      485                490

```

&lt;210&gt; 42210

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42210

```

Ser Ile Leu Arg Ser Gly Phe Thr Ser Ser Gly Asn Leu Pro Leu Pro
1      5      10      15
Pro Thr Leu Asn Thr Val Thr Met Phe Arg Ser Ala Val Val Arg Ser
      20      25      30
Leu Arg Ala Ser Val Pro Arg Ala Val Arg Thr Pro Ala Ala Phe Gln
      35      40      45
Ile Arg Ser Ser Pro Val Ala Arg Pro Ala Gln Phe Ala Pro Arg Phe
50      55      60
Ala Tyr Gln Gly Val Arg Leu Tyr Ser Ala Pro Ala Gly Leu Asn Lys
65      70      75      80
Glu Glu Val Glu Gly Arg Ile Val Asn Leu Leu Lys Asn Phe Asp Lys

```

[illegible]

```
<210> 42211
<211> 182
<212> PRT
<213> A.fumigatus
```

```
<210> 42212
<211> 69
<212> PRT
<213> A.fumigatus
```

<400> 42212															
Arg	Val	Cys	Gln	Gln	Glu	Phe	Ser	Ile	Glu	Ile	Pro	Asp	Lys	Glu	Ala
1				5					10					15	
Asp	Ala	Ile	His	Ser	Gly	Lys	Tyr	Thr	Arg	Thr	Val	Pro	Ser	Glu	Ser
			20					25					30		
Leu	Ile	Gln	Val	His	Leu	Leu	Ile	Leu	Ser	Thr	Val	Asp	Lys	Ala	Val
		35					40					45			
Glu	Tyr	Ile	Leu	Ala	Gln	Pro	Asp	Gly	Lys	Phe	Ile	Ser	Cys	Glu	Tyr

## 18834

50  
Lys Asn Pro Gly Tyr  
65

55

60

<210> 42213  
<211> 146  
<212> PRT  
<213> A.fumigatus

<400> 42213  
Thr His His His Ile Arg Leu Thr Ala Glu Ser Pro Ser Ser Ser Val  
1 5 10 15  
Ala Gln Pro Val Pro Arg Phe Gln Ser Thr Val Leu His Pro Asp Ile  
20 25 30  
Leu Met Ala Ser Ala Gly Gly Leu Thr Arg Arg Arg Gly Gly Gly Arg  
35 40 45  
Val Ala Gly Gly Asp Asp Asn Asp Asp Ser Arg Val Ser Ser Pro Ile  
50 55 60  
Ser Arg Asn Gly Ser Ala Leu Asp His Arg Gly Pro Glu Ala Ser Phe  
65 70 75 80  
Thr Ser Ser Glu Asn Gly His Lys Ile Ala Phe Asp Pro Arg Asp Leu  
85 90 95  
Ser Glu Ser Glu Glu Arg Ser Lys Gln Pro Lys Leu Thr Leu Met Glu  
100 105 110  
Glu Val Leu Leu Leu Gly Leu Lys Asp Lys Gln Val Ser Ala Gly Leu  
115 120 125  
Lys Ile Leu Pro Arg Ser Ser Met Ser Arg Leu Cys Ala Leu Thr Arg  
130 135 140  
His Cys  
145

<210> 42214  
<211> 93  
<212> PRT  
<213> A.fumigatus

<400> 42214  
Gly Tyr Leu Ser Phe Trp Asn Glu Asn Ile Ser Ser Val Leu Arg Gly  
1 5 10 15  
Cys Ile Val Ile Glu Leu Val Leu Arg Gly Arg Ile Ser Met Gln Lys  
20 25 30  
Asp Ser Ser Arg Arg Arg Phe Pro Leu Ala Asp Arg Val Ile Glu Val  
35 40 45  
Ile Asp Asp Thr Leu Thr Gly Glu Val Leu Leu Asp Glu Ala Leu Lys  
50 55 60  
Met Met Lys Ser Ser Glu Lys Met Ser Val Asn Ser Trp Ile Asp Leu  
65 70 75 80  
Met Ser Gly Ala Cys Lys His Ser Trp Ser Leu Lys Phe  
85 90

<210> 42215  
<211> 394  
<212> PRT  
<213> A.fumigatus

<400> 42215

## 18835

```

Ile Leu Phe Ile Met Lys Pro Ala Lys Pro Ala Gln Thr Asp Met Asp
1      5      10      15
Glu Gln Thr Phe Val Pro Ser Thr Met Arg Ala Leu Tyr Tyr Ser Leu
20      25      30
Ser Glu Asn His Ser His Asp Val Lys Ala Val Asp Cys Pro Glu Pro
35      40      45
Gly Leu Ile Phe Asp Thr Asp Phe Pro Thr Pro Ile Pro Ser Pro Thr
50      55      60
Gln Tyr Leu Ile Lys Val Gln Thr Ala Ala Phe Ser His Asp Glu Leu
65      70      75      80
Arg Leu Ala Lys Val Leu Asn Pro Arg Ile Ser Met Pro Asn Ile Pro
85      90      95
Leu His Asn Phe Cys Gly Thr Val Ile Ser Thr Pro Gly Glu Asp His
100     105     110
Trp Arg His Ala Gly Pro Lys Phe Lys Val Glu Asp Ala Val Phe Gly
115     120     125
Leu Ile Ser His Ser Arg Asp Gly Ala Ala Ala Asp Tyr Val Leu Ala
130     135     140
Thr Glu Asn Glu Leu Ala Phe Lys Pro Arg Asn Ile Ser Ala Ala Glu
145     150     155     160
Ala Ala Thr Ile Pro Leu Pro Ala Leu Thr Ala Trp Gln Ala Leu Phe
165     170     175
Thr Tyr Gly Lys Leu Asn Pro Ala Asp Thr Gly His Val Arg Gly Gly
180     185     190
Leu Arg Val Leu Val Thr Asn Ala Arg Asn Ser Glu Phe Gly Ile Gln
195     200     205
Ala Leu Gln Leu Leu Arg Ala Ser Ser Leu Phe Pro His Tyr Arg Pro
210     215     220
Trp Ile Cys Thr Thr Cys Asp Asn Glu Glu Gln Gly Thr Thr Leu Arg
225     230     235     240
Asp Gln Phe Gln Val Asp Glu Tyr Ile Val Ala Ala Leu Pro Leu Pro
245     250     255
Pro Asp Trp Asp Leu Ala Thr Thr Phe Lys Gln Lys Gln Trp Glu Pro
260     265     270
Val Asp Ile Val Ile Asp Cys Ala Gly Glu Asp Met Phe Gln Gln Ala
275     280     285
His Ser Pro Ala Val Val Lys Glu Asp Gly Ala Val Leu Thr Ala Val
290     295     300
Asp Pro Thr Pro Ala Gln Asn Gly Arg Thr Glu Gln Asp Thr Gln Thr
305     310     315     320
Ser Asn Gly Ser Lys Lys Lys Gly Pro Leu Ser Arg Phe Ile Ser Val
325     330     335
Glu Pro Asp Gly Lys Ala Leu Ala His Ile Ala Thr Leu Val Glu Glu
340     345     350
His Ser Val Arg Gly Arg Val Glu Ser Ile Thr Asp Leu Val Asn Ser
355     360     365
Ala Asp Ile Leu Asp Ala Asp Ala Ala Gly Ala Gly Gly Arg Arg
370     375     380
Gly Gly Met Met Val Ile Arg Val Asn Pro
385     390

```

&lt;210&gt; 42216

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42216

```

Ile Leu Lys Lys Gln Arg Ile Asp Val Ser Val Pro Asn Val Asn Leu
1          5          10          15
Glu Asp His Gly Arg Leu Lys Gln His Phe Phe Leu Thr Asn Val Cys
          20          25          30
Trp Ile Val Ser Ala Ser Pro Val Thr Asp Glu Ser Arg Thr Lys Thr
          35          40          45
His Leu Ile Leu Asn Leu Asn Asn Asn Trp Tyr Gly Ser Asn
          50          55          60

```

&lt;210&gt; 42217

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42217

```

Thr Leu Ser Thr Pro Gln Pro Gly Pro Arg Ser Pro His Ser Pro Arg
1          5          10          15
Leu Leu Ala Val Phe Ser Leu Leu Ser Asp Leu Leu Pro Tyr Asn Cys
          20          25          30
Arg Asn Gly Leu Leu Asp Ile Cys Cys Glu Ala Gly Arg Leu Pro Ser
          35          40          45
Pro Tyr Ser Leu Pro Val Gly Leu Phe Ser Pro Ser Phe Val Leu Trp
          50          55          60
Val Gln Ser Gln Pro Phe Ser Ser Ser Val Ser Arg Ala Ala Thr Pro
          65          70          75          80
Ala Gly Pro Pro Gln Pro Gly Phe Arg Leu Pro Ala Pro Arg Lys Trp
          85          90          95
Asp Gln Asp Pro Glu Ser Ser Leu Asp Lys Ala Ser Lys Tyr Phe Leu
          100          105          110
Met Ala Glu Leu Phe Arg Gly Met Tyr Val Val Leu Glu Gln Phe Phe
          115          120          125
Arg Pro Pro
          130

```

&lt;210&gt; 42218

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42218

```

Asp Arg Phe Ser His Tyr Ser Tyr Thr Ile Tyr Tyr Pro Phe Glu Lys
1          5          10          15
Gly Pro Ile Ser Pro Arg Phe Arg Gly Glu His Ala Leu Arg Arg Tyr
          20          25          30
Pro Thr Gly Glu Glu Arg Cys Ile Ala Cys Lys Leu Cys Glu Ala Ile
          35          40          45
Cys Pro Ala Gln Ala Ile Thr Ile Glu Ala Glu Glu Arg Glu Asp Gly
          50          55          60
Ser Arg Arg Thr Thr Arg Tyr Asp Ile Asp Met Thr Lys Cys Ile Tyr
          65          70          75          80
Cys Gly Tyr Cys Gln Glu Ser Cys Pro Val Asp Ala Ile Val Glu Ser
          85          90          95
Lys Leu Ile Arg Gln Val Asp Gln Tyr Asp Pro Thr Ala Asp Arg Ile
          100          105          110
His Ala Ala Ser Asn Ala Glu Tyr Ala Thr Glu Thr Arg Glu Glu Leu

```

```
<210> 42219
<211> 293
<212> PRT
<213> A.fumigatus
```

```
<220>
<221> UNSURE
<222> (1), (2), (3)
<223> Identity of amino acid sequences at the above locations are unknown.
```

[illegible]

<210> 42220  
 <211> 234  
 <212> PRT  
 <213> A.fumigatus

<400> 42220  
 Val Gln Ser Gly Gly Cys Arg Leu Arg Thr Asp Gln Ser Gln Pro Arg  
 1 5 10 15  
 Arg Arg Arg Ser Arg Leu Arg Pro Arg Asn Gly Lys Arg Ala Arg Ile  
 20 25 30  
 Gln Ala Gln Glu His Gln Arg Arg Arg Gly Gly Asp Asp Pro Thr Thr  
 35 40 45  
 Arg Pro His Arg Met Ala Ser Pro Leu His Leu Arg Gln Ile Glu Pro  
 50 55 60  
 Arg Arg His Gly Pro Cys Ser Arg Trp Pro Ala Arg Ala Arg His Gln  
 65 70 75 80  
 Arg Pro Gln Gln Arg Val Arg His Pro Gly Ala Ser Ala Ala Glu Gly  
 85 90 95  
 Leu Val Leu Val Pro Ala Leu Pro Pro Leu Asp Leu His Asn Leu Arg  
 100 105 110  
 Gln Arg Arg Thr Gly Asp Asn Thr Pro Arg Pro Ile Pro Gly Arg Arg  
 115 120 125  
 Val His Cys Arg Gly Pro Pro Val Ala Ala Arg Leu Gly Pro Gly His  
 130 135 140  
 Asn Val Gln Ala Glu Ala Val Gly Ala Arg Gly Tyr Arg His Arg Leu  
 145 150 155 160  
 Arg Arg Arg Arg His Val Pro Ala Ser Pro Leu Thr Ser Ser Cys Gln  
 165 170 175  
 Gly Arg Trp Arg Arg Pro Asn Arg Arg Arg Pro His Ala Gly Ser Glu  
 180 185 190  
 Arg Ala Asp Arg Ala Arg Tyr Pro Asp Gln Gln Arg Leu Glu Glu Glu  
 195 200 205  
 Arg Pro Val Glu Pro Val Tyr Leu Cys Arg Ala Gly Trp Glu Gly Ala  
 210 215 220  
 Arg Ala His Arg His Val Ser Arg Gly Thr  
 225 230

<210> 42221  
 <211> 351  
 <212> PRT  
 <213> A.fumigatus

<400> 42221  
 Asp Leu Arg His Arg Ser Asn Ala Ala Lys Thr Met Pro Pro Lys Asn  
 1 5 10 15  
 Pro Leu Ser Pro Pro Thr Lys Pro Phe Phe Lys Ser Gln Pro Val Arg  
 20 25 30  
 His Asp Gly Gln Gln Ala Pro Pro Val Val Gln Tyr Asn Leu Asn  
 35 40 45  
 Gln Leu Ser Ser Thr Ser Thr Ser Ala Ala Asn Gly Glu Arg Ile Leu  
 50 55 60  
 Ile Leu Thr Pro Met Ala Arg Phe Val Pro Glu Tyr Trp Asp Asn Val  
 65 70 75 80  
 Val Lys Leu Thr Tyr Pro His Glu Leu Ile Ser Ile Gly Phe Ile Ile  
 85 90 95  
 Pro Lys Asn Lys Glu Gly Asn Ala Ala Leu Ala Ala Leu Glu Ala Ala



## 18839

```

      100              105              110
Ile Ala Lys Thr Gln Ser Gly Pro Ile Asp Lys Arg Phe Ala Ser Ile
      115              120              125
Ser Ile Leu Arg Gln Asp Phe Glu Pro Pro Leu Gln Ser Gln Asp Glu
      130              135              140
Lys Glu Arg His Lys Ile Ser Asn Gln Lys Ala Arg Arg Glu Ser Met
145              150              155              160
Ser Arg Ala Arg Asn Ser Leu Leu Phe Thr Thr Leu Gly Pro Ala Thr
      165              170              175
Ala Trp Val Leu Trp Leu Asp Ala Asp Ile Val Glu Thr Pro Pro Thr
      180              185              190
Leu Ile Gln Asp Leu Thr Ala His Asp His Pro Val Leu Val Pro Asn
      195              200              205
Cys Tyr Gln Arg Tyr Tyr Asn Ser Glu Lys Lys Lys Met Asp Val Arg
      210              215              220
Pro Tyr Asp Tyr Asn Ser Trp Ile Asp Ser Ser Thr Ala Gln Ser Met
225              230              235              240
Ala Ala Glu Met Gly Pro Asp Glu Ile Leu Leu Glu Gly Tyr Ala Glu
      245              250              255
Met Pro Thr Tyr Arg Thr Leu Met Ala His Leu Ala Asp Thr Ala Asn
      260              265              270
Pro Asn Pro Lys Lys Val Ile Glu Leu Asp Gly Val Gly Gly Thr Ala
      275              280              285
Leu Met Val Lys Ala Glu Val His Arg Asp Gly Ala Met Phe Pro Ala
      290              295              300
Phe Pro Phe Tyr His Leu Val Glu Thr Glu Gly Phe Ala Lys Met Ala
305              310              315              320
Lys Arg Leu Gly Tyr Ser Val Tyr Gly Leu Pro Asp Tyr Phe Val Ser
      325              330              335
Arg Thr Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Gly
      340              345              350

```

&lt;210&gt; 42222

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42222

```

Leu Glu Phe Arg Cys Asp Arg Asp Arg Lys Leu Thr Leu Thr Gln Asn
1              5              10              15
Tyr Arg Arg Leu Gly Leu Val His Lys Leu Asn Ala Pro Thr Gly Gly
      20              25              30
Ser Glu Lys Lys Pro Thr Lys Asp Gly Arg Ile Glu Glu Leu Pro Glu
      35              40              45
Asp Pro Leu His Ile Arg Ser Ser Ala Lys Ala Ser Ala Lys Gln Ala
      50              55              60
Ala Met Gly Glu Thr Arg Val Glu Arg Asp Pro Glu Thr Gly Lys Ile
65              70              75              80
Ile Arg Val Ile Arg Asp Glu Glu Glu Ile Glu Ile Ala Gly Arg Lys
      85              90              95
Val Lys Pro Ser Asn Pro Leu Asn Asp Pro Leu Asn Glu Leu Ser Glu
      100              105              110
Asp Glu Ala Ala Arg Gln Pro Ala Ser Gln Arg Thr Asn Ala Lys Ser
      115              120              125
Ala Val Val Gln Gln Leu Glu Arg Gln Ala Asp Gln Glu Gly Lys Ala
      130              135              140

```

## 18840

Val Lys Ala Lys Lys Pro Arg His Gln Ser Lys Arg Glu Glu Glu Trp  
 145 150 155 160  
 Ile Met Arg Leu Ile Glu Arg His Gly Glu Asn Tyr Ser Ala Met Ala  
 165 170 175  
 Arg Asp Arg Lys Leu Asn Pro Met Gln Gln Ser Glu Gly Asp Leu Lys  
 180 185 190  
 Arg Arg Ile Arg Lys Trp Lys Ala Asn His Ser Ser  
 195 200

&lt;210&gt; 42223

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42223

Asp Leu Pro Arg Arg Arg Leu Pro Gly Ala Cys Ala Leu Arg His Gly  
 1 5 10 15  
 Arg Thr Gln Gln Glu Ser Pro Pro Arg Thr Arg Asp His Gly Arg Leu  
 20 25 30  
 Leu His Leu Arg Gly His Gly Gln Ser Ser Pro His Cys Asn Met Met  
 35 40 45  
 Arg Lys Ala Cys Pro Leu Thr Leu Ala His Arg His Arg Gln Leu Phe  
 50 55 60  
 Pro Arg His Asn His Gln Leu His His Gln His Arg Gln His Arg Ala  
 65 70 75 80  
 Thr Glu Ala Gln Ile His Ser Arg His Gln Glu Arg Thr Arg Arg Arg  
 85 90 95  
 Glu Arg His Gln Pro Gln Arg Gln Thr Arg Arg Leu Pro Gln Pro His  
 100 105 110  
 Arg Arg Leu His Pro Gln His His Arg Arg Pro Gly Asn Val Leu Leu  
 115 120 125  
 Leu Leu Arg Leu Pro His His Arg Arg Asn His Asn Arg Cys Arg Leu  
 130 135 140  
 Leu Pro Arg Asn Pro Pro Arg Ser Arg  
 145 150

&lt;210&gt; 42224

&lt;211&gt; 484

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (393), (408), (409)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42224

Pro Arg Asp Cys Phe His His Cys Thr Arg Asp Asp Asp Met Arg Tyr  
 1 5 10 15  
 Gly Ile Ser Val His Ala Thr Glu Ile Phe Ala His Leu Ile Leu Asp  
 20 25 30  
 Phe Ala Thr Pro Ile Leu Leu Gln Gln Leu Leu Gln Ala Met Gln Asp  
 35 40 45  
 Met Ser Ser Gly Lys Arg Pro Ala Met Thr Tyr Ala Leu Ala Thr Leu  
 50 55 60  
 Val Val Arg Val Val Ala Ala Gln Ser Gln Val Leu Asn Leu Trp Phe

## 18841

65					70					75				80
Gly	Arg	Arg	Cys	Tyr	Glu	Arg	Ser	Arg	Gly	Glu	Met	Ile	Met	Met
				85					90				95	
Tyr	Glu	Lys	Ala	Leu	Ser	Arg	Lys	Asn	Val	Phe	Asp	Thr	Gln	Ser
			100					105				110		
Gln	Lys	Asp	Glu	Gly	Pro	Ala	Asn	Arg	Glu	Leu	Ala	Glu	Glu	Asp
		115					120					125		
Asp	Glu	Glu	Ala	Glu	Ile	Pro	Thr	Arg	Arg	Lys	Phe	Cys	Gly	Ile
	130					135				140				
Ser	Gly	Ser	Arg	Gln	Thr	Thr	Lys	Lys	Pro	Ala	Lys	Thr	Ala	Ala
145				150					155					160
Met	Gly	Lys	Ile	Phe	Asn	Leu	Leu	Arg	Gly	Asp	Val	Tyr	Glu	Val
			165					170					175	
Gln	Arg	Phe	Trp	Glu	Val	Asp	Ser	Leu	Ile	Asp	Lys	Pro	Leu	Gly
		180					185					190		
Ile	Ile	Ala	Ile	Val	Leu	Val	Trp	Lys	Leu	Phe	Gly	Pro	Ser	Cys
	195					200					205			
Leu	Gly	Ile	Leu	Ala	Ile	Ile	Val	Ala	Gln	Ala	Leu	Asn	Ala	Val
210					215				220					
Thr	Arg	Thr	Leu	Leu	Arg	Trp	Glu	Arg	Val	Arg	Arg	Leu	Ala	Thr
225				230				235						240
Ala	Arg	Leu	Gln	Ile	Thr	Ser	Gln	Phe	Val	Glu	Ala	Leu	Arg	His
			245					250					255	
Arg	Trp	Tyr	Gly	Trp	Gln	Asp	His	Trp	Tyr	Arg	Gln	Val	Met	Asp
	260						265					270		
Arg	Gln	Ser	Glu	Leu	Asn	Leu	Arg	Ile	Ile	Thr	Asn	Leu	Trp	Ser
	275					280					285			
Leu	Ile	Arg	Phe	Val	Asn	Thr	Phe	Ala	Ser	Gly	Val	Phe	Pro	Val
290				295				300						
Ala	Leu	Tyr	Ala	Tyr	Thr	Leu	Leu	Ala	Gly	His	Pro	Leu	Arg	Ile
305				310				315						320
Ile	Ile	Phe	Pro	Ala	Leu	Gln	Leu	Phe	Thr	Met	Leu	Glu	Thr	Arg
		325						330					335	
Arg	Asp	Ile	Pro	Gly	Leu	Ile	Thr	Val	Leu	Ile	Asn	Ala	Ser	Ile
	340						345					350		
Val	Glu	Arg	Ile	Glu	Asp	Phe	Met	Ala	Glu	Pro	Asn	Lys	Glu	Asn
	355					360					365			
Ala	Thr	Lys	Pro	Ala	Asp	Ser	Ala	Ser	Ile	Gln	Leu	Gln	His	Cys
	370				375					380				
Tyr	Ala	Trp	Pro	Gly	Gln	Val	Val	Xaa	Val	Leu	Ser	Asp	Ile	Asn
385				390				395						400
Thr	Ile	Ser	Lys	Gly	Leu	Thr	Xaa	Xaa	Ser	Gly	Lys	Val	Gly	Ala
			405				410					415		
Lys	Thr	Ala	Leu	Leu	Gln	Gly	Ala	Pro	Arg	Glu	Ser	Trp	Asn	Gly
	420					425						430		
Gly	Gly	Ser	Ala	Lys	Ile	Pro	Asn	Glu	Leu	Leu	Gly	Tyr	Cys	Ala
	435					440					445			
Thr	Pro	Trp	Ala	Pro	Glu	His	Glu	Tyr	Pro	Arg	Arg	His	Pro	Phe
	450				455					460				
Ser	Ser	Pro	Tyr	Asp	Glu	Gln	Arg	Tyr	Gln	Arg	Val	Leu	Asp	Ala
465				470				475						480
Gly	Leu	Ala	Ser											

&lt;210&gt; 42225

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42225

Cys Glu Arg His Ala His Ser His Ser His Thr Asp Thr Asp Ser Ser  
 1 5 10 15  
 Ser His Gly Thr Thr Thr Ser Ser Thr Thr Ser Thr Ala Asn Thr Glu  
 20 25 30  
 Leu Arg Lys Arg Lys Ser Thr Pro Ala Thr Lys Lys Glu Pro Glu Asp  
 35 40 45  
 Glu Lys Asp Ile Asn Pro Ser Val Lys Leu Gly Gly Tyr Leu Asn Leu  
 50 55 60  
 Ile Ala Asp Phe Thr His Asn Ile Thr Asp Gly Leu Ala Met Ser Ser  
 65 70 75 80  
 Ser Phe Tyr Ala Ser Pro Thr Ile Gly Ala Thr Thr Thr Val Ala Val  
 85 90 95  
 Phe Phe His Glu Ile Pro His Glu Val Gly Asp Phe Ala Leu Leu Ile  
 100 105 110  
 Gln Ser Gly Phe Ser Lys Arg Lys Ala Met Gly Ala Gln Phe Val Thr  
 115 120 125  
 Ala Ile Gly Ala Phe Leu Gly Thr Phe Ile Gly Ile Ala Ile Gln Glu  
 130 135 140  
 Leu Gly Gly Gly His Ser Thr Ala Ala Gly Gly Val Thr Gly Ser Ser  
 145 150 155 160  
 Ala Gly Leu Leu Gly Thr Ser Leu Thr Trp Gly Asp Met Leu Leu Pro  
 165 170 175  
 Phe Thr Ala Gly Thr Phe Leu Tyr Val Gly Thr Val Ser Val Ile Pro  
 180 185 190  
 Glu Leu Leu Glu Thr Gly Lys Asp Lys Ala Val Glu Ile Lys Lys Thr  
 195 200 205  
 Ile Val Gln Phe Leu Ala Val Ala Val Gly Ala Gly Ile Met Leu Ala  
 210 215 220

&lt;210&gt; 42226

&lt;211&gt; 756

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42226

Met His Val Ala Leu Leu Pro Asp Leu Lys Asn Phe Glu His Gly Asp  
 1 5 10 15  
 Leu Ser Phe Val Gly Glu Asn Gly Ile Gly Leu Ser Gly Gly Gln Lys  
 20 25 30  
 Ala Arg Val Ala Leu Ala Arg Ala Leu Tyr Ser Thr Ala Arg Val Leu  
 35 40 45  
 Phe Leu Asp Asp Pro Ile Ser Ala Leu Asp His Asn Thr Ala Glu Ala  
 50 55 60  
 Val Val Glu Lys Cys Phe Thr Gly Pro Leu Met Gln Asp Arg Leu Val  
 65 70 75 80  
 Val Leu Val Thr His Arg Thr Ala Leu Val Asn His Leu Ala Asp Gln  
 85 90 95  
 Lys Val Leu Ile Glu Asp Gly Arg Ala Thr Ile His Ser Lys Gln Ala  
 100 105 110  
 Val Ser Ile Thr Ser Ala Ala Asp Lys Asp Ile Gln Ser Leu Gly Lys  
 115 120 125  
 Thr Ala Glu Ala Gln Ser Glu Ile Gln Gly Ala Leu Arg Glu Ala Ala

130 135 140  
 Ala Ser Val Pro Thr Lys Phe Met Glu Glu Glu His Arg Ala Glu Trp  
 145 150 155 160  
 Gly Val Lys Ala Arg Val Tyr Trp Asn Tyr Ile Arg Ala Gly Arg Tyr  
 165 170 175  
 Arg Trp Trp Ile Ser Leu Val Leu Val Leu Ala Val Tyr Arg Leu Thr  
 180 185 190  
 Ser Val Gly Gln Ser Trp Phe Leu Lys Glu Trp Gly Glu Ala Tyr Asn  
 195 200 205  
 Gln Ile Leu Leu Ala Phe Ser Asn Ser Thr Pro Asp Gly Arg Tyr Ser  
 210 215 220  
 Ala Arg Gln Leu Val Ile Pro Tyr Gly Trp Ser Gln Val Ser Arg Trp  
 225 230 235 240  
 Lys Pro Thr Asp Pro Leu Glu Lys Leu Pro Ala Pro Phe Asp Asp Val  
 245 250 255  
 Arg Pro Trp Leu Leu Ala Phe Phe Val Ile Thr Ala Phe Gln Ser Val  
 260 265 270  
 Met Leu Leu Phe Ala Gln Leu Leu Met Leu Val Ile Val Tyr Cys Ala  
 275 280 285  
 Gly Lys Lys Leu Phe His Gln Val Met Val Arg Val Ser His Ala Thr  
 290 295 300  
 Phe Arg Phe Phe Asp Val Thr Pro Val Gly Arg Leu Met Asn Arg Leu  
 305 310 315 320  
 Thr Ser Asp Ile Gly Val Val Asp Gly Asn Ile Ser Glu Gln Phe Gln  
 325 330 335  
 Ala Ile Ala Phe Gln Ala Ile Thr Trp Val Ser Ser Ile Val Val Ile  
 340 345 350  
 Ala Ser Val Thr Pro Ala Phe Leu Gly Phe Ser Phe Ala Leu Thr Ala  
 355 360 365  
 Ala Phe Ile Phe Ile Phe Leu Gln Phe Leu Pro Thr Ser Gln Ser Leu  
 370 375 380  
 Arg Arg Leu Glu Met Val Ser Leu Ser Pro Leu Ile Ser Asn Phe Gly  
 385 390 395 400  
 Glu Leu Leu His Gly Leu Thr Thr Val Arg Ala Phe His Ala Glu Glu  
 405 410 415  
 Arg Phe Gln Asn Arg Val Ile Ala Val Val Asp Lys Phe Gln Gly Met  
 420 425 430  
 Asp His Phe Tyr Trp Ser Leu Gln Ser Trp Leu Met Tyr Arg Phe Glu  
 435 440 445  
 Thr Leu Ser Ala Ala Ser Thr Leu Cys Leu Thr Val Leu Ala Leu Tyr  
 450 455 460  
 Thr Asn Val Thr Pro Gly Leu Ala Ala Phe Val Leu Ile Ala Ala Asn  
 465 470 475 480  
 Asn Phe Val Thr Ser Thr His Ala Leu Cys Lys Gln Phe Gly Gln Leu  
 485 490 495  
 Gln Met Asp Phe Val Ser Val Glu Arg Ile Asp Glu Leu Leu Arg Ile  
 500 505 510  
 Glu Gln Glu Asn Pro Gly Thr Ile Glu Pro Pro Ala Cys Trp Pro Arg  
 515 520 525  
 Phe Gly Gln Asp Ile Thr Phe Asp Asp Val Thr Ile Arg Tyr Ala Pro  
 530 535 540  
 His Leu Glu Pro Ser Leu Arg Ser Ile Ser Leu Thr Ile Pro Gly Gly  
 545 550 555 560  
 Ser Thr Thr Ala Val Ile Gly Arg Thr Gly Ser Gly Lys Ser Thr Leu  
 565 570 575  
 Ala Val Ser Leu Leu Ser Val Ile Arg Pro Glu Ser Gly Arg Ile Ile

580 585 590  
 Val Asp Gly Ile Asp Ile Ala Gln Val Asp Thr Gln Ala Leu Arg Thr  
 595 600 605  
 Arg Val Thr Phe Val Ala Gln Asp Pro Val Leu Phe Pro Gly Ser Ile  
 610 615 620  
 Arg Leu Asn Leu Asp Pro Thr Gly Glu Tyr Ser Asp Glu Glu Cys Ala  
 625 630 635 640  
 Asp Val Leu Lys Arg Val Cys Ser Arg His Gly Trp Asn Leu Gln Thr  
 645 650 655  
 His Val Glu Ala Gly Gly Arg Asn Leu Ser Gln Gly Glu Arg Gln Leu  
 660 665 670  
 Ile Gly Leu Thr Arg Ala Val Leu Arg His Ser Pro Ile Val Ile Leu  
 675 680 685  
 Asp Glu Ala Thr Ala Ser Ile Asp His Glu Ser Ser Leu Glu Ile Gln  
 690 695 700  
 Gln Val Ile Arg Glu Glu Leu Arg Glu Ser Thr Val Ile Thr Ile Ala  
 705 710 715 720  
 His Arg Leu Glu Ala Ile Lys Asp Ala Asp Tyr Tyr Val Val Leu Asp  
 725 730 735  
 Lys Gly Arg Val Ser Lys His Gly Tyr Val Asn Asp Lys Gly Thr Ser  
 740 745 750  
 Gln Ile Gln Thr  
 755

&lt;210&gt; 42227

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42227

Thr Ile Glu Asp Ile Tyr Leu Tyr Asn Ala Ala Leu Asp Glu Tyr Leu  
 1 5 10 15  
 Lys Gly Asn Pro Val Arg Ile Phe Arg Ile Val Thr Asn Val Leu Ile  
 20 25 30  
 Ser Ile Arg Ile Thr Asp Met Met Asp Thr His Leu Ile Gln Cys Phe  
 35 40 45  
 Lys Gly Tyr Pro Val Leu Val Ala Gln Val Tyr Leu Pro Ser His Ile  
 50 55 60  
 Tyr Glu Asn Gly Lys  
 65

&lt;210&gt; 42228

&lt;211&gt; 601

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42228

Ser Ser Gly Trp Leu Arg Leu Arg Phe Thr Leu Trp Ser Ser Val Val  
 1 5 10 15  
 Leu Ala Phe Ile Pro Leu Gly Lys Asn Glu Gly Gln Leu Gly Leu Val  
 20 25 30  
 Asp Ser Asp Ala Arg Ser Leu Glu Tyr Gln Ile Thr Pro Arg Arg Val  
 35 40 45  
 Gly Ala Ser Leu Phe Gly Ala Gly Ile Gln Ser Val Ser Ala Ile Asp  
 50 55 60  
 His Ala Thr Ile Val Leu Leu Gln Asn His Glu Val Trp Val Phe Ser

## 18845

65					70					75					80
Gln	Tyr	Gly	Tyr	Ser	Arg	Leu	Ser	Phe	Pro	Leu	Gly	Ile	Ser	Ser	Ser
				85					90					95	
Phe	Ile	Arg	Asn	Ser	Phe	Met	Ala	Thr	Arg	Tyr	Asp	Thr	Ser	Ala	Asn
			100					105					110		
Arg	Val	Val	Gln	Val	Lys	Ser	Gly	Gly	Asp	Thr	Ile	Cys	Ala	Arg	Ser
		115					120					125			
Ser	Ser	Gly	Glu	Val	Phe	Thr	Val	Arg	Val	Asn	Arg	Ser	Glu	Asn	Pro
	130					135				140					
Pro	Thr	Ser	Thr	Ser	Thr	Thr	Asn	Pro	Ser	Lys	Thr	Arg	Asn	Ser	Leu
145					150					155					160
Ser	Ala	Pro	Val	Arg	Val	Trp	Thr	Val	Lys	Lys	Ser	His	Met	Ala	Ala
				165				170						175	
Thr	Asp	Val	Asp	Val	Gly	Gln	Asp	Gly	Ser	Ile	Ile	Ile	Cys	Thr	Ala
		180						185					190		
Ser	Gly	Ser	Ala	Trp	Thr	Lys	Glu	Lys	Arg	Ser	Lys	Ala	Lys	Asp	Gly
	195					200					205				
Thr	Ser	Lys	Asp	Tyr	Lys	Phe	Ala	Arg	Val	Pro	Gly	Leu	Ser	Arg	Val
	210				215						220				
Val	Gly	Val	Cys	Ser	Asn	Ala	Tyr	Gly	Ala	Tyr	Ala	Val	Ala	Gln	Arg
225					230					235					240
Asp	Tyr	Asp	Val	Thr	Lys	Glu	Gln	Ile	Asn	Val	Asp	Gln	Ser	Thr	Leu
			245						250					255	
Trp	Glu	Asp	Phe	Leu	Pro	Leu	Ser	Pro	Phe	Ala	Ser	Leu	Val	Ser	Thr
		260						265					270		
Val	Thr	Pro	Leu	Lys	Thr	Asp	Asp	Ala	Ser	Asp	Ala	Leu	Ser	Asp	Gly
	275					280						285			
Gly	Ser	Ala	Asn	Ala	Met	Lys	Arg	Val	Ala	Met	Ser	Ile	Ser	Asp	Ile
	290					295				300					
Glu	Ser	Tyr	Phe	Gln	Pro	Leu	Arg	Asn	Glu	Ala	Pro	Glu	Gly	Thr	Val
305					310					315					320
Phe	Leu	Leu	Ser	Ser	Leu	Ser	Asp	Ala	Arg	Ile	Pro	Val	His	Glu	Phe
			325						330					335	
Ile	Leu	Thr	Gly	Arg	Ser	Ser	Val	Leu	Arg	Lys	Ala	Phe	His	Glu	Phe
		340						345					350		
Arg	Gln	Ala	Tyr	Tyr	Phe	Ser	Leu	Pro	Asp	Ile	Leu	Asp	Ile	Glu	Tyr
	355						360					365			
Gly	Pro	Asn	Gly	Gln	Cys	His	Val	Arg	Phe	Asn	Gly	Leu	Asp	Phe	Leu
	370					375					380				
Thr	Ile	Leu	Asn	Leu	Ala	Phe	Phe	Leu	Tyr	Ala	Asp	Asn	Val	Leu	Asp
385					390					395					400
Val	Trp	His	Gln	Met	Arg	Ala	Ser	Ala	Ala	Asn	Thr	Ser	Arg	Tyr	Arg
			405						410					415	
Gln	Val	Arg	Ser	Glu	Val	Met	Arg	Ile	Ala	Thr	Tyr	Leu	Gly	Leu	Pro
		420						425					430		
Thr	Leu	Glu	Arg	Ala	Ala	Arg	Leu	Met	Ile	Lys	Pro	Met	Lys	Ser	Leu
	435						440					445			
Lys	Ser	Asp	Met	Ala	His	Ala	Phe	Asn	Asp	Pro	Thr	Phe	Phe	Glu	Ser
	450					455					460				
Ser	Asp	Val	Thr	Ile	Glu	Leu	Asn	Gly	Glu	Thr	Met	Lys	Ala	His	Ser
465					470					475					480
Gln	Val	Leu	Cys	Arg	Arg	Cys	Pro	Phe	Phe	Asp	Thr	Leu	Phe	Asn	Gly
			485						490					495	
Arg	Ser	Gly	Gly	Lys	Trp	Leu	Leu	Ser	Arg	Arg	Thr	Gly	Ala	Asn	Asp
		500						505				510			
Ser	Ile	Arg	Val	Asp	Leu	Lys	His	Leu	Asp	Arg	Pro	Val	Phe	Glu	Phe

## 18846

515	520	525
Val Leu Arg Tyr Ile Tyr Thr Asp Ala Glu Glu Gln Leu Phe Asp Glu		
530	535	540
Val Arg Ser Lys Thr Leu Asp Gly Phe Ile Asp Leu Val Leu Asp Val		
545	550	555
Ala Phe Ile Ala Asn Glu Leu Met Ile Asp Arg Leu Ala Gln Val Cys		
	565	570
Gln Lys Met Leu Gly Lys Phe Gly Met Thr Phe Phe Lys Ala Phe Ser		
	580	585
Leu Met Ala Ser Phe Thr Glu Thr Leu		590
595	600	

&lt;210&gt; 42229

&lt;211&gt; 608

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42229

Ala Ser Ser Lys Asp Gly Ala Leu Glu Tyr Ile Cys Phe Asn Leu Glu		
1	5	10
Asp Val Leu Ala Gln Arg Leu Val Cys Ile Leu Thr His Ile Arg Gly		
	20	25
Asp Leu Asn Ala Ser Arg Arg Cys Leu Arg Asp Leu Asp Glu Asn Leu		
	35	40
Val Glu Ala Leu Asp Thr Val Cys His Glu Asn Gln Met Thr Ser Phe		
	50	55
Pro Val Ser Arg Gly Arg Asn Ser Glu Ala Tyr Val Leu Glu Lys Tyr		
65	70	75
Pro Glu Leu Val Thr Ser Ile Gln Ala Asp Arg Arg Arg Met Ile Asp		
	85	90
Ser Met Arg Leu Gln Ser Arg Leu Asn Cys Leu Gln Ser Tyr Glu Glu		
	100	105
Lys Pro Arg Pro Val Thr Asp Glu Lys Leu Arg Ala Ser Leu Ser Val		
	115	120
Gln Lys Ala Lys Ala Ala Ser Leu Lys Glu Asn Ser Asp Ile Pro Arg		
	130	135
Ser Pro Ile Leu Lys Ser Arg Gln Ser Thr Ser Asp Leu Met Phe Gln		
145	150	155
Met Asp Asp Asp Pro Met Leu Ser Pro Ala Asp Ser Ser Lys Gly Lys		
	165	170
Thr Ala Ile Arg Lys Gly Val Ala Ser Glu Pro Ser Arg Asp Phe Pro		
	180	185
Ala Leu Gly Thr Ser Leu Gly Asp Lys Gln Ala Phe Asn Asn Asp Ser		
	195	200
Asn Val Met Pro Glu Ser Leu Gln Ser Pro Gln Glu Asn Ala Leu Ser		
210	215	220
Asp Ser Pro Ser Val Phe Arg Ala Ala Val Leu Glu Gln Lys Lys Asn		
225	230	235
Gly Tyr Pro Ile Ser Ser Pro Ser Gln Thr Pro Trp Ala Ser Ser Ala		
	245	250
Ile Ser Thr Pro Lys Lys Asp Leu Lys Asp Ile Met Ser Glu Thr Ser		
	260	265
Glu Lys Arg Val Ser Asn Leu Ser Leu Gly Met Ser Ala Arg Arg Glu		
	275	280
Asn Ser Asn Asn Phe Thr Pro Lys Leu Ser Gln Lys Glu Arg Lys Lys		
290	295	300



Leu Gln Gln Gln Gln Leu Gln Glu Lys Leu Ala Ala Gln Glu Lys Ala  
 305 310 315 320  
 Lys Glu Ala Pro Gln Asn Pro Trp Lys Leu Ser Thr Pro Val Lys Leu  
 325 330 335  
 Pro Asp Lys Pro Gly Thr Pro Phe Gly Ser His Gly Lys Asp Gly Glu  
 340 345 350  
 Ser Ser Gln Pro Ser Lys Phe Ala Gln Lys Pro Ser Met Thr Leu Arg  
 355 360 365  
 Gln Thr Val Ala Gly Thr Pro Pro Pro Arg Ser Thr Pro Ser Ala Thr  
 370 375 380  
 Pro Thr Pro Gly Gln Gly Arg Ser Val Ser Gly Gly Pro Gln Pro Pro  
 385 390 395 400  
 Leu Lys Ser Ser Pro Gln Gln Ala Ala Ala Gly Pro Ser Thr Ser Pro  
 405 410 415  
 Asn Gly Leu Ala Ser Ala Gln Thr Pro Ile Lys Ser Ile Arg His Ile  
 420 425 430  
 Pro Arg Pro Glu Pro Tyr Gln Thr Ser Phe Cys Ser Pro Ser Pro Asn  
 435 440 445  
 Ser Leu Ser Leu Ala Ala Ile Leu Met Gln Gln Gln Thr Glu Lys Asp  
 450 455 460  
 Glu Leu Arg Glu Ala Ala Thr Ala Lys His Asn Phe Gln Asp Ile Gln  
 465 470 475 480  
 Leu Glu Gln Glu Phe Gln Glu Trp Trp Asp Lys Glu Ser Arg Arg Val  
 485 490 495  
 Gln Gly Ile Leu Glu Pro Asp Ser Thr Thr Ala Ser Gln Lys Asp Ser  
 500 505 510  
 Glu Gly Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly Ser Asn Asn Arg  
 515 520 525  
 Lys Lys His Gly Lys Gly Pro Glu Asn Ala Thr Gly Ser Pro Gly Leu  
 530 535 540  
 Thr Gln Gln Leu Ser Arg Ala Lys Gly Gln Asn Gly Gln Lys Phe Ser  
 545 550 555 560  
 Asp Ser Arg Arg Asp Asn Leu Gln Pro Glu Thr Asn Gly Asn His Ser  
 565 570 575  
 Ser Ser Ala Gly Asn Ser Arg Arg Gly Gly Arg Gly Gly His Pro  
 580 585 590  
 Lys Lys Gly Lys Glu Arg Asp Arg Thr Val Ser Gly Gln Thr Ile Gln  
 595 600 605

&lt;210&gt; 42230

&lt;211&gt; 473

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42230

His Phe Gly His Met Ile Ser Thr Leu Trp Glu Ser Phe Leu Arg Asp  
 1 5 10 15  
 Asp Val Glu Ser Phe Gln Arg Cys Leu Ala Asn Ala Asn Tyr Thr Ser  
 20 25 30  
 Gly Ser Gln Arg Pro Ser Ala Ala Gly Gly Gly Ser Gly Phe Lys Val  
 35 40 45  
 Gly Ser Leu Asp Gly Val Thr Pro Ser Ser Pro Phe Ser Ser Lys Gly  
 50 55 60  
 Lys Lys Leu Ser Gly Thr Ser Pro Gly Ala Thr Thr Pro Asp Arg Asn  
 65 70 75 80  
 Thr Gly Ser Pro Arg Pro Gly Lys Ala Leu Ser Arg Ala Asp Leu Asn

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<210> 42231
<211> 95
<212> PRT
<213> A.fumigatus

<400> 42231
```

## 18849

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Ile Ala Val Arg His Pro His Ser Val Ile Ala Asn Glu Leu Leu Gly
1          5          10          15
Ile Leu Val Asp Ser Arg Thr Ile Thr Asp Leu Arg Arg Arg Asp Lys
          20          25          30
His Phe Asp Tyr Tyr Tyr Thr Thr Gly Ile Tyr Phe Lys Glu Glu Gly
          35          40          45
Lys Ser Ser Lys Val Ala Gly His Asn Arg Lys Ser Pro Cys Tyr Asn
          50          55          60
His Ser Asn Phe Asp Ile Asn Asn His Asn Leu Ser Cys Val Tyr Glu
65          70          75          80
His Thr Asn Tyr Tyr Phe Tyr Gln His Ala Asn Asn Asn Thr Pro
          85          90          95

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&lt;210&gt; 42232

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42232

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Ser Trp Ile Asn Arg Tyr Arg His Asn His Val Asn Glu Asp Phe Asp
1          5          10          15
Leu Asp Thr Tyr Lys Ser Arg Ser Asp Ser Tyr Gly Tyr Asn Ala Cys
          20          25          30
Asn Gly Arg Phe Tyr Pro Asp His Gln Ser Asp Ser Asn Asp Asp Gly
          35          40          45
His Gln Asp Arg Gly Leu Ala Trp Glu Asn Arg Gly Arg Phe Lys Asp
          50          55          60
Asp Tyr Pro Thr Trp Asn Asp Asn Ser Gln Leu Glu Ser Cys Asp Ala
65          70          75          80
His Gly Ser Arg Asn Asn Cys Asp Tyr Tyr Glu Asp Asn His
          85          90

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&lt;210&gt; 42233

&lt;211&gt; 523

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42233

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Arg Asp Asp Asp Gly Ser Ala Gly His Ser His Asn Thr Ala Trp Ser
1          5          10          15
Asn Asp Phe Asp His Cys Tyr Ala Ala Ser Lys Tyr His Asp Arg Ile
          20          25          30
Arg Asn Tyr Tyr Tyr Ser Thr Arg Val Asn Tyr Cys Thr Lys Arg Asn
          35          40          45
Ser Pro Trp Ile Ala Val Ser Arg Asp Cys Ile Ser Asp Cys His Pro
          50          55          60
Glu Tyr Tyr Tyr Phe Arg Tyr Ser Asn Val Asp Trp Leu Val Ser Arg
65          70          75          80
Pro Thr Pro Cys Tyr Thr Tyr Trp Lys Phe Ala Asp Glu Val Gly Phe
          85          90          95
Asp Lys Ala Ile Thr Thr Thr Glu Pro Ala Ala Ser Thr Ala Gln Ser
          100          105          110
Gly Asn Thr Val Thr Val Pro Ala Thr Thr Thr Thr Leu Phe Ile Cys
          115          120          125
Pro Thr Leu Ser Ile Asn Pro Thr Tyr Thr Pro Val Ala Pro Leu Pro
          130          135          140

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## 18850

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Arg Asn Tyr Thr Trp Gly Cys Pro Pro Gly Tyr Leu Cys Lys Thr Lys
145          150          155          160
His Thr Gly Ala Asp Ala Gly Cys Asn Ile Glu Ala Ser Met Pro Ala
          165          170          175
Glu Ser Tyr Val Cys Ser Pro Asp Glu Cys Ile Lys Ser Ser Pro Phe
          180          185          190
Ile His Asp Gln Tyr Trp Gly Thr Pro Val Glu Ser Ser Glu Ile Arg
          195          200          205
Ser Ser Tyr Asn Ile Ser Lys Asp Tyr Phe Asn Leu Asp Pro Glu Ile
          210          215          220
Phe Gly Leu Asn Tyr Ser Ile Phe Arg Ile Pro Asp Leu Lys Pro Gly
225          230          235          240
Asp Asp His Tyr Tyr Ile Arg Ser Ser Arg Arg Thr Trp Ser Lys Leu
          245          250          255
Leu Ala Arg Gln Ser Ile Gly Val Ser Thr Val Pro Gly Ala Cys Tyr
          260          265          270
Asp Glu Cys Asn Asp Ala Ala Leu Glu Val Glu Ser Thr Gly Lys Thr
          275          280          285
Pro Asp Ile Cys Asn Ala Gly Ser Ala Phe Asn Val Ser Leu Gly Gln
          290          295          300
Cys Glu Lys Cys Cys Asn Thr His Lys Thr Ala Thr Ser Ala Ser Phe
305          310          315          320
Glu Gln Lys Val Leu Pro Asn Phe Gln Gln Phe Leu Asn Phe Cys Glu
          325          330          335
Gly Leu Glu Asp Ser Ala Thr Thr Ala Ala Ala Asp Thr Val Gly Ser
          340          345          350
Thr Thr Lys Gly Ser Gln Thr Ser Thr Thr Pro Gly Thr Thr Ser Thr
          355          360          365
Gln Glu Arg Gly Thr Met Ser Gln Ala Asp Pro Leu Thr Ala Ser Ser
          370          375          380
Thr Ser Asn Phe Thr Gly Lys Ala Thr Lys Ser Arg Asp Lys Ser Ser
385          390          395          400
Thr Ala Ala Ser Ala Thr Ser Val Glu Gln Thr Ile Ile Pro Ser Pro
          405          410          415
Thr Gln Gln Thr Thr Ala Pro His Pro Met Thr Glu Ser Lys Pro Val
          420          425          430
Thr Ala Ser Gly Ile Ser Thr Asp Thr Ile Ser Ser Ser Ser Ser Cys
          435          440          445
Ser Ala Thr Gly Thr Ser Ser Arg Glu Thr Ala Gln Ser Ser Ser Ala
          450          455          460
Cys Glu Asn Thr Gly Asn Ser Ala Ala Thr Ser Thr Ser His Arg Pro
465          470          475          480
Thr Ser Thr His Ser Gly Ala Ser Pro Ser Ala Pro Ala Leu Leu Phe
          485          490          495
Thr Gly Ala Ala Ser Leu Gln Thr Val Pro Ser His Trp Gly Ile Leu
          500          505          510
Ala Phe Ile Phe Gly Val Val Gly Phe His Ile
          515          520

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&lt;210&gt; 42234

&lt;211&gt; 564

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42234

Ala Ala Thr Ser Leu Pro Thr Ser Ala Thr Ala Tyr Ser Ala Val Ala

1		5		10		15									
Glu	Thr	Ser	Thr	Ser	Pro	Ala	Glu	Leu	Arg	Leu	Asp	Thr	Pro	Thr	Val
		20						25					30		
Leu	Leu	Pro	Thr	Ser	Ser	Ser	Ala	Tyr	Trp	Leu	Ile	Pro	Gly	Pro	Ser
		35					40					45			
Pro	Ile	Leu	Gly	Ala	Glu	Thr	Ser	Thr	Ser	Thr	Thr	Ile	Thr	Pro	Pro
		50				55					60				
Ala	Tyr	Thr	Leu	Arg	Lys	Arg	Ala	Asn	Pro	Pro	Lys	Ser	Pro	Ala	Ile
65					70					75					80
Ile	Ala	Arg	Ala	Pro	Ala	Thr	Ile	Thr	Val	Thr	Ser	Thr	Ser	Thr	Ile
				85					90					95	
Thr	Thr	Cys	Pro	Val	Cys	Thr	Asn	Thr	Pro	Thr	Thr	Thr	Ser	Thr	Asn
			100					105					110		
Thr	Pro	Thr	Ile	Thr	Pro	Pro	Glu	Thr	Thr	Pro	Thr	Thr	Ser	Thr	Ile
		115					120					125			
Thr	Ser	Thr	Pro	Val	Thr	Thr	Pro	Thr	Val	Gly	Pro	Gly	Ser	Thr	Val
		130				135					140				
Thr	Thr	Thr	Val	Thr	Val	Thr	Thr	Thr	Ala	Pro	Gly	Pro	Thr	Glu	Thr
145					150					155					160
Asp	Thr	Val	Thr	Thr	Thr	Val	Gly	Leu	Pro	Gly	Thr	Thr	Glu	Thr	Asp
				165					170					175	
Thr	Leu	Thr	Ser	Thr	Val	Thr	Ile	Pro	Gly	Thr	Thr	Gly	Thr	Asp	Thr
			180					185					190		
Val	Thr	Thr	Thr	Ile	Asp	Leu	Pro	Gly	Ala	Thr	Val	Thr	Ala	Thr	Gln
		195					200					205			
Ser	Ala	Thr	Ser	Thr	Ile	Thr	Ile	Thr	Ala	Thr	Thr	Thr	Gln	Ser	Gly
		210				215					220				
Thr	Thr	Cys	Ala	Ala	Thr	Pro	Gly	Asp	Gly	Ile	Thr	Gln	Thr	Thr	Thr
225					230					235					240
Val	Thr	Val	Ser	Ser	Glu	Gly	Ala	Thr	Thr	Met	Thr	Leu	Thr	Gln	Thr
			245					250					255		
Val	Thr	Leu	Pro	Ala	Thr	Thr	Val	Ser	Asn	Ala	Ala	Thr	Leu	Thr	Glu
		260						265					270		
Ala	Thr	Ser	Val	Ala	Met	Ser	Trp	Phe	Thr	Leu	Thr	Val	Pro	Gly	Ser
		275					280					285			
Thr	Val	Thr	Glu	Thr	Thr	Thr	Ser	Thr	Lys	Ile	Thr	Thr	Gln	Thr	Val
		290				295					300				
Thr	Val	Ser	Gly	Ser	Thr	Val	Thr	Gly	Ile	Thr	Thr	Val	Thr	Arg	Thr
305					310					315					320
Ser	Thr	Ser	Thr	Val	Thr	Ser	Pro	Gly	Ser	Thr	Val	Thr	Gly	Thr	Thr
			325					330					335		
Thr	Leu	Thr	Lys	Ile	Ser	Thr	Ser	Thr	Leu	Thr	Ser	Leu	Gly	Val	Thr
			340					345					350		
Val	Thr	Asp	Thr	Met	Pro	Val	Thr	Glu	Gly	Ser	Thr	Gln	Thr	Ile	Ser
		355					360					365			
Gln	Ile	Leu	Thr	Met	Thr	Ala	Thr	Lys	Thr	Glu	Val	Leu	Pro	Gly	Arg
		370				375					380				
Thr	Val	Val	Asp	Ser	Lys	Thr	Ile	Thr	Leu	Pro	Gly	Thr	Thr	Ile	Val
385					390					395					400
Asn	Ser	Lys	Ala	Val	Thr	Leu	Thr	Val	Pro	Gly	Thr	Thr	Val	Thr	Thr
			405					410					415		
Met	Arg	Thr	Ile	Thr	Lys	Ser	Gly	Thr	Thr	Met	Thr	Ile	Ser	Glu	Val
			420					425				430			
Val	Thr	Leu	Pro	Gly	Ser	Ile	Phe	Thr	Thr	Ile	Glu	Thr	Ile	Pro	Thr
		435					440					445			
Thr	Leu	Ser	Gly	Ser	Ile	Ile	Val	Thr	Thr	Thr	Thr	Lys	Pro	Gly	Gln

## 18852

450                      455                      460  
 Thr Ile Thr Met Ser Gly Ser Val Thr Thr Leu Pro Gly Ser Thr Ile  
 465                      470                      475                      480  
 Ile Gln Ser Ser Thr Leu Pro Ser Val Thr Thr Thr Asp Leu Gln Val  
                     485                      490                      495  
 Ile Pro Thr Thr Leu Pro Gly Ala Met Ile Leu Thr Thr Val Met Arg  
                     500                      505                      510  
 Pro Ala Ser Thr Met Ile Val Ser Gly Thr Ile Thr Thr Leu Pro Gly  
                     515                      520                      525  
 Ser Thr Ile Val Gln Ser Ala Thr Leu Pro Gly Leu Arg Leu Val Glu  
                     530                      535                      540  
 Thr Val Ser Val Thr Val Ile Gln Ser Thr Thr Ile Phe Asp Thr Val  
 545                      550                      555                      560  
 Thr Leu Thr Gly

<210> 42235  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 42235  
 Thr Asn Asn Asn Thr Leu Thr Asn Pro Ala Asp Asn Arg Thr Ala Pro  
 1                      5                      10                      15  
 Asn Asp Gly Ile Glu Ala Cys Asn Arg Glu Trp Asp Gln Tyr Gly Tyr  
                     20                      25                      30  
 Tyr Leu Gln Phe Ile Ile Met Leu Ser Asp Arg Tyr Leu Phe Glu Arg  
                     35                      40                      45  
 Asp Cys Thr Lys Phe Phe Arg Met Arg Glu His Trp  
                     50                      55                      60

<210> 42236  
 <211> 238  
 <212> PRT  
 <213> A.fumigatus

<400> 42236  
 Tyr Thr Ala Leu Glu Asn Cys Ser Leu Arg Met Ala Ser Leu Gly Ser  
 1                      5                      10                      15  
 Leu Thr Arg Ser Ile Ser Thr Leu Val Leu Gln Phe Asn Glu Tyr Ser  
                     20                      25                      30  
 Ser Ser Val Ser Ser Gln Pro Ser Glu Ala Ala Phe Leu Ala Thr Val  
                     35                      40                      45  
 Met Pro Glu Tyr Ser Gln Gln His Arg Ile Pro Leu Arg Val Leu Val  
                     50                      55                      60  
 Ser Pro Thr Asn Phe Leu Asn Leu Lys Arg Met Tyr Ser Gln Ile Pro  
 65                      70                      75                      80  
 Asn Val Glu Val Gln Ala Phe Arg Ile Gln Pro Arg His Leu Asn Ile  
                     85                      90                      95  
 Ser Met Met Leu Leu Met Ser Val Ser Gln Asn Asp Ser Met Pro  
                     100                      105                      110  
 Leu Tyr Met Ala Gln Val Thr Arg Val Leu Arg Glu Met Ala Met Glu  
                     115                      120                      125  
 Ser Gly Gly Cys Phe Asp Tyr Leu Asp Phe Arg Glu Arg Leu Ser Ala  
                     130                      135                      140  
 Leu Arg Leu Asp Arg Val Gln Thr Pro Phe Leu His Gln Arg Leu Asp

## 18853

```

145              150              155              160
Leu Leu Asp Ser Tyr Leu Asp Leu Thr Gly Gln Ala Thr Ser Asp Tyr
              165              170              175
Phe Val Asp Gly Gly Val Thr Ile Leu Asp Leu Ser Cys Pro Phe Val
              180              185              190
Asp Gln Asn Thr Ala Cys Ile Leu Phe Arg Ile Ala Ile Asp Leu Phe
              195              200              205
Leu Ser Ala His Pro Ser Arg Gly Lys Met Ile Val Ala Asp Glu Ala
              210              215              220
His Lys Val Pro Leu Trp Asp Arg Met Gly Phe Val Leu Cys
225              230              235

```

&lt;210&gt; 42237

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42237

```

Pro Val Asn Val Thr Val Ser Lys Ile Val Val Leu Trp Met Thr Val
1              5              10              15
Thr Asp Thr Val Ser Thr Asn Arg Asn Pro Gly Arg Val Ala Leu Cys
              20              25              30
Thr Ile Val Asp Pro Gly Arg Val Val Ile Val Pro Asp Thr Ile Met
              35              40              45
Val Leu Ala Gly Arg Ile Thr Val Val Lys Ile Ile Ala Pro Gly Ser
              50              55              60
Val Val Gly Met Thr Cys Arg Ser Val Val Val Thr Leu Gly Arg Val
              65              70              75              80
Leu Leu Trp Ile Ile Val Asp Pro Gly Asn Val Val Thr Asp Pro Asp
              85              90              95
Met Val Ile Val Cys Pro Gly Leu Val Val Val Val Thr Met Ile Asp
              100              105              110
Pro Glu Arg Val Val Gly Ile Val Ser Ile Val Val Asn Met Glu Pro
              115              120              125
Gly Arg Val Thr Thr Ser Glu Ile Val Ile Val Val Pro Asp Leu Val
              130              135              140
Ile Val Leu Ile Val Val Thr Val Val Pro Gly Thr Val Ser Val Thr
145              150              155              160
Ala Phe Glu Leu Thr Ile Val Val Pro Gly Arg Val Ile Val Phe Glu
              165              170              175
Ser Thr Thr Val Leu Pro Gly Lys Thr Ser Val Leu Val Ala Val Ile
              180              185              190
Val Arg Ile
              195

```

&lt;210&gt; 42238

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42238

```

Val Ala Val Thr Val Ala Pro Gly Lys Ser Met Val Val Val Thr Val
1              5              10              15
Ser Val Pro Val Val Pro Gly Ile Val Thr Val Leu Val Arg Val Ser
              20              25              30
Val Ser Val Val Pro Gly Lys Pro Thr Val Val Val Thr Val Ser Val

```

# 18854

```

      35              40              45
Ser Val Gly Pro Gly Ala Val Val Val Thr Val Thr Val Val Val Thr
  50              55              60
Val Asp Pro Gly Pro Thr Val Gly Val Val Thr Gly Val Leu Val Ile
65              70              75              80
Val Asp Val Val Gly Val Val Ser Gly Gly Val Ile Val Gly Val Leu
      85              90              95
Val Glu Val Val Val Gly Val Phe Val His Thr Gly Gln Val Val Ile
      100              105              110
Val Asp Val Glu Val Thr Val Ile Val Ala Gly Ala Leu Ala Ile Met
      115              120              125
Ala Gly Asp Phe Gly Gly Phe Ala Leu Phe Leu Lys Val Tyr Ala Gly
      130              135              140
Gly Val Ile Val Val Glu Val Leu Val Ser Ala Pro Lys Ile Gly Asp
145              150              155              160
Gly Pro Gly Ile Asn Gln Tyr Ala Glu Glu Leu Val Gly Asn Asn Thr
      165              170              175
Val Gly Val Ser Asn Arg Asn Ser Ala Gly Asp Val Asp Val Ser Ala
      180              185              190
Thr Ala Glu Tyr Ala Val Ala Leu Val Gly Arg Leu Val Ala Ala Tyr
      195              200              205
Cys Ile Leu Glu Val Ile Ser Ser Asn Arg Arg Leu Thr Asp Leu Pro
      210              215              220
Arg Phe Arg Asn Ser Asp Cys Phe Asn His Cys Leu Cys Tyr Cys His
225              230              235              240
Ile Phe Cys

```

<210> 42239

<211> 110

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (39), (40)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42239

```

Ser Ser Glu Gln Lys Val Leu Lys Glu Asn Cys Tyr Ser Ala Gln Arg
  1              5              10              15
Arg Leu Asp Glu Gln Ile Met Lys Asn Arg Lys Leu Gln Thr Met Leu
      20              25              30
Glu Glu Ser Asp Phe Arg Xaa Xaa Thr Leu Asn His Asp Ile Ala Val
      35              40              45
Gly Glu Val Asp Leu Asp Glu Tyr Gly Asn Gln Ser Ile Ile Cys Glu
      50              55              60
Leu Ile Phe Leu Leu Ser Gly Ser Leu Arg Lys Gly Phe Gln Ser Met
65              70              75              80
Glu Lys Arg Leu Lys Ala Leu Ser Ala Lys Phe Phe Lys Ser Ser Thr
      85              90              95
Ser Thr Glu Pro Val Cys Pro Ile Phe Thr Asn Gly Ile Asp
      100              105              110

```

<210> 42240

<211> 366



&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (68)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42240

```

Pro Lys Thr Val Lys Gly Gln Leu Ser Leu Gly Arg Val Ser Glu Phe
1          5          10          15
Phe Glu Pro Glu Ser Gln Ser Leu Asp Asp Arg Tyr Arg Pro Arg Arg
20          25          30
Gly Glu Ala Thr Val Leu His His Gln Ser Asp Glu Ser Thr Pro Met
35          40          45
Cys Leu Ile Ser Glu Arg Cys Arg Asp Phe Asp Gly Leu Ser Phe Gly
50          55          60
Thr Ala Gln Xaa Gln Glu Gln Glu Arg Glu Leu Ala Pro Glu Ile
65          70          75          80
Glu Gln Glu Arg Gln Ile Glu Arg Pro Pro Pro Ala Glu Pro Lys Gln
85          90          95
His Cys Leu His Ala Asp Leu Leu Thr Phe Val Ser Thr Gly Ile Leu
100          105          110
Lys Glu His Ser Ser Ala Val Arg Pro Ala Phe Glu Ala Leu Arg Asn
115          120          125
Thr Ser Ala Ala Arg Tyr Leu Asp Val Ser Gln Phe Pro Pro Gly Leu
130          135          140
Arg Val Thr Thr Asp Phe Ala Thr Thr Ile Gln Phe Arg Glu Gly Ser
145          150          155          160
Ser Ser Leu Ser Asp Ala Tyr Gln Arg Pro Val Gln Trp Val Leu Thr
165          170          175
His Ser Ile Tyr Asp Ser Thr Ser Gly Lys Arg Asn Ala Ser His Val
180          185          190
Ile Ile Ile Ser Pro Tyr Glu Ala Met His Leu Leu Ser Glu Val Arg
195          200          205
Arg Ser Thr Gly Ala Thr Ile His Leu Tyr Ala Pro Arg Gln His Leu
210          215          220
Ser Phe Val Pro Leu Asp Arg Leu Asp Leu Tyr Asn Ile Pro Ser Arg
225          230          235          240
Ala Asp Pro Ile Asp Ile Pro Asp Asp Leu Lys Ile Gln Leu Asn Leu
245          250          255
Phe Ala Gly Gln Leu Tyr Ile Ala Ser Tyr Asp Glu Tyr Leu Arg Leu
260          265          270
Cys Asp Thr Leu Gly Val Ala Ser Ala Ala Thr Pro Asp Asn Leu Ser
275          280          285
Val Ala Ala Asp Gly Phe Ile Leu Arg Gly Asn Val Thr Gly Lys Ser
290          295          300
Thr Phe Ser Gln Ser Pro Leu Lys Phe Leu Gln Val Leu Leu Ser Gln
305          310          315          320
Ile Arg Lys Asp Gly Gln Asp Ile Ser Lys Thr His Ile Gly Lys Leu
325          330          335
Leu Asp Gly Arg Leu Leu Glu Ala Arg Asn Phe Asp Ser Ala Ile Glu
340          345          350
Glu Leu Thr Leu Ala Arg Leu Ser Ile Arg Ser His Pro Glu
355          360          365

```

<210> 42241  
 <211> 233  
 <212> PRT  
 <213> A.fumigatus

<400> 42241  
 Cys His Ala Ser Thr Arg Asn Tyr Ala Lys Ser His Pro Asp Leu Cys  
 1 5 10 15  
 Ile Leu Ala Val Asn Thr Phe Val Gln Asp Ser Glu Asp Pro Asn Pro  
 20 25 30  
 Leu Ile Arg Ala Leu Ala Ile Arg Thr Met Gly Cys Ile Arg Val Asp  
 35 40 45  
 Lys Met Val Asp Tyr Met Glu Glu Pro Leu Arg Lys Thr Leu Arg Asp  
 50 55 60  
 Glu Ser Pro Tyr Val Arg Lys Thr Ala Ala Ile Cys Val Ala Lys Leu  
 65 70 75 80  
 Phe Asp Leu Asn Pro Ser Leu Cys Leu Glu Asn Gly Phe Leu Glu Met  
 85 90 95  
 Leu Gln Glu Met Ile Gly Asp Pro Asn Pro Met Val Val Ala Asn Ser  
 100 105 110  
 Val Thr Ala Leu Ser Glu Ile His His Ala Ala Pro Glu Thr Arg Ala  
 115 120 125  
 Leu Gln Val Thr Ser Asn Val Leu Arg Lys Leu Leu Met Ala Leu Asn  
 130 135 140  
 Glu Cys Thr Glu Trp Gly Arg Val Thr Ile Leu Thr Thr Leu Ala Glu  
 145 150 155 160  
 Tyr Lys Thr Ser Asp Val Thr Glu Ser Glu His Ile Cys Glu Arg Val  
 165 170 175  
 Ala Pro Gln Phe Gln His Ala Asn Pro Ser Val Val Leu Ala Ala Val  
 180 185 190  
 Lys Val Val Phe Leu His Met Lys Asn Ile Lys Gln Glu Leu Ser Ser  
 195 200 205  
 Asn Tyr Leu Lys Lys Met Ala Pro Pro Leu Gly Ile Ser Leu Glu Pro  
 210 215 220  
 Thr Cys His Pro Glu Ser Met Ala Arg  
 225 230

<210> 42242  
 <211> 173  
 <212> PRT  
 <213> A.fumigatus

<400> 42242  
 Gln Cys Trp Arg Tyr Pro Gly Arg Val Cys Gly Arg Val Gln Arg Arg  
 1 5 10 15  
 Ile Leu Thr Gly Leu Val Ala Ala Leu Asp Leu Cys Met Pro Arg Leu  
 20 25 30  
 Ile Phe Phe Tyr Gln Thr Gln Leu Gln Ile Leu Thr Ala Val Val Lys  
 35 40 45  
 Leu Phe Leu Lys Arg Pro Glu Lys Ala Gln Gly Leu Val Gln Lys Val  
 50 55 60  
 Leu Gln Ala Ala Thr Ala Glu Asn Asp Asn Pro Asp Val Arg Asp Arg  
 65 70 75 80  
 Ala Tyr Val Tyr Trp Arg Leu Leu Ser Asn Thr Ser Asp Pro Asn Ala  
 85 90 95  
 Thr Lys Asn Ile Val Leu Ser Gln Lys Pro Pro Ile Val Thr Thr Ile

```

                100                105                110
His Ser Leu Pro Pro Ala Leu Leu Glu Gln Leu Ile Gly Glu Leu Ser
                115                120                125
Thr Leu Ala Ser Val Tyr His Lys Pro Pro Glu Gln Phe Val Gly Gln
                130                135                140
Gly Arg Phe Gly Ala Asp Ala Val Gln Arg Ala Ala Ile Glu Phe Val
145                150                155                160
Ala Leu Leu Leu Asn Pro Phe Leu Ser Ser Gln Leu Ile
                165                170

```

&lt;210&gt; 42243

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42243

```

Trp Asn Arg Glu Gln Ile Gln Asn Ala Arg Glu Asn Pro Leu Ala Ala
1          5          10          15
Ala Ala Ala Ala Ala Val Thr Gly Ala Thr Pro Pro Pro Gln Ala
20          25          30
Gln Asn Asn Val Glu Asn Leu Leu Asp Ile Asp Phe Asp Gly Ala Ala
35          40          45
Pro Ala Ser Thr Gln Lys Glu Pro Ala Ser Gly Met Ser Gly Leu Glu
50          55          60
Gly Leu Ala Gly Thr Pro Val Arg Val Glu Ser Pro Ala Val Gly Ser
65          70          75          80
Pro Ala Pro Ala Ala Ser Asn Asn Leu Asp Asp Leu Leu Gly Val Phe
85          90          95
Gly Asp Ser Gly Ser Thr Ser Ala Ser Ala Ser Thr Ala Ile Pro Asn
100          105          110
Gly Gly Gly Ala Ala Ala Asp Leu Met Asn Gly Phe Ser Gly Leu Asp
115          120          125
Leu Ser Ala Asn Thr Gly Gly Asn Gln Gln Arg Lys Thr Asn Glu Asp
130          135          140
Ile Leu Ser Leu Phe
145

```

&lt;210&gt; 42244

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (296)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42244

```

Leu Ser Phe Glu Asp Val Val Leu Lys Gly Leu Ala Ser Asp Gly Gly
1          5          10          15
Leu Phe Ile Pro Glu Glu Ile Pro Ser Leu Pro Ala Gly Trp Glu Thr
20          25          30
Glu Trp Arg Asp Leu Ser Phe Glu Asp Leu Ala Tyr Arg Ile Met Ser
35          40          45
Leu Tyr Ile Ser Pro Ser Glu Ile Pro Ser Glu Asp Leu Gln Asp Ile
50          55          60

```

## 18858

Ile Arg Arg Ser Tyr Ala Thr Phe Arg His Pro Glu Arg Thr Pro Leu  
 65 70 75 80  
 Val Glu Leu Asp Gly Lys Arg Asn Leu Tyr Leu Leu Glu Leu Phe His  
 85 90 95  
 Gly Pro Thr Phe Ala Phe Lys Asp Val Ala Leu Gln Phe Leu Gly Asn  
 100 105 110  
 Leu Phe Glu Tyr Phe Leu Val Arg Lys Asn Glu Gly Lys Glu Gly Lys  
 115 120 125  
 Asp Arg His His Leu Thr Val Ile Gly Ala Thr Ser Gly Asp Thr Gly  
 130 135 140  
 Ser Ala Ala Ile Tyr Gly Leu Arg Gly Lys Lys Asp Val Ser Ile Phe  
 145 150 155 160  
 Ile Leu Phe Pro Thr Gly Arg Val Ser Pro Ile Gln Gln Ala Gln Met  
 165 170 175  
 Thr Thr Val Leu Asp Ala Asn Val His Asn Leu Thr Val Glu Gly Ser  
 180 185 190  
 Phe Asp Asp Cys Gln Asp Ile Val Lys Ala Leu Phe Ala Asp Pro Asp  
 195 200 205  
 Leu Asn Ser Thr His Asn Ile Ala Ala Val Asn Ser Ile Asn Trp Ala  
 210 215 220  
 Arg Ile Leu Ala Gln Ile Thr Tyr Tyr Phe Tyr Ser Tyr Phe Ser Leu  
 225 230 235 240  
 Thr Lys Thr Ser Ala Phe Ser Lys Asp Thr Lys Met Arg Phe Val Val  
 245 250 255  
 Pro Ser Gly Asn Phe Gly Asp Ile Leu Ala Gly Trp Phe Ala Lys Arg  
 260 265 270  
 Met Gly Leu Pro Ala Glu Lys Leu Val Ile Ala Thr Asn Glu Asn Asp  
 275 280 285  
 Ile Leu Asp Arg Phe Phe Arg Xaa Gly Gly His  
 290 295

&lt;210&gt; 42245

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42245

Thr Pro Ile Gln Val Phe Ser Ser Phe Ser Arg Arg Met Cys Leu Gln  
 1 5 10 15  
 Thr Asp Asp Glu Gly Ile Ser Val Gly Gly Glu Asn Met Arg Ile Val  
 20 25 30  
 Asp Ser Ile Leu Pro Cys Leu Ser Leu Ser Thr Ser Leu Asp Asn Phe  
 35 40 45  
 Gly Tyr Gly Pro Ile Leu Ala Asn Glu Glu Ile Ile Gln Leu Arg Pro  
 50 55 60  
 Leu Trp Ile Arg Asp Asp His Leu Ser Gln Ser Met Thr Ser Met Phe  
 65 70 75 80  
 Phe Phe Ala Phe Phe Trp Leu Ile Tyr Pro Ala Leu Lys Pro Asp Phe  
 85 90 95  
 Thr Ser Ser Asn Tyr  
 100

&lt;210&gt; 42246

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42246

```

Leu Pro Ser Thr Ser Thr Thr Ile Ile Met Ser Val Pro Phe Ser Gln
1          5          10          15
Phe Pro Ser Thr Ala Thr Ile Val Pro Ala Pro Phe Gln Val Ala Val
          20          25          30
Pro Asp Glu Gln Ile Ala Glu Leu Lys Thr Leu Val Lys Leu Ala Lys
          35          40          45
Ile Ala Pro Pro Thr Leu Glu Asn Gln Gln Gln Asp Arg Arg Tyr Gly
          50          55          60
Val Thr Ser Asp Trp Leu Thr Thr Met Arg Glu Lys Trp Leu Asn Asp
65          70          75          80
Tyr Asp Trp Arg Val Thr Glu Ala Arg Ile Asn Ser Phe Pro Gln Phe
          85          90          95
Thr Thr Arg Ile Glu Asp Ile Ser Leu His Phe Ala Ala Leu Phe Ser
          100          105          110
Glu Lys Arg Asp Ala Val Pro Val Ile Leu Leu His Gly Trp Pro Gly
          115          120          125
Lys Thr Leu Leu Pro Ser Ile Ile Ser Ser Val Leu Ile Glu Lys Pro
          130          135          140

```

&lt;210&gt; 42247

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42247

```

Tyr Ser Lys Pro Gln Ser Thr Pro Leu Asn Arg Leu Thr Arg Val Gly
1          5          10          15
Glu Lys Phe Leu Asp Trp Val Asp Glu Pro Leu Pro Leu Glu Thr Ile
          20          25          30
Leu Asp Phe Val Ser Leu Tyr Trp Phe Thr Glu Thr Tyr Pro Arg Ala
          35          40          45
Ile Tyr Phe Tyr Arg Glu Val Trp Val Pro Ile Ser
          50          55          60

```

&lt;210&gt; 42248

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42248

```

Val Phe Leu Leu Ser Pro Leu Val Ile Pro Lys Ala Trp His Ala Asp
1          5          10          15
Ile Tyr Ile Val Thr Leu Val Ser Ser Ala Pro Glu Val Gln Tyr Val
          20          25          30
Ala Leu Arg Asn Ile Asp Leu Leu Gln Lys Gln Pro Asp Ile Leu
          35          40          45
Asn Lys Glu Leu Arg Val Phe Phe Cys Lys Tyr Asn Asp Pro Pro Tyr
          50          55          60
Val Lys Phe Gln Lys Leu Glu Ile Met Val Arg Ile Ala Asn Asp Arg
65          70          75          80
Asn Val Asp Gln Leu Leu Ala Glu Leu Arg Glu Tyr Ala Leu Glu Val
          85          90          95
Asp Met Asp Phe Val Arg Arg Ala Val Arg Ala Ile Gly Gln Val Ala
          100          105          110

```

## 18860

```

Ile Lys Ile Glu Ser Ser Cys Glu Lys Cys Val Asn Thr Leu Leu Asp
    115                      120                      125
Leu Ile Asn Thr Lys Val Asn Tyr Val Val Gln Glu Ala Ile Val Val
    130                      135                      140
Ile Lys Asp Ile Phe Arg Lys Tyr Pro Gly Tyr Glu Gly Ile Ile Pro
145                      150                      155                      160
Thr Leu Cys Lys Cys Ile Asp Glu Leu Asp Glu Pro Asn Ala Arg Ala
    165                      170                      175
Ala Leu Ile Trp Ile Val Gly Glu Tyr Ala Glu Lys Ile Ser Asn Ala
    180                      185                      190
Gly Asp Ile Leu Ala Gly Phe Val Glu Gly Phe Asn Glu Glu Phe Ser
    195                      200                      205
Gln Val Trp Leu Leu Arg Ser Thr Cys Val Cys Gln Gly
    210                      215                      220

```

<210> 42249  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42249
Leu Glu Gly Met Ser Ile Pro Gln His Pro Ala Ser Ala Ala Thr Ile
1          5          10          15
Phe Leu Asp Gln Pro Pro Ser Cys Leu Gln Phe Cys Pro Ser Ala Pro
    20          25          30
Asn Asn Phe Ile Ile Gly Thr Tyr Leu Leu Ser Glu Asn Lys Asp Ser
    35          40          45
Asp Gly Asn Val Gln Gln Thr Lys Thr Gly Ser Leu Gln Leu Trp Asn
    50          55          60
Leu Ser Pro Leu Ser Asn Glu Leu
65          70

```

<210> 42250  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42250
Ala Met Asn Cys Glu Ile Cys Thr Ile Phe Leu Pro Ser Ser Arg Leu
1          5          10          15
Thr Asp Ser Leu Tyr Lys Thr Leu Ser Ser Leu Ile Gln Arg Leu Ala
    20          25          30
Leu Pro Tyr Ala Val Phe Asp Leu His Phe His Pro Arg Glu Ser Ser
    35          40          45
Ile Leu Ala Ile Ala Asn Ser Ala Ala Ser Val Ala Leu Phe Lys Phe
    50          55          60
Ser Thr Asp Pro Glu Pro His Ile Ser His Leu Trp Thr Leu Thr Val
65          70          75          80
Asn Glu Asp

```

<210> 42251  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

18861

<400> 42251

```

Trp Val Glu Ser Leu Asp Met Phe Ile Glu Thr Phe Arg Arg Glu Val
1          5          10          15
Cys Ile Ala Leu Asp Asp Ile Asn Asn Tyr Arg Ala Pro Gly His Tyr
          20          25          30
Val Ser Val Leu Arg Ile Phe Ile Glu Ser Asp Glu Ala Ser Asp Asn
          35          40          45
Ile Gly Ala Glu Thr Gly Gln Asp His Val Val Ser Ser Gly Trp
          50          55          60

```

<210> 42252

<211> 82

<212> PRT

<213> A.fumigatus

<400> 42252

```

Val Asp Asp Ser Arg Val Glu Thr Glu Ser Lys Glu Arg Gln Gly Asn
1          5          10          15
Arg Arg Gly Asn Gly Val Ser Trp Ile His Gly Gly Cys Gln Phe Pro
          20          25          30
Cys His Ser Ser Ile His Ser Cys Asp Trp Thr Ile Asp Cys Gln Pro
          35          40          45
Tyr His Thr Asn Met Ala Leu Asp Lys His Gly Thr Ser Gly Met Cys
          50          55          60
Lys Trp Tyr Asp Glu Ile Pro Thr Phe Asn Gln Leu Ile Gly Pro His
          65          70          75          80
Ile Arg

```

<210> 42253

<211> 199

<212> PRT

<213> A.fumigatus

<400> 42253

```

Ser Ile Val Leu Ser Met Phe Ser Arg Arg Lys Tyr Ile Tyr Ile Tyr
1          5          10          15
Ile Cys Ala Ser Pro Gln Arg Ala Asn Arg Asp Ile Gln Gln Val Ala
          20          25          30
Ala Gly Arg Ile Leu His Ala Leu Asn Ala Asp Ala Lys Val Thr Val
          35          40          45
Val Cys Pro His Ser Gly Leu Asn Asp Glu Val Ala Phe Arg Val Ser
          50          55          60
Glu Gly Gln Val Thr His Val Asp Arg Thr Phe Glu Pro Glu Asp Leu
          65          70          75          80
Glu Gly Ala Asp Met Val Leu Cys Ala Ile Asp Asp Pro Asp Ala Ser
          85          90          95
Ser Arg Val Trp Lys Leu Cys Lys Glu Lys Arg Ile Pro Ala Asn Ile
          100          105          110
Ala Asp Val Pro Ala Glu Cys Asp Phe Tyr Phe Gly Ser Met Tyr Arg
          115          120          125
Asp Gly Pro Leu Gln Val Met Val Ser Thr Asn Gly Asn Gly Pro Lys
          130          135          140
Leu Ala Ser Ile Ile Arg Lys Lys Ile Ala Ala Ser Leu Pro Asp Asn
          145          150          155          160
Met Gly Ala Ala Ile Glu Asn Val Gly Lys Leu Arg Lys Lys Leu Arg

```

## 18862

165 170 175  
 Asp Val Ala Ala Arg Pro Glu Glu Gly Pro Ser Arg Met Lys Trp Tyr  
 180 185 190  
 Arg Glu Pro Tyr Leu Ser Gly  
 195

&lt;210&gt; 42254

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42254

Arg Gly Pro Ser Ser Pro Val Val Lys Thr Ala Gly Gln Val Phe Ala  
 1 5 10 15  
 Thr Val Gly Arg Asp Ile Gln Gly Glu Lys Tyr Ala Gln Ala Ser Glu  
 20 25 30  
 Glu Met Ala Asn Lys Thr Glu Gln Leu Tyr Arg Ser Leu Ile Arg Ala  
 35 40 45  
 Gln Arg Lys Thr Ala Val Arg Glu Ala Leu Ser Arg Phe Ile Pro Ala  
 50 55 60  
 Thr Ser Val Arg His Val Gly Ser Met Phe Asn Val Thr Trp Met Ser  
 65 70 75 80  
 Phe Leu Ser Gly Leu Ser Ala Pro Met Gln Asp Thr Gln Asn Leu Glu  
 85 90 95  
 Thr Ile Lys Leu Cys Met Glu Gly Met Lys Leu Ala Ile Arg Ile Ser  
 100 105 110  
 Cys Ala Phe Asp Leu Glu Thr Pro Arg Val Ala Phe Val Thr Gly Leu  
 115 120 125  
 Ala Lys Phe Thr Asn Leu Gly Asn Val Arg Glu Met Val Pro Lys Asn  
 130 135 140  
 Val Glu Ala Leu Lys Ala Leu Leu Asp Val Ala Leu Thr Glu Gly Asn  
 145 150 155 160  
 Asn Leu Lys Ser Ser Trp Arg Glu Val Leu Thr Cys Val Ser Gln Leu  
 165 170 175  
 Asp Arg Leu Gln Leu Leu Thr Asp Gly Val Asp Glu Gly Ser Leu Pro  
 180 185 190  
 Asp Pro Ser Arg Ala Arg Ile Val Pro Gln Thr Pro Ser Asp Gly Ser  
 195 200 205  
 Arg Lys Ser Met Gln Ala Ser Arg Arg Pro Pro Arg Pro Arg Ser Val  
 210 215 220  
 Asn Gly Pro Thr Ala Phe Arg Ser Glu Val Ala Met Glu Ser Arg Ser  
 225 230 235 240  
 Ala Glu Met Ile Arg Gly Val Asp Arg Ile Phe Thr Asn Thr Ala Asn  
 245 250 255  
 Leu Thr His Glu Ala Ile Ile Asp Phe Val Arg Ala Leu Ser Glu Val  
 260 265 270  
 Ser Trp Gln Glu Ile Gln Ser Ser Gly Gln Thr Glu Ser Pro Arg Thr  
 275 280 285  
 Tyr Ser Leu Gln Lys Leu Val Glu Ile Ser Tyr Tyr Asn Met Thr Arg  
 290 295 300  
 Val Arg Ile Glu Trp Ser Lys Ile Trp Asp Val Leu Gly Gln His Phe  
 305 310 315 320  
 Asn Gln Val Gly Cys His Thr Asn Thr Thr Val Val Phe Phe Ala Leu  
 325 330 335  
 Asp Ser Leu Arg Gln Leu Ser Met Arg Phe Leu Glu Ile Glu Glu Leu  
 340 345 350



## 18863

Pro Gly Phe Lys Phe Gln Lys Asp Phe Leu Lys Pro Phe Glu His Val  
 355 360 365  
 Met Ala Asn Ser Asn Ala Val Thr Val Lys Asp Met Ile Leu Arg Cys  
 370 375 380  
 Leu Ile Gln Met Ile Gln Ala Arg Gly Asp Asn Ile Arg Ser Gly Trp  
 385 390 395 400  
 Lys Thr Met Phe Gly Val Phe Thr Val Ala Ala Arg Glu Pro Tyr Gly  
 405 410 415  
 Lys Gln Val Phe Tyr Arg Leu Gly Ser Met  
 420 425

&lt;210&gt; 42255

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42255

Tyr Leu Glu Glu Gly Ile Val Asn Met Ala Leu Glu His Val Thr Gln  
 1 5 10 15  
 Ile Tyr Asn Thr Arg Phe Gly Val Val Ile Thr Gln Gly Ala Phe Pro  
 20 25 30  
 Asp Leu Ile Val Cys Leu Thr Glu Phe Ser Lys Asn Met Arg Phe Gln  
 35 40 45  
 Lys Lys Ser Leu Gln Ala Ile Glu Thr Leu Lys Ser Thr Val Thr Lys  
 50 55 60  
 Met Leu Arg Thr Pro Glu Cys Pro Leu Ser His Arg Gly Ile Thr Ser  
 65 70 75 80  
 Glu Gly Val Gln Glu Asp Gly Thr Asn Leu Ala Lys Gln Leu Ser Arg  
 85 90 95  
 Gln Ser Gln Glu Glu Gln Phe Trp Tyr Pro Ile Leu Ile Ala Phe Gln  
 100 105 110  
 Asp Val Leu Met Thr Gly Asp Asp Leu Glu Val Arg Ser Arg  
 115 120 125

&lt;210&gt; 42256

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42256

Val Thr Met Arg Gly Val Gln Ile Phe Ser Gly Thr Ser His Pro Val  
 1 5 10 15  
 Leu Ala Glu Thr Ile Cys Glu Arg Leu Gly Thr Leu Pro Ala Arg Ala  
 20 25 30  
 Val Leu Gly Lys Phe Ala Asn Gly Glu Thr Arg Val Asp Ile Gly Val  
 35 40 45  
 Ser Val Arg Asn Gln Asp Val Tyr Ile Val Gln Ser Gly Ser Gln Lys  
 50 55 60  
 Ile Asn Asp Ser Val Met Glu Leu Leu Ile Met Ile Ser Ala Cys Lys  
 65 70 75 80  
 Gly Gly Ser Ala Lys Ser Ile Thr Gly Glu Leu Phe Val Glu  
 85 90

&lt;210&gt; 42257

&lt;211&gt; 364

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42257

Phe Gly Pro Gly Asn Leu Ala Asn Ser Glu Thr Arg Ala Leu Thr Tyr  
 1 5 10 15  
 Leu Phe Asp Thr Leu Ile Arg His Gly Gly Asp Phe Pro Gln Glu Phe  
 20 25 30  
 Trp Asp Val Leu Trp Arg Gln Leu Leu Tyr Pro Ile Phe Val Val Leu  
 35 40 45  
 His Ser Lys Ser Glu Met Ser Lys Val Pro Asn His Glu Glu Leu Ser  
 50 55 60  
 Val Trp Leu Ser Thr Thr Met Ile Gln Ala Leu Arg Asn Met Ile Thr  
 65 70 75 80  
 Leu Phe Thr His Tyr Phe Asp Ala Leu Glu Tyr Met Leu Gly Arg Ile  
 85 90 95  
 Leu Glu Leu Leu Thr Leu Cys Ile Cys Gln Glu Asn Asp Thr Ile Ala  
 100 105 110  
 Arg Ile Gly Ser Asn Cys Leu Gln Gln Leu Ile Leu Gln Asn Val Ala  
 115 120 125  
 Lys Phe Gln Gln Glu His Trp Thr Lys Val Val Gly Ala Phe Val Glu  
 130 135 140  
 Leu Phe Ser Arg Thr Thr Ala Tyr Glu Leu Phe Thr Ala Ala Ala Ser  
 145 150 155 160  
 Ile Ser Ser Lys Pro Ala Ser Ile Arg Asn Glu Asn Gly Glu Ala Ser  
 165 170 175  
 Asn Glu Asp Gly Leu His Lys Thr Glu Gln Glu Thr Ala Glu Ser Thr  
 180 185 190  
 Arg Val Gln Glu Thr Pro Ser Asp Ala Pro Lys Val Asn Gly Ser Gln  
 195 200 205  
 Pro Val Thr Ser Glu His Glu Glu Gly Asp Met Pro Ala Ala Ser Thr  
 210 215 220  
 Pro Glu Leu Glu Asp Tyr Arg Pro Gln Ala Glu Pro Gln Gln Gln Pro  
 225 230 235 240  
 Ala Ala Val Thr Val Ala Arg Arg Arg Phe Phe Asn Arg Ile Ile Thr  
 245 250 255  
 Asn Cys Val Leu Gln Leu Leu Met Ile Glu Thr Val His Glu Leu Phe  
 260 265 270  
 Ser Asn Asp Lys Val Tyr Ala Glu Ile Pro Ser His Glu Leu Leu Arg  
 275 280 285  
 Leu Met Glu Leu Leu Lys Lys Ser Tyr Gln Phe Ala Lys Lys Phe Asn  
 290 295 300  
 Glu Asp Lys Glu Leu Arg Met Gln Leu Trp Arg Gln Gly Phe Met Lys  
 305 310 315 320  
 Gln Pro Pro Asn Leu Leu Lys Gln Glu Ser Gly Ser Ala Ala Thr Tyr  
 325 330 335  
 Val His Ile Leu Phe Arg Met Tyr His Asp Glu Arg Glu Glu Arg Lys  
 340 345 350  
 Ser Ser Arg Gly Glu Thr Glu Ala Ala Leu Ile Pro  
 355 360

&lt;210&gt; 42258

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42258

## 18865

```

Val Leu Arg Ala Leu Ser Leu Pro Thr Thr Ala Asn Asn Met Ile Leu
1          5          10          15
Ser Ser Leu Cys Ala Asp Ile Ile Arg Ser Phe Val Arg Leu Asp Glu
          20          25          30
Asp Ser Gln His Arg Asn Ile Val Ala Trp Arg Pro Val Val Val Asp
          35          40          45
Val Ile Glu Gly Tyr Thr Asn Phe Pro Ser Glu Gly Phe Asp Lys His
          50          55          60
Ile Glu Thr Phe Tyr Pro Leu Ala Val Asp Leu Leu Gly Arg Asp Leu
65          70          75          80
Asn Pro Glu Ile Arg Leu Ala Leu Gln Ser Leu Phe Arg Arg Ile Gly
          85          90          95
Glu Ala Arg Leu Gly Ile Ala Ala Val Gln Thr Pro Ile Ser Pro Arg
          100          105          110
Ser Ser Ile Ser Gln His His Ser Arg Arg Tyr Ser Arg Asp His
          115          120          125

```

&lt;210&gt; 42259

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42259

```

Gln Met Val Gly Thr Met Thr Asn Arg His Leu Thr Glu Tyr Gln Ala
1          5          10          15
Ser Gln Met Gln Gly Phe Phe Gly Lys Pro Val Asp Asn Leu Phe Ala
          20          25          30
Glu Pro Phe Ile Ala Arg Trp Ile Arg Met Asn Val Pro Gly Trp Lys
          35          40          45
Glu Ala Val Val Val Ser Lys Asn Ala Gly Gly Thr Lys Arg Val Thr
          50          55          60
Ser Leu Ala Asp Thr Leu Lys Leu Asn Phe Gly Ile Val Thr Thr Asp
65          70          75          80
Arg Arg Arg Pro Lys Val Ala Met Ser Met Thr Asp Ser Thr Val Phe
          85          90          95
Phe Asp Ser Met Asn Asp Ser Ile Pro Lys Asp Pro Lys Pro Phe Val
          100          105          110
Leu His Leu Arg Lys Asn Ser Gln Gly Gly Glu Ser Ser Glu Arg Asn
          115          120          125
Thr Ala Glu Thr Glu Glu Leu Leu Arg Pro Val Thr Pro Pro Ala Ala
          130          135          140
Arg Arg Pro Ser Glu Leu Glu Ala Ala His Glu Tyr Thr Asp Val Arg
145          150          155          160
Val Arg Asp Val Ile Thr Gly Arg Leu Val Gln Gly His Ile Val Asp
          165          170          175
Asp Asp Phe Pro Ser Gly Gly Pro Thr Ser Val Pro Ala Ser Gly His
          180          185          190
Thr Thr Pro Gly Gln Pro Ser Ser Gln Asp Gln Pro Glu Ser Val Pro
          195          200          205
Asp Ala Met Val Asn Ser Phe Ile Ser Thr Thr Ser Ser Leu Pro Gly
          210          215          220
Asp His Ala Leu Gly Gly Ser Phe Asp Ala Ala Glu Ser Ser Asp Glu
225          230          235          240
Glu Glu Ser Asn Gly Arg Ser Val Glu Gln Glu Lys Met Ile Thr Leu
          245          250          255
Val Gly Asp Val Arg Asp Arg Thr Val Phe Leu Val Asp Asp Met Ile

```

	260		265		270										
Asp	Lys	Ser	Gly	Ser	Trp	Ile	Ala	Ala	Ala	Glu	Thr	Val	Val	Lys	Arg
	275						280					285			
Gly	Gly	Ala	Lys	Gln	Val	Tyr	Cys	Ile	Ala	Thr	His	Gly	Leu	Phe	Gly
	290					295					300				
Gly	Asp	Ser	Leu	Glu	Gln	Met	Glu	Ala	Cys	Asp	Ala	Ile	Asp	Tyr	Ile
305					310					315					320
Val	Val	Thr	Asn	Thr	Phe	Pro	Ile	Thr	Pro	Gln	Met	Met	Arg	Lys	Ser
			325						330					335	
Lys	Lys	Leu	Val	Ile	Ile	Asp	Ile	Ser	Ser	Leu	Leu	Ala	Glu	Ser	Ile
			340					345					350		
Arg	Arg	His	His	Tyr	Gly	Glu	Arg	Ser	Val	Val	Leu	Arg	Thr	Asp	Leu
	355						360						365		

&lt;210&gt; 42260

&lt;211&gt; 649

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42260

Leu	Ser	Ser	Arg	Glu	Leu	Trp	Arg	Glu	Glu	Ala	Lys	Leu	Asp	Ser	Ile
1				5					10					15	
Leu	Ala	Asn	Ala	Ser	Asn	Glu	Val	Asp	Arg	Ala	Glu	Arg	Thr	Leu	Ser
		20						25					30		
Gln	Met	Met	Asp	His	Asn	Thr	Ser	Arg	Gly	Ile	Ala	Ala	Val	Arg	Arg
	35						40					45			
Ile	Lys	Arg	Gln	His	Asn	Leu	Glu	Gly	Val	Tyr	Gly	Thr	Leu	Ala	Glu
50					55					60					
Leu	Phe	Glu	Val	Asn	Asp	Arg	Tyr	Arg	Thr	Ala	Val	Glu	Val	Thr	Ala
65				70					75						80
Gly	Gln	Ser	Leu	Phe	His	Tyr	Val	Val	Asp	Thr	Asp	Glu	Thr	Ala	Thr
				85					90					95	
Lys	Val	Leu	Glu	Ile	Leu	Gln	Gln	Glu	Lys	Ala	Gly	Arg	Val	Thr	Phe
		100						105					110		
Met	Pro	Leu	Asn	Arg	Leu	Arg	Ser	Lys	Pro	Ala	Asn	Leu	Pro	Arg	Ala
		115					120					125			
Ser	Asp	Thr	Ile	Pro	Met	Ile	Asp	Lys	Leu	Gln	Tyr	Asp	Ser	Ala	Phe
	130				135						140				
Glu	Lys	Ala	Phe	Asn	His	Val	Phe	Gly	Lys	Thr	Ile	Ile	Cys	Pro	Asn
145				150						155					160
Leu	Gln	Val	Ala	Ser	Gln	Tyr	Ala	Arg	Ser	His	Gly	Val	Asn	Ala	Ile
				165					170					175	
Thr	Pro	Glu	Gly	Asp	Arg	Ser	Asp	Lys	Arg	Gly	Ala	Leu	Thr	Gly	Gly
		180						185					190		
Phe	His	Asp	Ser	Arg	Gln	Ser	Arg	Leu	Asp	Ala	Val	Lys	Asn	Leu	Thr
	195					200						205			
Lys	Trp	Arg	Asp	Glu	Tyr	Glu	Asn	Lys	Lys	Asn	Arg	Gly	Ala	Glu	Ile
	210					215					220				
Arg	Lys	Glu	Leu	Glu	Lys	Leu	Asp	Gln	Val	Ile	Thr	Lys	Ser	Val	Gly
225					230					235					240
Glu	Leu	Gln	Lys	Leu	Glu	Gln	Gln	Arg	His	Gln	Val	Gln	His	Ser	Ser
			245						250					255	
Gly	Pro	Leu	Arg	Gln	Glu	Leu	Arg	Ser	Lys	Arg	Asp	Leu	Leu	Gln	Lys
		260						265					270		
Lys	Asn	Asp	Ser	Leu	Asp	Ala	Lys	Arg	Lys	Ala	Leu	Arg	Asn	Ile	Glu
	275						280						285		

## 18867

Thr Asn Leu Ala Ala Leu Ser Asp Gln Val Asn Ala Phe Glu Ala Glu  
 290 295 300  
 Leu Asn Thr Pro Phe Gln Lys Ala Leu Ser Asn Glu Glu Glu Ala Gln  
 305 310 315 320  
 Leu Glu Ser Leu Ser Val Val Ala Gln Asn Leu Arg Gln Gln Tyr Gln  
 325 330 335  
 Glu Leu Ser Ala Gln Arg Ser Glu Leu Glu Ala Arg Lys Ser Ile Leu  
 340 345 350  
 Glu Val Glu Leu Arg Glu Asn Leu Asn Pro Arg Leu Asp Gln Leu Val  
 355 360 365  
 Ser Arg Asp Thr Asp Met Gly Asp Asp Asp Gly Gln Gly Asn Leu Lys  
 370 375 380  
 Glu Thr Glu Arg Glu Met Lys Arg Leu Arg Lys Ser Leu Glu Asn Leu  
 385 390 395 400  
 Ser Gln Arg Leu Gln Asn Val Asp Glu Ser Ile Glu Lys Ala Asn Ala  
 405 410 415  
 Gln Ala Asn Glu Leu Glu Lys Gln Lys Ala Glu Ile Arg Leu Glu Leu  
 420 425 430  
 Glu Glu Leu Ala Arg Ser Ile Glu Lys His Gln Arg Arg Met Glu Lys  
 435 440 445  
 Asn Met Gln Lys Lys Ala Ala Leu Thr Lys Gln Ala Ala Glu Cys Ala  
 450 455 460  
 Ala Asn Ile Arg Asp Leu Gly Val Leu Pro Asp Glu Ala Phe Thr Lys  
 465 470 475 480  
 Tyr Lys His Thr Asp Ser Asn Thr Val Val Lys Lys Leu His Lys Val  
 485 490 495  
 Asn Glu Ala Leu Lys Lys Tyr Ser His Val Asn Lys Lys Ala Phe Glu  
 500 505 510  
 Gln Tyr Asn Ser Phe Thr Lys Gln Arg Glu Thr Leu Thr Ser Arg Arg  
 515 520 525  
 Glu Glu Leu Glu Ala Ser Gln Lys Ser Ile Glu Glu Leu Ile Ser Val  
 530 535 540  
 Leu Asp Gln Arg Lys Asp Glu Ala Ile Glu Arg Thr Phe Lys Gln Val  
 545 550 555 560  
 Ser Arg Glu Phe Ala Asn Ile Phe Glu Lys Leu Val Pro Ala Gly Arg  
 565 570 575  
 Gly Arg Leu Ile Ile Gln Arg Lys Thr Asp Arg Ala Leu Arg Gln Glu  
 580 585 590  
 Asp Asp Met Asp Ser Asp Asp Glu Arg Ala Gln Gln Ser Val Glu Asn  
 595 600 605  
 Tyr Val Gly Val Gly Ile Ser Val Ser Phe Asn Ser Lys His Asp Glu  
 610 615 620  
 Gln Gln Arg Ile Gln Gln Leu Ser Gly Gly Gln Lys Ser Lys Ser Phe  
 625 630 635 640  
 Leu Ser Arg Ala His Arg Leu Thr Tyr  
 645

&lt;210&gt; 42261

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42261

Thr Gly Leu Cys Ala Leu Ala Leu Val Phe Ala Ile Gln Ala Cys Asp  
 1 5 10 15  
 Pro Ala Pro Phe Tyr Leu Phe Asp Glu Ile Asp Ala Asn Leu Asp Ala

18868

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          20          25          30
Gln Tyr Arg Thr Ala Val Ala Gln Met Leu Gln Ser Ile Ser Glu Ser
      35          40          45
Thr Asn Gly Gln Phe Ile Cys Thr Thr Phe Arg Pro Glu Met Leu His
      50          55          60
Val Ala Glu Lys Cys Tyr Gly Val Ser Phe Arg Gln Lys Ala Ser Thr
      65          70          75          80
Ile Asp Val Val Ser Arg Glu Glu Ala Leu Lys Phe Val Glu Glu Gln
          85          90          95
Lys Thr

```

<210> 42262  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42262
Ile Leu Ala Ser Arg Ala Ser Lys Met Tyr Val Lys Gln Ile Ile Ile
1          5          10          15
Gln Gly Phe Lys Arg Tyr Ala Leu Ser Ser Glu Gln Thr Leu Lys Lys
      20          25          30
Leu Ser Val Ala Ala Lys Ser Leu Ile Ala Ser Ser Tyr Lys Asp Gln
      35          40          45
Thr Val Ile Glu Pro Phe Ser Pro Lys His Asn Val Ile Val Gly Arg
      50          55          60
Asn Gly Ser Gly Lys Ser Asn Phe Phe Ala Ala Ile Arg Phe Val Leu
      65          70          75          80
Ser Asp Ala Tyr Thr His Leu Gly Arg Glu Glu Arg Gln Ala Leu Leu
          85          90          95
His Val Cys Gly Ala Leu Ser Pro Ser Asn Val Ser Leu Ala His Ile
      100          105          110
His

```

<210> 42263  
 <211> 404  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42263
Glu Gly Ser Gly Ser Ala Val Met Ser Ala Tyr Val Glu Ile Ile Phe
1          5          10          15
Asp Asn Ser Asp Asp Arg Phe Pro Thr Gly Lys Pro Glu Val Val Leu
      20          25          30
Arg Arg Thr Ile Gly Leu Lys Lys Asp Glu Tyr Thr Leu Asp Arg Lys
      35          40          45
Asn Ala Thr Lys Ser Asp Val Met Asn Leu Leu Glu Ser Ala Gly Phe
      50          55          60
Ser Arg Ser Asn Pro Tyr Tyr Ile Val Pro Gln Gly Arg Val Thr Ala
      65          70          75          80
Leu Thr Asn Met Lys Asp Ser Glu Arg Leu Asn Leu Leu Lys Glu Val
          85          90          95
Ala Gly Thr Gln Val Tyr Glu Ala Arg Arg Ala Glu Ser Leu Lys Ile
      100          105          110
Met His Glu Thr Asn Asn Lys Lys Ala Lys Ile Asp Glu Leu Leu Asp

```

## 18869

```

      115              120              125
Phe Ile Asn Glu Arg Leu Ala Glu Leu Glu Glu Glu Lys Asp Glu Leu
      130              135              140
Arg Asn Phe Gln Glu Lys Asp Lys Glu Arg Arg Cys Leu Glu Tyr Thr
145              150              155              160
Ile Tyr Ser Arg Glu Gln Gln Glu Ile Ser Gly Ile Leu Asp Asn Leu
      165              170              175
Glu Glu Gln Arg Gln Thr Gly Val Glu Asp Thr Asp Leu Asn Arg Asp
      180              185              190
Arg Phe Ile Glu Gly Glu Lys Gly Met Ala Gln Ile Asp Ala Glu Ile
      195              200              205
Ala Glu Cys Lys Gln Gln Ile Glu Phe Leu Lys Val Asp Lys Val Gln
      210              215              220
Leu Glu Asp Glu Arg Arg Glu Ala Ser Lys Ala Leu Ala Gln Val Glu
225              230              235              240
Leu Arg Ala Lys Ser Leu Ser Glu Asn Gln Ala Thr Ala Gln Val Leu
      245              250              255
Lys Ala Arg Tyr Asp Glu Asp Leu Arg Thr Val Glu Arg Ala Ile Lys
      260              265              270
Glu Arg Glu Ala Glu Leu Glu Glu Leu Ile Pro Arg Phe Asn Ala Val
      275              280              285
Arg Glu Gln Glu Asp Asn Ile Lys Ala Gln Leu Asn Glu Ala Glu Thr
      290              295              300
Ile Arg Gln Arg Leu Tyr Ala Lys Gln Gly Arg Asn Ser Arg Phe Arg
305              310              315              320
Asn Lys Ser Glu Arg Asp Lys Trp Leu Gln Ala Glu Ile Arg Glu Asn
      325              330              335
His Thr Ser Ile Ser Thr Val Gln Ala Val Met Ala Gln Thr Gln Glu
      340              345              350
Asp Ile Lys Glu Leu Glu Asn Asp Ile Ala Leu Leu Glu Pro Glu Thr
      355              360              365
Glu Arg Leu Arg Gln Gln Ile Asp Gly Lys Gly Asp Thr Val His Ser
      370              375              380
Val Glu Gln Gln Val Gln Ala Ala Lys Asp Glu Arg Asp Arg Leu Met
385              390              395              400
Asp Gln Arg Lys

```

&lt;210&gt; 42264

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42264

```

Gly Asp Ile Ser Tyr Arg Gln Leu His Pro Ser Lys Asp Lys Ile Lys
1              5              10              15
Gln Ser Pro Asp Cys Arg Ala Ile Ser Val Val Asp Leu Ser Phe Ser
      20              25              30
Leu Pro Leu Pro Pro Thr Ala Pro Leu Gln Ile Ser Leu Phe Leu Ser
      35              40              45
Phe Ser Ile Phe Asn Ile Phe Thr Asn Arg Arg Ile Val Arg Asp Glu
      50              55              60
Val Phe Thr Ala Gly Leu Glu Gly Ala Val Gln Val Lys Arg
65              70              75

```

&lt;210&gt; 42265

18870

<211> 85  
<212> PRT  
<213> A.fumigatus

<400> 42265

Ala	Ile	Ser	Arg	Leu	Lys	Leu	Pro	Val	Leu	Asn	Asn	Ile	Ser	Gly	Ile
1				5					10					15	
Lys	Ser	Cys	Leu	Ser	Gln	Glu	Thr	Ile	Ser	Leu	Glu	Gly	Ile	Met	Asp
			20					25					30		
Thr	Thr	Ser	Glu	Pro	Pro	Ala	Phe	Asn	Leu	Thr	Asp	Thr	Asp	Arg	Glu
		35				40						45			
Val	Leu	Ala	Met	Thr	Asp	Asp	Gln	Phe	Val	Pro	His	Asp	Trp	Asp	Asn
	50				55					60					
Leu	Lys	Asp	Ile	Ile	Gly	Met	Arg	Ser	Arg	Pro	Tyr	Leu	Val	Arg	Asp
65					70					75					80
Arg	Leu	Ile	Asn	Lys											
				85											

<210> 42266  
<211> 198  
<212> PRT  
<213> A.fumigatus

<400> 42266

Phe	Ala	Phe	Ser	Pro	His	Thr	Ala	Arg	Asn	Asp	Leu	Gly	Ala	Leu	Lys
1				5					10					15	
Arg	Lys	Pro	Ser	Asp	Leu	Val	Arg	Tyr	Leu	Ser	Trp	Ser	Arg	Asp	Thr
			20					25					30		
Lys	Ala	Gln	Tyr	Gly	Ser	Ile	Thr	Asn	Phe	Ile	Cys	Lys	Arg	Arg	Leu
		35					40					45			
Gly	Trp	His	Leu	Pro	Glu	Pro	Ala	Gly	Thr	Asp	Asp	Ser	Ser	Gly	Thr
	50				55					60					
Ala	Val	Ala	Asp	Ser	Glu	Pro	Val	Phe	Pro	Tyr	Asn	Asn	Pro	Ile	Pro
65					70					75					80
Phe	Ala	Asp	Pro	Ser	Asp	Tyr	Lys	Ile	Leu	Arg	Asn	Asp	Trp	Pro	Tyr
			85					90						95	
Gly	Leu	Ala	Pro	Gly	Ile	Ala	His	Leu	Cys	Val	Trp	Leu	Arg	Thr	Pro
			100					105					110		
Val	Pro	Val	Gln	Glu	His	Gly	Gly	Asp	Leu	Thr	Asp	Glu	Ser	Arg	Arg
		115					120					125			
Leu	Ile	Glu	Glu	Phe	Val	Arg	Arg	Thr	Phe	Val	Glu	Arg	Leu	Ala	Arg
	130					135					140				
Glu	Gly	Tyr	Asn	Asn	Pro	Lys	Asp	His	Val	Leu	Trp	Phe	Lys	Asn	Trp
145					150					155					160
Thr	Ala	Leu	Gln	Ser	Val	Arg	Ser	Leu	Glu	His	Ile	His	Val	Leu	Ile
			165					170						175	
Arg	Asp	Val	Pro	Glu	Ser	Ile	Leu	Phe	Glu	Trp	Thr	Gln	Glu	Pro	Pro
			180					185					190		
Arg	Asp	Gly	Leu	Pro	Asn										
				195											

<210> 42267  
<211> 570  
<212> PRT  
<213> A.fumigatus



&lt;400&gt; 42267

Asp Ile Leu Ala Val Met Ser Thr Gln Thr Pro Ser Thr Gln Ala Ala  
 1 5 10 15  
 Ser Leu Ala Asp Gly Leu Ser Pro Ser His Thr Tyr Val Pro Asn Arg  
 20 25 30  
 Gly Tyr Val Asn Ala Glu Gly Thr Ile Pro Ala Met Ala Gly Gln Asp  
 35 40 45  
 Pro Glu Val Gln Glu Val Glu Glu Asp Glu Asp Glu Tyr Tyr Asp Asp  
 50 55 60  
 Ile Phe Glu Glu Glu Leu Asp Glu Glu Asp Phe Thr Ser Ser Asn Thr  
 65 70 75 80  
 Ala Asp Leu Thr Lys Ala Tyr Asn Arg Gln Arg Lys Val Asn Glu Leu  
 85 90 95  
 Ala Ala Asp Pro Asn Ala Pro Lys Trp Thr Tyr Pro Lys Thr Asn Thr  
 100 105 110  
 Gln Lys Pro Thr Val Asn Thr Tyr Ala Ser Val Asp Asp Gln Val Lys  
 115 120 125  
 Ser Leu Thr Arg His Ala Ala Lys Ile Lys Leu Asp His Val Gln Ser  
 130 135 140  
 Gly Leu Ala Val Arg Gly Glu Arg Gly Gly Asp Arg Ala Asp Arg Ala  
 145 150 155 160  
 Thr Ser Glu Gln Val Leu Asp Pro Arg Thr Arg Met Ile Leu Leu Gln  
 165 170 175  
 Met Ile Asn Arg Asn Ile Val Ala Glu Ile His Gly Cys Leu Ser Thr  
 180 185 190  
 Gly Lys Glu Ala Asn Val Tyr His Ala Ile Trp Phe Pro Asp Glu Glu  
 195 200 205  
 Glu Ile Gln His His Arg Ala Ile Lys Val Tyr Lys Thr Ser Ile Leu  
 210 215 220  
 Val Phe Lys Asp Arg Asp Lys Tyr Val Thr Gly Glu Phe Arg Phe Arg  
 225 230 235 240  
 Gln Gly Tyr Ser Lys Ser Asn Asn Arg Ala Met Val Lys Leu Trp Ala  
 245 250 255  
 Glu Lys Glu Met Arg Asn Leu Arg Arg Ile Tyr Thr Ala Gly Ile Pro  
 260 265 270  
 Cys Pro Glu Pro Ile His Leu Arg Leu His Val Leu Val Met Gly Phe  
 275 280 285  
 Val Gly Asn Ser Lys Gly Leu Pro Ala Pro Arg Leu Lys Asp Val Glu  
 290 295 300  
 Phe Asp Ile Pro Glu Pro Glu Thr Arg Trp Arg Glu Leu Tyr Ile Glu  
 305 310 315 320  
 Leu Leu Gly Tyr Met Arg Val Met Tyr Gln Thr Cys His Leu Val His  
 325 330 335  
 Ala Asp Leu Ser Glu Tyr Asn Ile Leu Tyr His Lys Asn Lys Leu Tyr  
 340 345 350  
 Ile Ile Asp Val Ser Gln Ser Val Glu His Asp His Pro Arg Ser Leu  
 355 360 365  
 Glu Phe Leu Arg Met Asp Ile Lys Asn Val Ser Asp Phe Phe Arg Arg  
 370 375 380  
 Lys Gly Val Glu Thr Leu Ser Glu Arg Thr Val Phe Glu Phe Ile Ile  
 385 390 395 400  
 Ser Thr Asp Gly Pro Ala Thr Ile Glu Ala Ser Glu Glu Met Arg Gly  
 405 410 415  
 Ala Ile Glu Lys Leu Tyr Thr Leu Lys Pro Asp Gln Ala Glu Thr Glu  
 420 425 430  
 Gln Asp Thr Ala Val Phe Arg Gln Gln Phe Ile Pro Gln Thr Leu Glu

435 440 445  
 Gln Val Tyr Asp Phe Glu Arg Asp Ala Glu Lys Val Gln Ala Gly Glu  
 450 455 460  
 Gly Ser Asp Leu Val Tyr Arg Asp Leu Leu Ala Gly Ala Lys Ser Ser  
 465 470 475 480  
 Ser Lys Asn Ile Pro Asp Gly Glu Asp Asp Gln Gly Ser Asp Ala Ser  
 485 490 495  
 Gly Gly Val Ser Val Ala Asp Ser Ala Ser Asp Leu Glu Glu Val Pro  
 500 505 510  
 His Gly Glu Asp Pro Phe Ala Lys Lys Gln Pro Arg Gly Lys Arg Phe  
 515 520 525  
 Glu Asp Lys Asp Ser Lys Arg Glu His Lys Gln Arg Val Lys Glu Glu  
 530 535 540  
 Lys Arg Gln Gln Arg Ala Asn Lys Met Pro Lys His Leu Lys Lys Arg  
 545 550 555 560  
 Leu Val Ser Thr Ser Ser Arg Lys Lys Lys  
 565 570

&lt;210&gt; 42268

&lt;211&gt; 281

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42268

Ala Leu Glu Thr Met Trp His Arg Asp Val Ala Ser Ile Asn Tyr Ile  
 1 5 10 15  
 Glu Thr Ser Thr Trp Thr Arg Gln Glu His Asn Gly Phe Ser His Gln  
 20 25 30  
 Asn Pro Ser Phe Ile Gly Ala Val Leu Lys Leu Lys Pro Ser Ala Ala  
 35 40 45  
 Arg Val Tyr Leu Pro Pro Asp Ala Asn Thr Phe Leu Thr Thr Leu His  
 50 55 60  
 His Cys Leu Lys Ser Lys Asn Tyr Ile Asn Leu Met Val Gly Ser Lys  
 65 70 75 80  
 Gln Pro Thr Pro Val Tyr Leu Thr Pro Glu Glu Ala Glu Ser His Cys  
 85 90 95  
 Arg Ala Gly Ala Ser Ile Trp Arg Phe Cys Ser Thr Asp Asn Gly Leu  
 100 105 110  
 Asp Pro Asp Val Val Leu Val Gly Ile Gly Val Glu Val Met Phe Glu  
 115 120 125  
 Val Ile Thr Ala Ala Ala Ile Leu Arg Lys Arg Cys Pro Glu Leu Arg  
 130 135 140  
 Val Arg Val Ile Asn Val Thr Asp Leu Met Ile Leu Glu Asn Glu Gly  
 145 150 155 160  
 Ala His Pro His Ala Leu Thr Thr Glu Ala Phe Asp Asn Leu Phe Thr  
 165 170 175  
 Tyr Asp Lys Pro Ile His Phe Asn Tyr His Gly Tyr Ala Thr Glu Leu  
 180 185 190  
 Gln Gly Leu Leu Ser Gly Arg Pro Arg Leu Asp Arg Val Thr Ile Asn  
 195 200 205  
 Gly Tyr Met Glu Glu Gly Ser Thr Thr Thr Pro Phe Asp Met Met Leu  
 210 215 220  
 Val Asn Lys Thr Ser Arg Phe His Val Ala Gln Ala Ala Leu Arg Gly  
 225 230 235 240  
 Ala Ala Arg Arg Asn Glu Ser Val Arg Ile Arg Gln Gln Glu Leu Tyr  
 245 250 255

## 18873

Thr Glu Leu Asn His Asn Ile Ala Glu Thr Lys Lys Tyr Ile Ile Glu  
                   260                  265                  270  
 Asn Arg Lys Gly Lys Phe Ala Cys Ala  
           275                  280

<210> 42269  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 42269  
 Arg Lys Ile Phe Thr Met Pro Gly Glu Val Ile Asp Thr Pro Asn Pro  
 1                  5                  10                  15  
 Gln Ala Leu Pro Ser His Ile Pro Asp Val Val Glu Gln Leu Gln Val  
           20                  25                  30  
 Lys Leu Asp Leu Thr Ser Leu Glu Gln Pro Ala Cys Asp Ala Leu Ile  
           35                  40                  45  
 Lys Phe Arg Arg Ala Ala Ser Tyr Ile Ala Ala Gly Lys Leu Ala Thr  
           50                  55                  60  
 Tyr Thr Ser Ser Ala Val Leu Ala Asn Val Ser Gln Arg  
 65                  70                  75

<210> 42270  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 42270  
 Arg Asp Pro Thr His Ala Leu Thr Leu Phe Pro Gly His Trp Gly Thr  
 1                  5                  10                  15  
 Cys Pro Gly Leu Ile Leu Val Tyr Ser His Leu Asn Tyr Leu Ile Lys  
           20                  25                  30  
 Thr Arg Asp Leu Asp Met Leu Tyr Val Val Gly Pro Gly His Gly Ala  
           35                  40                  45  
 Pro Ala Ile Leu Ala Ser Leu Trp Leu Glu Gly Ser Leu Glu Lys Phe  
           50                  55                  60  
 Tyr Pro Asp Tyr Ser Arg Asn Ala Glu Gly Leu Arg Asn Leu Ile Ser  
 65                  70                  75                  80  
 Thr Phe Ser Thr Thr Ala Gly Leu Pro Arg  
                   85                  90

<210> 42271  
 <211> 221  
 <212> PRT  
 <213> A.fumigatus

<400> 42271  
 Gly Trp Thr Gly Pro Lys Lys Leu His Gly Lys Phe Ile Glu Gly Ser  
 1                  5                  10                  15  
 Phe His Ser His Gln Val Pro Leu Pro Lys Ala Lys Lys Asp Lys Glu  
           20                  25                  30  
 Glu Leu Gln Ala Leu His Glu Trp Leu Ser Ser Tyr Gly Pro Asn Glu  
           35                  40                  45  
 Leu Phe Lys Glu Asn Gly Asp Ile Ile Asp Glu Ile Lys Ser Ile Ile  
           50                  55                  60  
 Pro Ser Glu Asp Ser Lys Lys Leu Gly Gln Arg Val Glu Ala Tyr Lys

## 18874

65					70					75				80	
Ala	Tyr	Ala	Pro	Pro	Asn	Leu	Pro	Asp	Trp	Arg	His	Phe	Ala	Ile	Asp
				85					90					95	
Lys	Gly	Ser	Gln	Gly	Lys	Cys	Asn	Glu	Ser	Asn	Arg	Glu	Ala	His	Arg
			100					105					110		
Arg	Arg	Phe	Ser	Arg	Leu	Ile	Phe	Thr	Glu	Trp	Asp	Phe	Ser	Ser	Pro
		115					120					125			
Asp	Glu	Leu	Glu	Ser	Asn	Lys	Leu	Ser	Ala	Ala	Leu	Asp	Arg	Thr	Gly
		130				135					140				
Arg	Asn	Phe	Gln	Trp	Asp	Gln	Phe	Ser	Asn	Ala	Arg	Gly	Gly	Arg	Val
145					150					155					160
Ile	Glu	Val	Leu	Ser	Glu	His	Met	Cys	Gln	Gly	Phe	Leu	Gln	Gly	Tyr
			165					170						175	
Thr	Leu	Thr	Gly	Arg	Thr	Gly	Ile	Phe	Pro	Ser	Tyr	Glu	Ser	Phe	Leu
			180					185					190		
Gly	Ile	Ile	His	Thr	Met	Met	Val	Gln	Tyr	Ala	Lys	Phe	Ile	Lys	Met
		195					200					205			
Val	Leu	Arg	Ser	Leu	Val	Ala	Gln	Ser	Lys	Met	Gly	Cys			
	210					215					220				

&lt;210&gt; 42272

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42272

Gln	Gly	Ile	Ala	Pro	Thr	Phe	Phe	Thr	Ala	Gly	Ile	Tyr	Val	Leu	Leu
1				5					10					15	
Gly	Arg	Phe	Ile	Thr	Ile	Leu	Gly	Arg	Glu	Ser	Ser	Ile	Ile	Ser	Pro
		20						25				30			
Asn	Leu	Tyr	Leu	Trp	Ile	Phe	Val	Thr	Cys	Asp	Ile	Ile	Ser	Leu	Val
		35					40					45			
Val	Gln	Ala	Ile	Gly	Gly	Gly	Met	Ala	Ser	Ala	Ala	Thr	Asn	Asp	Val
	50					55					60				
Asn	Gly	Asp	Thr	Ala	Pro	Gly	Thr	His	Ile	Met	Val	Ala	Gly	Ile	Val
65					70				75					80	
Phe	Gln	Met	Ala	Ser	Ile	Thr	Val	Phe	Val	Ile	Leu	Ala	Ala	Asp	Phe
			85					90						95	
Val	Arg	Arg	Ala	Leu	His	Arg	Arg	Leu	Leu	Gln	Ser	Met	Ser	Gly	Ser
			100					105					110		
Ile	Val	Pro	Leu	Phe	Gly	Ala	Met	Ile	Phe	Ser	Val	Val	Cys	Ile	Tyr
		115					120					125			
Val	Arg	Ser	Ile	Tyr	Arg	Thr	Ile	Glu	Leu	Ser	Glu	Gly	Trp	Ser	Gly
	130					135					140				
Tyr	Leu	Ile	Thr	Thr	Glu	Arg	Tyr	Phe	Ile	Ala	Leu	Asp	Gly	Ala	Met
145					150					155					160
Met	Val	Ala	Ala	Val	Val	Phe	Asn	Val	Phe	His	Pro	Gly	Trp	Met	
			165					170					175		
Met	Pro	Thr	Gly	Lys	Ser	Met	Gln	Phe	Gln	Arg	Glu	Ile	Tyr	Ser	Ala
		180					185					190			
Asp	Gly	Leu	Pro	Ala	Thr	Glu	Leu	Arg							
	195					200									

&lt;210&gt; 42273

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42273

```

Leu Leu Tyr Gly Pro Gly Ala Asp Asn Val Arg Arg Ser Trp His Ala
1           5           10           15
Ile Lys Tyr Ile Asp Pro Ala Glu Ser Gly Ala Val Leu Pro Ile Leu
20           25           30
His Leu Asn Gly Phe Lys Ile Ser Glu Arg Thr Ile Phe Gly Cys Met
35           40           45
Asp Asp Arg Glu Leu Ile Ser Leu Phe Thr Gly Tyr Gly Tyr Gln Val
50           55           60
Arg Ile Val Gln Asp Leu Asn Asp Ile Asp Thr Asp Leu His Arg Ser
65           70           75           80
Met Thr Trp Ala Val Asp Glu Ile His Lys Ile Gln Gln Ala Ala Arg
85           90           95
Ser Gly Lys Pro Ile Leu Lys Pro Arg Trp Pro Leu Leu Ile Leu Arg
100          105          110
Thr Pro Lys Val Cys Pro Leu Arg Lys Asp Tyr Gln Arg Glu Ser Val
115          120          125
Trp Leu Thr Leu Ala Pro Ile Thr Asp Arg Asp Gly Arg Asp Pro Arg
130          135          140
Asn Cys Thr Ala Ser Ser Ser Arg Gly His Ser Ile Arg Thr Arg Phe
145          150          155          160
Arg Phe Pro Lys Arg Arg Arg Thr Arg Arg Asn Cys Arg Pro Ser Met
165          170          175
Ser Gly Cys Arg Arg Thr Val Pro Met Ser Phe Ser Arg Lys Thr Glu
180          185          190
Ile Leu Ser Thr Arg
195

```

&lt;210&gt; 42274

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (149)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42274

```

Ser Phe Val Ser Ala Ser Leu His Ala Phe Gln Ser Ile Ile Thr His
1           5           10           15
Arg Cys Gln Ser Cys Val Pro Leu His Gln Arg Ser Trp Lys Ser Lys
20           25           30
Pro Arg Glu His Lys Arg Asp Ala Tyr Gln Gln Gly Gly Ser Phe Leu
35           40           45
Ser Gln Pro Ser Arg Thr Lys Leu Met Leu Ile Ala Ile Gln Ala Glu
50           55           60
Glu Ile Leu Asn Lys Gln Ser Gly Trp Lys Ala Leu Thr Gly Thr Thr
65           70           75           80
Asp Phe Ser Arg Ile Ala Val Glu Asn Pro Pro Ser His Ala His Lys
85           90           95
Leu Ala Phe Asp Ile Val Val Asp Arg Ile Leu Gly Phe Val Gly Asn
100          105          110
Tyr Phe Val Lys Leu Asp Gly Gln Val Asp Ala Ile Val Phe Ala Gly

```

## 18876

```

      115              120              125
Gly Ile Gly Glu Lys Ser Ala Leu Leu Arg Lys Val Leu Val Glu Lys
      130              135              140
Ala Ser Cys Leu Xaa Val Ala Val Asp Thr Ala Ala Asn Glu Thr Gly
145              150              155              160
Pro Ala Glu Asp Gln Thr Val Leu Asp Ile Ser Lys Glu Ala Gly Lys
      165              170              175
Arg Pro Arg Val Leu Val Cys Gln Thr Asp Glu Gln Val Ser Arg Arg
      180              185              190
Pro Leu Thr Ser Cys Leu Asn Glu Leu Leu Thr His Leu Ile Ser Leu
      195              200              205
Arg Trp His Ile Ile Ala Phe
      210              215

```

&lt;210&gt; 42275

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42275

```

Arg Ala Asn Thr Ser Ser Ser Arg Pro Asp Leu Met Ser Glu Ser Asp
1              5              10              15
Gly Ile Asp Thr Ser Pro Glu Lys Ile Ile Gln Val Val Leu Leu Phe
      20              25              30
Asp His Ala Pro Trp Tyr Leu Arg Ser Ala Met Tyr Asp Glu Thr Arg
      35              40              45
Ile Gly Thr Gly Pro Val Thr Leu Ile Gly Leu Arg Pro Arg Gly Leu
      50              55              60
Arg Arg Ser Ile Ser Pro
65              70

```

&lt;210&gt; 42276

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42276

```

His Leu Pro Pro Ala Arg Arg Ala Arg Glu Ser Ser Ser Phe Val Arg
1              5              10              15
Val Ile Phe Glu Gly Ile Gly Lys Glu Trp Leu Met Thr Leu Ile Thr
      20              25              30
Ile Arg His Asn Tyr Ser Ala Leu Glu Ile Ile Arg Thr Cys Lys Gln
      35              40              45
Glu Ile Pro Asn Val Lys Ser Val Thr Phe Phe Asp Ser Ala Phe His
      50              55              60
Gln Thr Met Pro Glu His Val Lys Thr Tyr Pro Ile Asp Gln Gly Ile
65              70              75              80
Ala Lys Ala Asn Gly Leu Arg Lys Tyr Gly Phe His Gly Ile Ser Tyr
      85              90              95
Ser Phe Ile Leu Arg Ser Val Ala Glu Phe Leu Lys Lys Pro Val Glu
      100              105              110
Glu Thr Asn Ile Ile Ala Met His Leu Gly Ser Gly Ala Ser Met Cys
      115              120              125
Ala Ile Arg Asn Gly Lys Ser Val Asp Thr Thr
      130              135

```

<210> 42277  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 42277  
 Thr Ala Arg Ile Gly Arg Gln His Ile Val Leu Gly Thr Gln Ala Asp  
 1 5 10 15  
 Asn Arg Ile Thr Ile Ser Asn Cys Tyr Ile Asp Gly Val Thr Asp Tyr  
 20 25 30  
 Ser Ala Thr Cys Asn Gly Tyr His Tyr Trp Gly Ile Tyr Leu Asn Gly  
 35 40 45  
 Ser Asn Asp Met Val Thr Met Lys Gly Asn Tyr Ile Tyr His Thr Thr  
 50 55 60  
 Gly Arg Ser Pro Lys Val Gln Gly Asn Thr Leu Leu His Ala Val Arg  
 65 70 75 80  
 Ser Phe Pro Ser Ser Leu Ile Thr Pro Asn  
 85 90

<210> 42278  
 <211> 121  
 <212> PRT  
 <213> A.fumigatus

<400> 42278  
 Ser Pro Leu Thr Asn Arg Gly Asn Gln Val Asn Asn Tyr Trp Tyr Asp  
 1 5 10 15  
 Asn Ala Gly His Ala Phe Glu Ile Gly Ser Gly Ala Tyr Val Val Ala  
 20 25 30  
 Glu Gly Asn Val Phe Gln Asn Val Lys Ala Val Ala Glu Ser Pro Ile  
 35 40 45  
 Ser Gly Lys Leu Phe Ser Ser Pro Asp Ala Ser Thr Asn Lys Val Cys  
 50 55 60  
 Ser Ser Tyr Leu Gly His Thr Cys Gln Ile Asn Gly Phe Gly Ser Ser  
 65 70 75 80  
 Gly Ala Phe Ser Gln Ala Asp Thr Asp Ile Leu Ser Lys Phe Lys Gly  
 85 90 95  
 Lys Asn Ile Ala Ser Ala Ala Ala Tyr Asn Thr Val Val Ser Ser Val  
 100 105 110  
 Thr Ala Asn Ala Gly Asn Gly Lys Leu  
 115 120

<210> 42279  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 42279  
 Phe Gly Arg Leu Leu Ser Arg Ala Val Thr Pro Thr Leu Phe Leu Leu  
 1 5 10 15  
 Leu Leu Leu Leu Leu Leu Phe Pro Tyr Leu Phe Leu Leu Leu Phe Leu  
 20 25 30  
 Leu Leu Pro Leu Leu Pro Leu Phe Arg Leu Phe Leu Leu Leu Val Asn  
 35 40 45  
 Gln Pro Trp Leu Ala Phe Leu Asp Glu Leu Leu Arg Arg Val Gln His  
 50 55 60

## 18878

Ile Ser Pro Met Leu Arg Met His Ile Arg Pro Pro Gln Met Lys Val  
 65 70 75 80  
 Leu Gln Arg

<210> 42280

<211> 103

<212> PRT

<213> A.fumigatus

<400> 42280

Ser Ala Gln Pro His Gln Met Gly Val Glu Ser Ile Asp Thr Asn Tyr  
 1 5 10 15  
 Thr Ala Asp Thr Thr Arg Asp His Phe Lys Ser Gly Thr Thr Phe Arg  
 20 25 30  
 Ser Tyr Asp Asp Asp Ala Phe Ser Tyr Thr Asp Thr Val Glu Leu Ser  
 35 40 45  
 Val Ala Val Ala Asn Pro Glu Ser Arg Glu Trp Arg Pro Arg Val Lys  
 50 55 60  
 Asp Trp Leu Val Leu Ile Cys Ile Ser Thr Leu Thr Met Leu Val Ala  
 65 70 75 80  
 Phe Asp Ala Thr Met Val Val Pro Phe Ile Pro Val Arg His Pro Ser  
 85 90 95  
 Gln Pro Ser Glu Pro Pro Ser  
 100

<210> 42281

<211> 318

<212> PRT

<213> A.fumigatus

<400> 42281

Cys Ile Glu Cys Leu Leu Gly Ser Val Thr Gln Lys Thr Gln Glu Phe  
 1 5 10 15  
 Ile Lys His Asp Ala Glu Glu Lys Ala Lys Glu Lys Ala Lys Ser Thr  
 20 25 30  
 Lys Glu Glu Ser Ala Val Ala Leu Lys Arg His Lys Phe Val Leu Tyr  
 35 40 45  
 Pro Phe Lys Pro Arg Leu Ser Lys Ala His Leu Asp Arg Arg Trp Thr  
 50 55 60  
 Ala Val Lys Phe Leu Cys Lys Arg Pro Leu Ser Glu Asp Thr Lys Cys  
 65 70 75 80  
 Tyr Thr Phe Glu Leu Pro Ser Arg Asp Lys Lys Leu Gly Leu Glu Thr  
 85 90 95  
 Gly Gln His Leu Gln Ile Gly Phe His Phe Gln Asp Arg Leu Val Ile  
 100 105 110  
 Arg Pro Tyr Thr Pro Thr Arg Pro Ile Leu Glu Ser Glu Glu Asp Gly  
 115 120 125  
 Thr Phe Asp Leu Val Val Lys Thr Tyr Phe Pro Ser Ser Ala Gln Pro  
 130 135 140  
 Gly Gly Thr Met Ser Asn Ile Leu Asp Cys Leu Gln Glu Gly Glu Glu  
 145 150 155 160  
 Val Glu Val Lys Gly Pro Ala Gly Glu Ile Arg Tyr Arg Gly Asn Gly  
 165 170 175  
 Glu Phe Arg Val Asp Asp Lys Thr Tyr His Phe Asp His Ile Thr Leu  
 180 185 190



## 18879

Ile Leu Gly Gly Ser Gly Ile Thr Pro Gly Tyr Gln Leu Ile Ala Arg  
 195 200 205  
 Ile Leu Arg Thr Glu Gln Gly Lys Gly Pro Lys Val Arg Ala Ile Asp  
 210 215 220  
 Ala Asn Lys Ser Glu Glu Asp Ile Leu Met Arg Gly Glu Leu Asp Lys  
 225 230 235 240  
 Tyr Ala Thr Glu Asn Ala Asp Gln Phe Gln Ile Thr Tyr Val Leu Ser  
 245 250 255  
 His Pro Ala Glu Asp Trp Thr Gly Glu Lys Gly His Val Asn Glu Lys  
 260 265 270  
 Ile Leu His Lys Tyr Ala Phe Glu Pro Gly Glu Lys Ser Val Ala Leu  
 275 280 285  
 Leu Cys Gly Pro Pro Ala Met Ile Gln Lys Ala Val Leu Pro Val Leu  
 290 295 300  
 Lys Lys Trp Gly Tyr Asp Glu Asp Lys Asn Leu Phe Gly Phe  
 305 310 315

&lt;210&gt; 42282

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42282

Asp Phe His Leu Arg Arg Pro Asp Val His Pro Lys His Trp Arg Tyr  
 1 5 10 15  
 Val Leu His Thr Thr Glu Glu Phe Ile Lys Glu Gly Gln Pro Trp Leu  
 20 25 30  
 Ile Asn Glu Lys Lys Lys Glu Thr Glu Glu Gly Glu Lys Gly Lys Lys  
 35 40 45  
 Lys Lys Glu Gln Gln Glu Lys Val Gly Glu Gln Gln Gln Gln Lys  
 50 55 60  
 Glu Gln Glu Glu Gly Gly Ser Asp Gly Ser Gly Lys Lys Pro Ala Glu  
 65 70 75 80  
 Ser Gly Gln Glu Gly Pro Asp Gln Gly Asp Glu Glu Asp Ser Lys Lys  
 85 90 95  
 Pro Lys Tyr Thr Pro Glu Gln Gln Ala Leu Leu Ala Tyr Leu Lys Gln  
 100 105 110  
 Glu Ala Glu Tyr Met Gln Ser Leu Lys Ser Asn Asp Gly Lys Gly Arg  
 115 120 125  
 Ser Pro Ala Arg Ser Ser Ser Val Pro Gly Glu Ile Asp Glu Ala Asp  
 130 135 140  
 Gln Phe Thr Pro Asp Asn Trp Val Pro Arg Thr Asp His Leu Ile Arg  
 145 150 155 160  
 Leu Thr Gly Lys His Pro Leu Asn Gly Glu Pro Asp Leu Val Glu Leu  
 165 170 175  
 Phe Asp Ala Gly Leu Ile Thr Pro Asn Tyr Leu His Tyr Val Arg Ser  
 180 185 190  
 His Gly Leu Val Pro His Leu Leu Trp Glu Asn His Lys Leu Glu Ile  
 195 200 205  
 Ser Ala Gly Lys Ser Leu Thr Leu Leu Met Asp Asp Leu Lys Asp Arg  
 210 215 220  
 Phe Glu Ser Ile Asn Ile Pro Ala Val Met Ala Cys Asp Gly Asn Arg  
 225 230 235 240  
 Arg Lys Glu Leu Asn Leu Ile Lys Arg Ser Lys Gly Phe Asn Trp Gly  
 245 250 255  
 Pro Ala Ala Val Gly Cys Ala Tyr Trp Lys Gly Val Leu Met Arg Asp

## 18880

```

      260      265      270
Val Leu Leu Met Ala Asp Ile Leu Gln Leu Met Asp Glu Tyr Lys Asp
      275      280      285
Val Pro Leu Trp Val Asn Phe Gly Gly Ala Glu Ile Leu Ser Glu Gly
      290      295      300
Lys Tyr Glu Thr Ser Ile Pro Leu Asp Tyr Cys Met Asp Pro Cys Asn
305      310      315      320
Asp Val Ile Leu Ala Tyr Glu Met Asn Asp Ser Pro Ile Pro Pro Asp
      325      330      335
His Gly Tyr Pro Leu Arg Leu Val Ile Pro Gly Tyr Val Gly Gly Arg
      340      345      350
Cys Val Lys Trp Leu Glu Lys Ile Trp Val Thr Asp Arg Glu Asn Asp
      355      360      365
Thr Tyr Tyr His Ile Phe Asp Asn Arg Val Val Pro Ser Phe Val Thr
      370      375      380
Asp Arg Phe Asp Glu Ile Phe Gly Gln Thr Met Tyr Arg Leu Pro Ser Thr
385      390      395      400
Ala Cys Asn Glu Gln Met Leu Asn Ser Val Ile Ala Arg Pro Ala Gln
      405      410      415
Gly Glu Arg Ile Asp Leu Ala Glu Val Arg Lys Gly Arg Lys Tyr Arg
      420      425      430
Ile Met Gly Tyr Ala Tyr Asn Gly Gly Gly Asn Glu Val Gln Arg Val
      435      440      445
Glu Val Ser Leu Asp Gly Gly Val Asn Trp Leu Tyr Cys Val Arg Lys
      450      455      460
Val Cys Arg Glu Pro Cys Leu Arg Pro Val Val Met Leu Phe Asp Ala
465      470      475      480
Ser Asp Thr Glu Gln Phe Pro Glu Ala Pro Leu Arg His Gly Lys Lys
      485      490      495
Phe Trp Thr Trp Leu His Trp His Val Asp Ile Asp Ile Thr Gln Leu
      500      505      510
Leu Arg Ala Glu Gln Ile Thr Val Arg Cys Trp Asp Val Asn Lys Asn
      515      520      525
Thr Gln Pro Glu Asn Pro Thr Trp Asn Leu Glu Gly
      530      535      540

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&lt;210&gt; 42283

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42283

```

Ser Ala Ser Trp Asp Pro Ser Pro Arg Arg Arg Lys Ser Ser Ser Ser
1      5      10      15
Thr Thr Pro Lys Lys Lys Arg Arg Arg Lys Gln Asn Gln Gln Lys Arg
      20      25      30
Arg Ala Arg Leu Pro Leu Ser Val Thr Ser Ser Phe Ser Ile Leu Ser
      35      40      45
Ser His Val Tyr Gln Lys Leu Thr Ser Ile Ala Asp Gly Pro Arg Ser
      50      55      60
Asn Ser Ser Ala Asn Asp His Tyr Arg Lys Thr Arg Ser Ala Thr Pro
65      70      75      80
Leu Ser Ser His Leu Glu Thr Arg Ser Ser Ala Trp Lys Gln Ala Ser
      85      90      95
Ile Phe Arg Ser Ala Ser Thr Ser Arg Thr Gly Leu Ser Phe Ala His
      100      105      110

```

## 18881

Thr Pro Leu Pro Gly Pro Ser Trp Ser Pro Lys Lys Thr Ala His Ser  
 115 120 125  
 Thr Leu Ser Ser Lys Arg Thr Ser Pro Val Leu His Asn Gln Ala Ala  
 130 135 140  
 Gln  
 145

&lt;210&gt; 42284

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42284

Thr Pro Phe Leu Thr Asn Cys Gln Ser Leu Ser Leu Thr Phe Gly Glu  
 1 5 10 15  
 Pro Leu Ser Ser Asn Leu Trp Leu Asn Ser Cys Tyr Leu Leu Ala Ser  
 20 25 30  
 Ala Thr Gly Gln Ile Phe Phe Ser Met Leu Ala Glu Val Ile Gly Pro  
 35 40 45  
 Gly Pro Leu Leu Val Ala Ala Ala Val Leu Ser Thr Val Gly Thr Gly  
 50 55 60  
 Val Cys Ser Gly Ser Leu Gln Leu Ser Glu Leu Val Ala Gly Arg Phe  
 65 70 75 80  
 Ile Gln Gly Leu Gly Gly Gly Gly Val Val Ser Val Ser Leu Leu Cys  
 85 90 95  
 Leu Ala Glu Asn Ile Pro Asp Lys His Leu Ile Arg Phe Ser Asn Tyr  
 100 105 110  
 Val Ser Arg Val Arg Leu Ala Gly Ala Ile Leu Gly Leu Val Met Gly  
 115 120 125  
 Ser Leu Leu Phe Glu Tyr Ile Ala Trp Arg Gly Ala Phe Tyr Ser Ser  
 130 135 140  
 Phe Phe Phe Cys Ala Leu Gly Met Leu Val Ile Pro Phe Ala Ile Asp  
 145 150 155 160  
 Leu Arg Gly His Arg Gly Ile Ser Ser Gln Thr Phe Leu Arg Leu Asp  
 165 170 175  
 Trp Leu Gly Gly Val Leu Thr Leu Leu Gly Leu Cys Ser Leu Leu Ile  
 180 185 190  
 Gly Ile Ser Trp Gly Gly Thr Ser Tyr Ala Trp Ser Ala Trp Gln Val  
 195 200 205  
 Leu Thr Pro Ile Thr Ile Gly Ala Ser Ser Met Leu Val Leu Ala Val  
 210 215 220  
 Asn Glu Thr Asn Trp Ala Val Arg Pro Phe Phe His Arg Asn Asp Phe  
 225 230 235 240  
 Arg Thr Leu Pro Val Leu Met Met Tyr Ala Gly Ser Phe Leu His Gly  
 245 250 255  
 Phe Thr Val Lys Ser Pro Thr Ser Pro Asn  
 260 265

&lt;210&gt; 42285

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42285

Thr Arg Thr Pro Ser Arg Lys Ile Arg Arg Gly Ile Ser Lys Gly Glu  
 1 5 10 15

## 18882

Cys Arg Ala Met Lys Ala Asn Arg Arg Cys Thr Ser Leu Asn Thr Ser  
                   20                                  25                                  30  
 Ser Met Met Asn Asn Cys His Tyr Val Val Lys Ser Glu Thr Phe Val  
                   35                                  40                                  45  
 Glu Pro Thr Asn Asn Lys Pro Tyr Leu Leu Phe Arg His Pro Ala Glu  
                   50                                  55                                  60  
 Ala Gly Thr Gly Asp Asn Gly Trp Met Lys Pro Ser Ile Asp Ile Gln  
                   65                                  70                                  75                                  80  
 Lys Glu Asp Ile Arg Arg Ser Ala Ala Val Pro Glu Lys Gln Phe Thr  
                                   85                                  90                                  95  
 Arg Glu Glu Ile Glu Lys His Thr Thr Asp Asp Asp Cys Trp Ile Ile  
                                   100                                  105                                  110  
 Ile Asn Asp Lys Val Tyr Asp Ala Thr Ser Val Leu Ser Trp His Pro  
                                   115                                  120                                  125  
 Gly Gly Lys Ala Pro Ile Met Ala His Ala Gly Arg Val His Gln Asp  
                                   130                                  135                                  140  
 Thr Ser Lys Glu Phe Glu Ser Ile His Asp Asp Tyr Ala Val Arg Lys  
                                   145                                  150                                  155                                  160  
 Leu Glu Gly Ile Pro Ser Leu Phe Ala Pro Ile Gly Arg Ala Asn Ile  
                                   165                                  170                                  175  
 Val His Arg Val Pro Pro Gly Ile Arg His Pro Glu Asp Ala Arg Val  
                                   180                                  185                                  190  
 His Gln Ala Arg Arg Arg Arg Lys Ser Glu Gly Glu Ser Lys Ile Asn  
                                   195                                  200                                  205  
 Lys Arg Gly Glu Arg Gly Cys Pro  
                                   210                                  215

&lt;210&gt; 42286

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42286

Arg His Ala Gly Ile Ser Ser His Ser Gln Thr Val Glu His Glu Glu  
 1                                  5                                  10                                  15  
 Pro Ala Glu Leu Arg Lys Ser Leu Phe Asp Asp Pro Ala Ser Gln Pro  
                                   20                                  25                                  30  
 Glu Glu Trp Glu Asn Val Phe Arg Thr Asn Val Thr Gln Leu Phe Phe  
                                   35                                  40                                  45  
 Thr Thr Thr Ala Phe Leu Pro Leu Leu Ala Lys Gly Ser Glu Gln Glu  
                                   50                                  55                                  60  
 His Gly Trp Ser Ser Thr Val Ile Asn Ile Ser Ser Ile Ser Gly Ile  
                                   65                                  70                                  75                                  80  
 Val Lys Ile Ser Gln His His Phe Ala Tyr Asn Ala Ser Lys Ala Ala  
                                   85                                  90                                  95  
 Ala Ile His Leu Ser Lys Met Leu Ala His Glu Ile Ser Ser Ser Lys  
                                   100                                  105                                  110  
 Leu Lys Ile Arg Val Asn Asn Ile Ala Pro Gly Val Phe Pro Ser Glu  
                                   115                                  120                                  125  
 Met Thr Ala Gly Glu Ser Asp Glu Lys Gln Lys Ser Phe Ile Pro Arg  
                                   130                                  135                                  140  
 Glu Lys Tyr Glu Gln Lys Val Pro Ala Gly Arg Pro Gly Lys Asp Glu  
                                   145                                  150                                  155                                  160  
 Asp Met Ala Ser Ala Val Leu Phe Thr Ala Thr Asn Gln Tyr Leu Asn  
                                   165                                  170                                  175  
 Gly Gln Thr Ile Val Val Asp Gly Gly Tyr Val Leu Ala Ala Gly Thr

180 185 190  
 Val  
  
 <210> 42287  
 <211> 146  
 <212> PRT  
 <213> A.fumigatus  
  
 <400> 42287  
 Asp Arg Ala Asp His Cys Gly Leu Pro Pro Cys Arg His Pro Leu Leu  
 1 5 10 15  
 His Gly Asp Arg Arg Phe Trp Pro Asp Gly Gly Cys His Cys Pro Gly  
 20 25 30  
 Arg Gly His Leu His Trp Tyr Arg Gly Ala Arg His Gly Arg Arg Pro  
 35 40 45  
 Ala Ala Ile His Gln Arg Arg Arg Lys Arg Glu Ala Ile Ser Pro Leu  
 50 55 60  
 Ser Thr Gln Ser Pro His Gln Arg Pro Lys His Phe Leu Pro Gln Arg  
 65 70 75 80  
 Arg Ala Val Gly Arg Gly Leu Pro Ile Arg Arg Asp Arg Leu Arg Pro  
 85 90 95  
 Asn Leu Ala Arg Thr Lys Ile Pro His Arg Arg Gly Val Gln Gly Ala  
 100 105 110  
 Gln Gln Arg Arg Arg Gly Asp Arg Arg Arg Arg Gln Arg Arg Ser Arg  
 115 120 125  
 Thr Ala His Cys Gly Cys Arg His Arg Arg Arg Leu Arg Gln Arg Arg  
 130 135 140  
 Arg His  
 145  
  
 <210> 42288  
 <211> 1126  
 <212> PRT  
 <213> A.fumigatus  
  
 <400> 42288  
 Thr Ala Gly Pro Ser Val Gln Ser His Thr Leu Leu Asn Thr Leu Glu  
 1 5 10 15  
 Ile Ala Ala Leu Gly Met Ala Gln Ser Pro Ala Ser Ser Glu Pro Leu  
 20 25 30  
 Lys Gln Asp Phe Lys Leu Gly Val Asp Asn Pro Asn Glu Pro Pro Asp  
 35 40 45  
 Gly Arg Thr Gly Arg Ala Thr Arg Ile Gln Phe Asp Gly Asp Val Pro  
 50 55 60  
 Pro Glu Glu Gly Ser Gly Gly Ile Tyr His Ser Arg Leu Ser Arg His  
 65 70 75 80  
 Arg Ser Leu Ser Arg Asp Thr Ile Arg Ser Ser His Asp Ala Ser Gln  
 85 90 95  
 Ser Asn Lys Ala Ala Gly Ile Pro Ile Glu Phe Arg Thr Leu Ser Phe  
 100 105 110  
 Gln Ile Ser Glu Ser Gln Asn Ala Thr Glu Ala Ala Ile Lys Ala Arg  
 115 120 125  
 Gln Gly Lys Asp Asn Lys Pro Asp Gln Asp Tyr Phe Glu Ser Leu Asp  
 130 135 140  
 Tyr His Ile Leu Gln Pro Asp Arg Leu Phe Gln Gln Leu Asn Val Asp

145					150					155					160
Pro	Arg	Ser	Gly	Leu	Ser	Ser	Ser	Ala	Ala	Thr	Ser	Arg	Leu	Gln	Arg
				165					170					175	
Asp	Gly	Lys	Asn	Val	Ile	Ala	His	His	Ser	Glu	Asn	Tyr	Leu	Lys	Lys
			180					185					190		
Ile	Phe	Phe	Tyr	Val	Phe	Gly	Gly	Phe	Cys	Ser	Val	Leu	Trp	Ile	Gly
		195				200					205				
Val	Ile	Ile	Phe	Phe	Ile	Cys	Trp	Lys	Pro	Leu	Ser	Asn	Pro	Pro	Ser
	210				215						220				
Val	Pro	Ser	Leu	Ala	Met	Ala	Ile	Leu	Val	Leu	Ile	Val	Ile	Phe	Leu
225				230						235					240
Gln	Ala	Ser	Phe	Ser	Ala	Phe	Gln	Asp	Trp	Ser	Thr	Lys	His	Val	Met
			245					250						255	
Asn	Ser	Ile	Leu	Asn	Leu	Leu	Pro	Ser	Glu	Ala	Leu	Val	Val	Arg	Asp
			260					265					270		
Gly	Lys	Gln	Ile	Arg	Val	Pro	Ser	Thr	Asp	Leu	Val	Ala	Gly	Asp	Ile
		275				280						285			
Val	His	Val	Ser	Ile	Gly	Asn	Asn	Ile	Pro	Ala	Asp	Met	Arg	Leu	Phe
	290				295						300				
Gln	Thr	Ser	Gly	Asp	Val	Arg	Phe	Asp	Arg	Ser	Ile	Leu	Thr	Gly	Glu
305				310						315					320
Ser	Asp	Glu	Ile	Glu	Gly	Ala	Ile	Asp	Val	Thr	Asp	Asp	Asn	Phe	Leu
			325					330						335	
Glu	Thr	Arg	Asn	Ile	Ala	Phe	Met	Gly	Thr	Ser	Val	Thr	Asn	Gly	Asn
			340					345					350		
Ala	Val	Gly	Val	Val	Val	Leu	Thr	Gly	Ser	Arg	Ser	Val	Met	Gly	Arg
		355					360					365			
Ile	Ala	Lys	Met	Thr	Thr	Gly	Val	Lys	Glu	Lys	Pro	Thr	Leu	Ile	Gln
	370				375						380				
Lys	Glu	Ile	Thr	Arg	Phe	Val	Thr	Ile	Ile	Ile	Cys	Leu	Thr	Val	Thr
385				390						395					400
Leu	Val	Leu	Ile	Ile	Leu	Phe	Thr	Trp	Val	Gly	Trp	Leu	Arg	Val	Glu
			405						410					415	
His	Tyr	Gln	Phe	Met	Asn	Val	Val	Ser	Met	Leu	Asn	Asn	Val	Met	Gly
		420						425					430		
Cys	Val	Val	Ala	Phe	Ile	Pro	Glu	Gly	Met	Pro	Val	Gly	Val	Ala	Leu
		435				440						445			
Thr	Leu	Met	Met	Ile	Ala	Thr	Arg	Met	Lys	Lys	Asn	Asn	Ile	Leu	Pro
	450				455						460				
Lys	Gly	Leu	Ala	Thr	Val	Glu	Thr	Leu	Gly	Cys	Val	Asn	Val	Ile	Cys
465				470						475					480
Ser	Asp	Lys	Thr	Gly	Thr	Leu	Thr	Gln	Asn	Lys	Met	Phe	Val	Arg	Ser
			485					490						495	
Leu	Gly	Leu	Thr	Asp	Gln	Glu	Leu	His	Ile	Glu	Lys	Leu	Leu	Gly	Asp
			500												

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      595              600              605
Thr Tyr Val Lys Gly Ala Pro Asp Val Leu Leu Pro Arg Cys Thr Ser
  610              615              620
Tyr Tyr Ser Gly Leu Glu Ser Arg Ile Lys Pro Met Asp Glu Asn Ala
625              630              635              640
Arg Arg Met Leu Ser Asp Phe Gln Thr Ser Leu Ser Arg Arg Ala Glu
      645              650              655
Arg Val Ile Val Leu Cys Gln Arg Tyr Tyr Thr Pro Ser Ala Ala Val
      660              665              670
Gly Ser Asn Asp Phe Asn Asp Glu Val Leu Ala His Gly Val His Asp
      675              680              685
Leu Thr Val Ile Gly Ile Phe Gly Ile Val Asp Leu Pro Arg Pro Glu
      690              695              700
Thr Ala Arg Thr Ile Ala Ala Cys Arg Arg Ala Gly Ile Arg Phe Phe
705              710              715              720
Met Val Thr Gly Asp Phe Gly Leu Thr Ala Ala Ala Ile Ala Arg Asp
      725              730              735
Val Gly Ile Phe Thr Gly Thr Ala Glu Pro Asp Thr Val Asp Asp Leu
      740              745              750
Arg Leu Ser Thr Ser Asp Asp Glu Asn Glu Lys Gln Ser Leu Arg Ser
      755              760              765
Arg Arg Ser Leu Leu Ile Asn Gly Pro Ser Ile Ser Ser Leu Ser Asp
      770              775              780
Glu Gln Trp Asp Ala Val Cys Gln Tyr Glu Glu Ile Val Phe Ala Arg
785              790              795              800
Thr Ser Pro Glu Gln Lys Tyr Arg Ile Val Glu Glu Phe Lys Ala Arg
      805              810              815
Asn Asn Val Val Ala Val Thr Gly Asp Gly Val Asn Asp Ala Pro Ala
      820              825              830
Leu Arg Thr Ala Asp Val Gly Ile Ala Val Val Ser Gly Ser Asp Val
      835              840              845
Ala Ile Glu Ala Ala Asp Leu Val Leu Leu Asp Lys Phe Asp Ser Ile
      850              855              860
Val Asp Ala Ile Arg Leu Gly Arg Leu Val Phe Gln Asn Leu Gln Lys
865              870              875              880
Val Ile Ala Tyr Leu Leu Pro Ala Gly Ser Trp Ser Glu Ile Trp Pro
      885              890              895
Val Leu Met Asn Val Phe Phe Gly Val Pro Leu Pro Leu Ser Ser Phe
      900              905              910
Leu Met Ile Ile Ile Cys Val Phe Thr Asp Leu Phe Leu Ser Leu Ser
      915              920              925
Leu Ile Met Glu Lys Glu Glu Phe Asp Leu Leu Ser Leu Pro Pro Arg
      930              935              940
Asn His Lys Lys Asp His Leu Ile Asn Leu Lys Ile Tyr Ala Gln Ser
945              950              955              960
Tyr Leu Phe Ile Gly Val Met Glu Thr Phe Ile Ala His Ser Met Phe
      965              970              975
Phe Leu Tyr Met Tyr Lys Lys Ala Gly Ile Pro Phe His Ala Val Ile
      980              985              990
Phe Ala Phe Glu Ser Tyr Ser Asp Gly Phe Tyr Gly Tyr Ser Ala Glu
      995              1000              1005
Gln Leu Ala His Phe Asn Asn Val Gly Gln Gly Val Tyr Phe Val Thr
      1010              1015              1020
Leu Val Met Leu Gln Trp Gly Asn Ile Leu Ser Val Arg Asn Lys Arg
1025              1030              1035              1040
Leu Ser Ile Leu Thr Ala Asp Pro Val Arg Lys Gln Arg Arg Asn Pro

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## 18886

1045 1050 1055  
 Trp Leu Pro Leu Ala Met Leu Val Ser Leu Val Ile Ala Ile Phe Val  
 1060 1065 1070  
 Thr Glu Val Pro Gly Phe His Thr Leu Phe Gly Thr Ala Pro Val Pro  
 1075 1080 1085  
 Ile Glu Phe Trp Phe Ile Pro Leu Pro Leu Ala Leu Gly Ile Leu Phe  
 1090 1095 1100  
 Met Asp Glu Leu Arg Lys Leu Leu Val Arg Ala Phe Pro Arg Gly Ile  
 1105 1110 1115 1120  
 Ile Ala Lys Ile Ser Trp  
 1125

&lt;210&gt; 42289

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42289

Arg Arg Leu Pro Leu Pro Gly Thr Trp Ala Ser Ser Leu Val Pro Arg  
 1 5 10 15  
 Ser Gln Thr Arg Ser Thr Thr Cys Gly Tyr Pro Pro Ala Thr Thr Lys  
 20 25 30  
 Thr Arg Ser Asn Leu Ser Ala Leu Asp Ala Val Ser Ser Ser Thr Ala  
 35 40 45  
 Gln Ala Phe Pro Pro Ser Ala Thr Ser Ser Gly Thr Arg Ser Ala Asn  
 50 55 60  
 Thr Lys Arg Ser Ser Ser Pro Glu Pro Arg Pro Asn Lys Asn Thr Ala  
 65 70 75 80  
 Ser Ser Arg Ser Ser Arg Arg Ala Thr Thr Ser Ser Arg  
 85 90

&lt;210&gt; 42290

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42290

Ser Ser Ser Ala Ser Ser Arg Thr Ser Ser Ser Pro Ser Pro Ser Ser  
 1 5 10 15  
 Trp Lys Arg Lys Asn Ser Thr Ser Ser Ala Ser Arg Pro Ala Thr Ile  
 20 25 30  
 Arg Lys Thr Thr Ser Ser Thr Ser Arg Ser Thr Pro Ser Pro Thr Ser  
 35 40 45  
 Ser Ser Ala Ser Trp Lys His Ser Ser Pro Thr Pro Cys Ser Ser Cys  
 50 55 60  
 Thr Cys Thr Arg Lys Pro Ala Ser Pro Ser Thr Pro Ser Ser Ser Pro  
 65 70 75 80  
 Ser Ser Pro Thr Pro Thr Ala Ser Thr Ala Thr Pro Pro Ser Ser Ser  
 85 90 95  
 Pro Thr Ser Thr Ser Ser Ala Arg Ala Cys Thr Ser Ser Pro Ser Ser  
 100 105 110  
 Cys Ser Asn Gly Ala Thr Ser Phe Pro Ser Ala Thr Ser Ala Ser Pro  
 115 120 125  
 Ser Ser Pro Arg Thr Arg Ser Ala Ser Ser Ala Ala Thr Pro Gly Cys  
 130 135 140  
 Pro Ser Pro Cys Leu Ser Pro Ser Ser Ser Pro Phe Leu Leu Pro Arg



## 18887

145                    150                    155                    160  
 Phe Arg Ala Ser Ile Pro Cys Ser Ala Pro Pro Pro Ser Pro Leu Ser  
                          165                    170                    175  
 Ser Gly Ser Ser Arg Cys Pro Trp Pro Trp Ala Phe Cys Ser Trp Met  
                          180                    185                    190  
 Ser

<210> 42291  
 <211> 304  
 <212> PRT  
 <213> A.fumigatus

<400> 42291  
 Leu Leu Leu Ser Ala Ala Arg Ser Thr Pro Cys Gly Glu Asp Ser Ser  
 1                    5                    10                    15  
 Thr Lys Ile Gly Ser Gly Asn Gln Arg Ser Val Ser Ser Thr His Thr  
                          20                    25                    30  
 Leu Pro Ile Gln Ser Ser Ala Pro His Arg Ser Arg Ser Asn Ser Pro  
                          35                    40                    45  
 Leu Arg Met Ala Ser Asn Leu Gly Ser Ser Pro Ser Ala Gln Thr Leu  
                          50                    55                    60  
 Ala Val Ser Pro Val His Gly Arg Pro Pro Leu Asn Arg Lys Ser Ser  
 65                    70                    75                    80  
 Trp Gln Arg Ser Arg Lys Ser Leu Lys Glu Leu Glu Glu Glu Tyr His  
                          85                    90                    95  
 Asp Ser Asp Glu Glu Leu Pro Asp Asp Met Ser Leu Trp Asn Val Pro  
                          100                    105                    110  
 Ile Ser Pro Arg Pro Leu Gln Asp Arg Ala Ser Ser Arg Gly Thr Ser  
                          115                    120                    125  
 Pro Asp Gly Arg Ser Pro Gly Pro Arg Pro Leu Pro Leu Ser His Ser  
                          130                    135                    140  
 Val Ser Asp Met Ser Val Leu Ser Ser Thr Gly Ala Lys Ser Pro Arg  
 145                    150                    155                    160  
 Gly Ser Arg Pro Gly Arg Gln Met Val Arg Ser Ser Ser Ala Gly Pro  
                          165                    170                    175  
 Glu Arg Gly Gln Ile Ser Pro Arg Asn Pro Arg Ile Tyr Ser Tyr Asn  
                          180                    185                    190  
 Thr Met Leu Ser Asp Leu Ser Glu Glu Ala Lys Ile Ile Thr Gln Ala  
                          195                    200                    205  
 Leu Glu Tyr His Ala Asp Glu Arg Asp Arg Lys Arg Ala Glu Asn Leu  
                          210                    215                    220  
 Gln Ser Gly Ile Ser Ser Leu Arg Ser Ser Ser Glu Ser Lys Arg Asp  
 225                    230                    235                    240  
 Ser Lys Ala Thr Ile Glu Leu Pro Pro Leu Gln Lys Cys Asn Ile Met  
                          245                    250                    255  
 Ile Asp Pro Leu Pro Ile Ser Lys Glu Lys Glu Lys Val Leu Thr Arg  
                          260                    265                    270  
 Thr Arg Pro Ser Trp Leu Pro Pro Lys Asp Gln Lys Glu Glu Lys Arg  
                          275                    280                    285  
 His Leu Arg Glu Tyr Lys Lys Met Met Ala Met Ala Arg Glu Ala Gly  
                          290                    295                    300

<210> 42292  
 <211> 206  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42292

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Leu Cys Leu Gln Thr Ile Ala Ala Leu Leu Val Leu Gln Phe Pro Ser
1           5           10           15
Pro Ser Ser Ala Phe Leu Ala Met Ala Asn Ala Leu Asn Arg Pro Leu
20           25           30
Pro Val Ala Phe Leu Thr Leu Asp Arg Gly Ala Ile Gly Arg Thr Tyr
35           40           45
Ser Leu Ala Ser Ala Thr Leu Arg Tyr Lys Phe Pro Arg Leu Ala Thr
50           55           60
His Leu Tyr Glu Thr Leu Arg Leu Ser Asp Glu Glu Ile Trp Glu Pro
65           70           75           80
Met Phe Arg Ser Leu Leu Thr Asn Gly Leu Asp Leu Glu Arg Val Ser
85           90           95
Arg Val Trp Asp Cys Trp Val Phe Glu Gly Asp Arg Ile Leu Ile Arg
100          105          110
Ala Ala Val Ala Ile Leu Gly Cys Leu Gln Pro Gln Leu Phe Ala Phe
115          120          125
Thr Gln Pro Asp Asp Gln Gly Arg Ala Ala Val Lys Asp Ile Leu Gly
130          135          140
Trp Gly Pro His His Thr Gly Ser Asn Lys Pro Ala Ala Arg His Ser
145          150          155          160
Ala Pro Ala Ala Pro Met Thr Gly Phe Gly Gly Ser Gln Ser Leu Asn
165          170          175
Ala Val Ala Gly Asp Tyr Trp Ile Leu Thr Thr Ala Gly Asn Glu Asp
180          185          190
Gly Phe Met Asn Glu Val Arg Glu Ala Gly Lys Val Arg Asp
195          200          205

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&lt;210&gt; 42293

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42293

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Ala Met Thr Phe Cys Arg Phe Trp Lys Thr Arg Arg Pro Arg Arg Ile
1           5           10           15
Ala Ser Thr Met Glu Ser Asn Leu Ser Ser Arg Thr Arg Ser Ala Ala
20           25           30
Ser Met Ala Thr Ser Leu Pro Glu Thr Thr Ala Met Pro Thr Ser Ala
35           40           45
Val Arg Ser Ala Gly Ala Ser Leu Thr Pro Ser Pro Val Thr Ala Thr
50           55           60
Thr Leu Leu Arg Ala Leu Asn Ser Ser Thr Met Arg Tyr Phe Cys Ser
65           70           75           80
Gly Glu Val Arg Ala Lys Thr Ile Ser Ser Tyr Trp Gln Thr Ala Ser
85           90           95
His Cys Ser Ser Leu Arg Glu Glu Met Leu Gly Pro Leu Met Arg Arg
100          105          110
Leu Arg Arg Glu Arg Arg Asp Cys Phe Ser Ser Ser Ser Leu Val
115          120          125
Asp Ser Arg Arg Ser Ser Thr Val Ser Gly Ser Ala Val Pro Val Lys
130          135          140
Met Pro Thr Ser Arg Ala Met Ala Ala Ala Val Arg Pro Lys Ser Pro
145          150          155          160

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18889

Val Thr Met Lys Lys Arg Met Pro Ala Arg Arg Gln Ala Ala Met Val  
 165 170 175  
 Arg Ala Val Ser Gly Arg Gly Arg Ser Thr Met Pro Lys Met Pro Ile  
 180 185 190  
 Thr Val Arg Ser Trp Thr Pro Trp Ala Lys Thr Ser Ser Leu Lys Ser  
 195 200 205  
 Phe Asp Pro Thr Ala Ala Leu Gly Val  
 210 215

<210> 42294  
 <211> 169  
 <212> PRT  
 <213> A.fumigatus

<400> 42294  
 Cys Ser Thr Arg Asn Gln Pro Thr Gln Val Lys Arg Met Ile Arg Thr  
 1 5 10 15  
 Ser Val Thr Val Arg Gln Ile Met Met Val Thr Lys Arg Val Ile Ser  
 20 25 30  
 Phe Trp Ile Asn Val Gly Phe Ser Leu Thr Pro Val Val Ile Leu Ala  
 35 40 45  
 Met Arg Pro Ile Thr Glu Arg Leu Pro Val Ser Thr Thr Thr Pro Thr  
 50 55 60  
 Ala Leu Pro Leu Val Thr Leu Val Pro Met Lys Ala Ile Leu Arg Val  
 65 70 75 80  
 Ser Lys Lys Leu Ser Ser Val Thr Ser Met Ala Pro Ser Ile Ser Ser  
 85 90 95  
 Asp Ser Pro Val Arg Met Glu Arg Ser Lys Arg Thr Ser Pro Asp Val  
 100 105 110  
 Trp Lys Arg Arg Met Ser Ala Gly Ile Leu Leu Pro Met Glu Thr Trp  
 115 120 125  
 Thr Met Ser Pro Ala Thr Arg Ser Val Asp Gly Thr Arg Ile Cys Phe  
 130 135 140  
 Pro Ser Arg Thr Thr Arg Ala Ser Asp Gly Ser Arg Leu Arg Ile Glu  
 145 150 155 160  
 Phe Met Thr Cys Phe Val Asp Gln Ser  
 165

<210> 42295  
 <211> 316  
 <212> PRT  
 <213> A.fumigatus

<400> 42295  
 Ser Phe Pro Thr Ser Leu Ser Ala Ala Gly Arg Pro Ser Asn Ser Cys  
 1 5 10 15  
 Ser Pro Glu Gln Arg Pro Leu Leu Leu Ser Ser Ser Val Tyr Ser  
 20 25 30  
 Ser Ile Ser Ala Ser Leu Ser Pro Ser Leu Ser Pro Pro Ser Ser  
 35 40 45  
 Leu Ala Gln Lys Tyr Gly Thr Cys Ile Glu Ile Leu His Tyr Gly Ser  
 50 55 60  
 Phe Ser Ser Val Arg Leu Tyr Ala Arg Lys Pro Thr Thr Ser Pro Thr  
 65 70 75 80  
 Gly Thr Ser Pro Lys Gln Leu His Val Val Lys Val Phe Arg Arg Ser  
 85 90 95

## 18890

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Ser Ser Pro Ala Ile Ile Thr His His Arg Phe Glu Gln Ser Leu Ser
      100                      105                      110
Ser Ser Leu Ser His Pro Asn Ile Leu Arg Thr Ile Asp Ser Leu Leu
      115                      120                      125
Asn Asp Arg Gly Glu Leu Cys Leu Val Thr Glu Tyr Cys Ala Ala Gly
      130                      135                      140
Asp Leu Cys Thr Leu Ile Ala Thr Ala Gly Ala Thr Leu Thr Leu Cys
      145                      150                      155                      160
Asp Ile Asn Cys Phe Phe Lys Gln Ile Met Arg Ala Ile Thr Tyr Leu
      165                      170                      175
His Asp Arg Gly Ile Ala His Arg Asp Leu Lys Pro Glu Asn Ile Leu
      180                      185                      190
Leu Thr Val His Gly Ala Val Lys Leu Ala Asp Phe Gly Ser Ala Val
      195                      200                      205
Cys Leu Pro Arg Ile Asp Ala Ser Asp Ser Asp Ala Glu Ala Glu Gly
      210                      215                      220
Gly Val Val Ser Ser Tyr Ser Pro Pro Arg Lys Leu Leu Trp Thr Ile
      225                      230                      235                      240
Pro Tyr Ile Ala Pro Glu Glu Leu Cys Glu Val Arg Arg Phe Asp Pro
      245                      250                      255
Arg Ala Gly Asp Ile Trp Ala Ser Gly Leu Val Tyr Met Ala Met Gln
      260                      265                      270
Cys Arg Arg Leu Pro Trp Arg Met Ala Ser Glu Glu Glu Asp Gly Trp
      275                      280                      285
Tyr Arg Glu Tyr Leu Val Gly Arg Gln Gly Glu Glu Gly Tyr Ala Pro
      290                      295                      300
Ile Glu Gly Leu Gly Glu Val Cys Ala Gly Phe Leu
      305                      310                      315

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&lt;210&gt; 42296

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42296

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Arg Tyr Ser Leu Leu Thr Pro Ile Asp Lys Arg Arg Ala Ala Lys Ala
1      5      10      15
Ala Ser Ala Lys Cys Glu Lys Asp Asn Thr Arg Glu Ala Leu Lys Arg
      20      25      30
Ile Trp Asp Glu Tyr Val Phe Pro Asn Trp Asp Arg Ala Ile Gly Glu
      35      40      45
Thr Arg Thr Arg Glu Leu Trp Trp Arg Gly Val Pro Pro Arg His Arg
      50      55      60
Gly Thr Ile Trp Gln Arg Ala Ile Gly Asn Glu Leu Ser Leu Ser Glu
      65      70      75      80
Glu Thr Tyr Lys Lys Ala Leu Gln Arg Ala Lys Asp Val Arg Ser Lys
      85      90      95
Ser His Gly Glu Ala Gly Glu Ser His Lys Arg Met Lys Glu Trp Phe
      100     105     110
Asp Thr Ile Glu Thr Asp Val Ser Lys Ala Phe Pro Asp Leu Lys Leu
      115     120     125
Phe Gln Leu Gly Gly Pro Leu Arg Asp Thr Leu Ile Asp Val Leu Glu
      130     135     140
Ala Tyr Ser Met Tyr Arg Ser Asp Val Gly Tyr Val Ser Gly Leu His
      145     150     155     160
Val Ser

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<210> 42297  
 <211> 387  
 <212> PRT  
 <213> A.fumigatus

<400> 42297

Arg	Lys	Thr	Tyr	Val	Gln	Ser	Ile	Leu	Pro	Ser	Pro	Val	Gln	Ser	Pro
1				5				10					15		
Arg	Asn	Leu	Arg	Asn	Asn	Ala	Pro	Arg	Glu	Arg	Ala	Asn	Lys	Gln	Leu
		20						25					30		
Pro	Gln	Leu	Ile	His	Glu	Gln	Asn	Ala	Gln	Gly	Gln	Gly	Gln	Arg	Asp
		35					40					45			
Glu	Pro	Glu	Leu	Asn	Gly	Asp	Gly	Gly	Gly	Ala	Glu	Gln	Gly	Met	Glu
	50					55					60				
Ala	Arg	Asn	Leu	Gly	Asn	Lys	Asn	Gly	Asp	Asp	Glu	Gly	Asp	Lys	His
65					70				75					80	
Gly	Glu	Gly	Gln	Pro	Gly	Val	Ala	Ala	Leu	Leu	Ala	Asp	Arg	Val	Arg
				85					90					95	
Gly	Glu	Asp	Gly	Glu	Ala	Leu	Val	Ala	Asp	Gly	Lys	Asp	Val	Ala	Pro
		100						105					110		
Leu	Glu	His	Asp	Glu	Gly	Asp	Glu	Val	His	Ala	Leu	Ala	Asp	Val	Val
		115					120						125		
Glu	Val	Gly	Glu	Leu	Leu	Gly	Gly	Val	Ala	Val	Glu	Ala	Val	Gly	Val
	130					135						140			
Gly	Leu	Glu	Gly	Glu	Asp	Asp	Gly	Val	Glu	Gly	Asp	Ala	Gly	Phe	Leu
145					150					155					160
Val	His	Val	Gln	Glu	Glu	His	Gly	Val	Gly	Asp	Glu	Cys	Phe	His	Asp
				165				170						175	
Ala	Asp	Glu	Glu	Val	Gly	Leu	Gly	Val	Asp	Leu	Glu	Val	Asp	Glu	Val
		180						185					190		
Val	Phe	Leu	Met	Val	Ala	Gly	Arg	Glu	Ala	Glu	Glu	Val	Glu	Phe	Phe
	195						200						205		
Leu	Phe	His	Asp	Glu	Gly	Glu	Gly	Glu	Glu	Glu	Val	Arg	Glu	Asp	Ala
	210					215					220				
Asp	Asp	Asp	His	Glu	Glu	Gly	Ala	Glu	Arg	Gln	Arg	Asp	Pro	Glu	Glu
225					230					235					240
Asp	Val	His	Gln	His	Arg	Pro	Asp	Leu	Gly	Pro	Ala	Ala	Cys	Gly	Glu
			245						250					255	
Gln	Val	Gly	Asp	Asp	Leu	Leu	Gln	Ile	Leu	Glu	Asp	Glu	Ala	Ala	Glu
		260						265					270		
Ala	Asp	Arg	Val	Asn	Asp	Gly	Val	Glu	Leu	Val	Glu	Gln	Asp	Glu	Val
		275					280					285			
Gly	Cys	Leu	Asn	Gly	Asp	Val	Ala	Ala	Gly	Asp	Asp	Gly	Asp	Ala	Asp
	290					295					300				
Ile	Arg	Ser	Ala	Gln	Cys	Gly	Ser	Val	Val	Asp	Ala	Val	Ala	Gly	His
305					310					315					320
Arg	Asp	Asp	Val	Val	Ala	Arg	Leu	Glu	Leu	Leu	Asp	Asp	Ala	Val	Phe
			325						330					335	
Leu	Phe	Gly	Arg	Gly	Ser	Gly	Glu	Asp	Asp	Leu	Phe	Val	Leu	Ala	Asp
		340						345					350		
Arg	Val	Pro	Leu	Leu	Val	Ala	Glu	Gly	Gly	Asn	Ala	Trp	Ala	Val	Asp
		355					360					365			
Glu	Glu	Thr	Ala	Ser	Arg	Ala	Glu	Arg	Leu	Leu	Leu	Val	Phe	Val	Val
	370					375						380			

Ala Gly Gly  
385

<210> 42298

<211> 678

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (540)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42298

Thr	Pro	Leu	Ser	Gly	Leu	Pro	Pro	Arg	Ile	Leu	Leu	Gln	Trp	Ile	Ala
1				5					10					15	
Leu	Phe	Leu	Cys	Phe	Pro	Asn	Val	Val	Ser	Ser	Arg	Pro	Leu	Ile	Lys
			20					25					30		
Pro	Met	Ala	Cys	Ser	Val	Asp	Trp	Ser	Thr	Val	Leu	Asn	Val	Leu	Leu
		35					40					45			
Pro	Leu	His	Gly	Pro	Arg	Asn	Arg	Thr	Met	Thr	Glu	Ser	Ile	Ile	His
		50				55					60				
Ser	Asn	Phe	Asp	Ile	Leu	Arg	Tyr	Leu	Ala	Gly	His	Leu	Ile	Thr	Gln
65					70					75					80
Ser	Lys	Ala	Pro	Arg	Gly	Phe	Arg	Pro	Pro	Ser	Pro	Thr	Lys	Leu	Leu
				85					90					95	
Ser	Ser	Leu	Leu	Gly	Gly	Gly	Gln	Ser	Lys	Asp	Val	Lys	Asp	Ser	Gly
			100					105					110		
Ala	Ile	Gly	Ser	Lys	Gly	Pro	Ser	Ser	Ala	Thr	Leu	Leu	Gly	Glu	Phe
		115					120						125		
Pro	Lys	Met	Pro	Pro	Pro	Arg	Ala	Asn	Val	Thr	Arg	Ser	Asn	Thr	Leu
		130					135					140			
Pro	Ser	Met	Phe	Pro	Gly	Lys	Glu	Glu	Thr	Pro	Ser	Lys	Ile	Ser	Val
145					150					155					160
Val	Gly	Thr	Ala	Pro	Ser	Lys	Gly	Pro	Asp	Ser	Pro	Phe	Ser	Leu	Leu
				165					170					175	
Glu	Gln	Thr	Phe	Thr	Ala	Tyr	Ala	Leu	Ala	Leu	Gln	Ser	Arg	Ser	Gly
			180					185					190		
Asn	Ile	Val	Gly	Arg	Ser	Leu	Arg	Ala	Arg	Glu	Asn	Val	Asp	Arg	Ser
		195					200					205			
Ser	Val	Asn	Glu	Leu	Tyr	Asn	Val	Leu	Leu	Glu	Asp	Pro	Gly	Lys	Ile
		210				215					220				
Gln	Ala	Ala	Ala	Glu	Val	Pro	Val	Asp	Thr	Leu	Phe	Val	Ala	Phe	Glu
225					230					235					240
Thr	Phe	Met	Ala	Asn	Ala	Trp	Lys	Glu	His	Met	Gly	Pro	Val	Ile	Glu
				245					250					255	
Ser	Gly	Ala	Leu	Lys	Leu	Ile	Gln	Ser	Gln	Phe	Asp	Thr	Met	Phe	Pro
			260					265					270		
Arg	Asp	Phe	Glu	Glu	Asn	Phe	Arg	Arg	Phe	Leu	Thr	Glu	Ile	Ser	Pro
		275					280					285			
Gln	Asn	Arg	Arg	Ala	Leu	Ala	Ser	Leu	Val	Arg	Leu	Leu	Ala	Asp	Leu
		290				295					300				
Leu	Asp	Ala	Ser	Gly	Asn	Asp	Gly	Asp	Arg	Gly	Ala	Leu	Thr	Ala	Ala
305					310					315					320
Phe	Ala	Glu	Ile	Leu	Thr	Val	Glu	Gly	Asp	Pro	Met	Gln	His	Ile	Ser
				325					330					335	

## 18893

Leu Leu Asp Arg Leu Val Asp Asp Phe Asp Asn Leu Phe Asp Glu Phe  
 340 345 350  
 Ile Pro Ser Gly Ala Ser Leu Asp Gly Ile Leu Ser Ser Asp Gln Ser  
 355 360 365  
 Lys Pro Ser Ala Arg Asp Ala Gly Ser Val Ser Ser Asn Ala Ser Ser  
 370 375 380  
 Phe Arg Lys Arg Phe Gly Phe Ser Leu His Arg Glu Ser Ser Lys Asn  
 385 390 395 400  
 Asp Gly Glu Ser Lys Val Ser Ser Ile Leu Arg Thr Leu Ser Lys Ser  
 405 410 415  
 Lys Asn Ser Gly Asp Thr Glu Ser Gly Thr Pro Arg Gly Ser Leu Leu  
 420 425 430  
 Arg Ser Lys Ser Ile Asp Val Asp Thr Gly Leu Ala Leu His Leu Arg  
 435 440 445  
 Pro Gly Ser Arg Asp Arg Pro Ser Ala Ala Ser Ser Gln Glu His Leu  
 450 455 460  
 Arg Arg Pro Gly Ser Ser Gln Gly Gln Pro Pro Ser Leu Ser Ser Ile  
 465 470 475 480  
 Arg Gly Ile Ser Thr Asn Gly Val Val Lys Val Arg Arg Arg Arg Arg  
 485 490 495  
 Ser Ser Leu Ser Asp Leu Arg Pro Gly Thr Ala Ser Thr Asp Thr Ser  
 500 505 510  
 Ala Val Ser Pro Arg Gln Asp Leu Arg Pro Ala Thr Pro Val Pro Ser  
 515 520 525  
 Thr Asn Arg Ser Glu Thr Glu Leu Ala Thr Pro Xaa Thr Gln Pro Arg  
 530 535 540  
 Pro Gln Thr Ser His Gly Thr Asp Ser Thr Asn Arg Ser Thr Ser Pro  
 545 550 555 560  
 Thr Lys Ser Asn Ser Pro Ser Arg Leu Ala Ser Pro Ser Arg Arg Ser  
 565 570 575  
 Pro Thr Arg Pro Val Thr Pro Ser Arg Lys Glu Asn Ile Asp Pro Thr  
 580 585 590  
 Leu Ser Arg Thr Gly Arg Pro Pro Arg Lys Lys Ser Asp Leu Ala Val  
 595 600 605  
 Ser Pro Thr Gln Glu Gln Lys Arg Arg Leu Arg Ala Leu Ser Ile Pro  
 610 615 620  
 Ser Ser Arg Asn Val Gly Leu Lys Glu Arg Pro Val Leu Val Asn Gly  
 625 630 635 640  
 Ser Asp Pro Arg Arg Leu Gln Thr Leu Ile Ser Ser Gln Arg Thr Pro  
 645 650 655  
 Lys Leu Arg Met Gln Ser Pro Gln Lys Val Cys Phe Pro Asp Phe Pro  
 660 665 670  
 Leu Leu Pro Gly Arg Leu  
 675

&lt;210&gt; 42299

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42299

Thr Lys Val Asp Ala Gly Glu Arg Glu Arg Ser Ser Trp Leu Phe Leu  
 1 5 10 15  
 Ala Ser Ala Asp Asp Ile Phe Trp Val Ala Val Arg Ala Leu Thr Thr  
 20 25 30  
 Ser Thr Leu Ser Leu Ile Ile Arg Glu His Ile Asn Phe Thr Arg Leu

## 18894

35                      40                      45  
 Leu Gln Ser Leu Ile Ser Leu Ile Glu Tyr Met Val Phe Tyr Thr Ser  
 50                      55                      60  
 Arg Val Gly Tyr Ser His Ile Lys Pro Thr Thr Ala Arg Gln Lys Glu  
 65                      70                      75                      80  
 Ala Thr Gln Gly Lys Thr Asp Pro Thr Thr Pro Gly Val Gln Tyr Gly  
 85                      90                      95  
 His Arg Glu

<210> 42300  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

<400> 42300  
 Phe Val Phe Thr Arg Cys Ala Leu Ile Pro Pro Ser Leu Lys Leu Pro  
 1                      5                      10                      15  
 Ala Met Ala Thr Val Ser Ser Ala Val Ser Asn Leu Pro Leu Glu Gln  
 20                      25                      30  
 Leu Thr Leu Tyr Gln Ala Ser Asp Pro Tyr Leu Tyr Ser Ile Phe Val  
 35                      40                      45  
 Phe Tyr Gly Pro Val Thr Thr Ala Asn Ala Thr Val Ser Ser Ser Arg  
 50                      55                      60  
 Ile Gln Ala His Ile Leu Thr Pro Ala Gly Phe Gln Ser Tyr Ser Arg  
 65                      70                      75                      80  
 Asp His Arg Leu Pro Arg Gly Pro Val Ile Cys Ser Arg Gln Thr Pro  
 85                      90                      95  
 Pro Pro Arg Glu Thr Arg Arg Arg Asp Leu Ser Trp Ser Cys Cys Gln  
 100                      105                      110  
 His Val Glu Ile Phe Cys Arg Val Val Arg Thr Gly Gln Gly Met Leu  
 115                      120                      125  
 Gly Asn Asn Gly Ser Cys Gly Glu Ala  
 130                      135

<210> 42301  
 <211> 218  
 <212> PRT  
 <213> A.fumigatus

<400> 42301  
 Asp Val Gly Asn Ala Val Leu Met Ala Gly Cys Glu Glu Gly Gly Leu  
 1                      5                      10                      15  
 Gly Glu Gly Glu Glu Gly Pro Ala Glu Glu Asn Ala Thr Gly Gly His  
 20                      25                      30  
 Gly Glu Ala Trp Leu Phe Ala Leu Val Phe Ala Leu His Leu Arg Cys  
 35                      40                      45  
 Gly Arg Ala Pro Arg Thr Ser Thr Gly Cys Ala Cys Ala Val Val Ala  
 50                      55                      60  
 Arg Ala Glu Asp His His Arg Ala Thr Leu Arg Asp Ala Val Glu Thr  
 65                      70                      75                      80  
 Met Thr Leu Trp Asn Pro Gly Asp Gly Arg Asp Pro Gly Gln Ala Ser  
 85                      90                      95  
 Thr Ser Gly Thr Gly Thr Gln Pro Pro Glu Gly Gly Leu Asp Ile Val  
 100                      105                      110  
 Ile Leu Val Val Ala His Glu Glu Gly Ala Asp Ala Ser Val Ser Ala



## 18895

115	120	125
Gly Tyr Ala Glu Ser Leu Lys Ala Gln Thr Ser Gly Met Gly Phe Glu		
130	135	140
Arg Gly Asp Ala Ala Ala Leu Trp Pro Phe Glu Arg Glu Asn Leu Cys		
145	150	155
Leu Gln Ala Cys Val Ala Val Ser Pro Trp Arg Val Asp Lys Ile Val		
	165	170
Ile Trp Leu Thr His Val Thr Gln Pro Cys Ser Tyr Ser Ala Gly Phe		
	180	185
Pro Ala Ala Leu Leu Pro Gly Phe Gly Val Asn Asp Lys Gly Cys His		
	195	200
Gly Gln Pro Val Tyr Glu Val Leu Phe Leu		205
210	215	

&lt;210&gt; 42302

&lt;211&gt; 564

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42302

Ser Leu Glu Ile Glu Asp Asn His Asp Leu Gln Tyr Gly Gln Tyr Thr		
1	5	10
Gly Leu Ile Arg Ala Leu Gly Ala Pro Met Phe Leu Pro Thr Ser Arg		
	20	25
Leu Lys Arg Ala Pro Ser Gln Pro Thr Asn Leu Ser Lys Ser Arg Ile		
	35	40
Phe Thr Arg Ser Gln Lys Glu Ser Leu Arg Leu Thr Met Cys Glu Leu		
	50	55
Val Asp Thr Glu Glu Arg Tyr Val Ser Lys Leu Tyr Asn Leu Val Arg		
65	70	75
Glu Val Ala Glu Glu Phe Arg Leu Lys Ala Gln Gly Arg Gly Ala Ser		
	85	90
Ser Thr Ser Pro Asp Glu Ala Ser Leu Ala Ala Leu Phe Pro Pro Cys		
	100	105
Leu Asn Glu Ile Leu Asp Val Asn Leu Gly Phe Leu Glu Val Ile Arg		
	115	120
Asn Val Leu Glu Glu Thr Glu Arg Asp Ala Ile Ala Asp Ile Gly Asp		
	130	135
Asp Thr Glu Leu Pro Ser Ser Met Ser His Arg Thr Ala Ser Arg Asp		
145	150	155
Gly Lys Asp Pro Ile Gly Ala Val Ala Phe Ala Asn Ala Leu Leu Glu		
	165	170
Trp Phe Pro Gln Phe Ser Gln Pro Tyr Ala Asp Tyr Met Arg Ala His		
	180	185
Thr Gly Phe Thr Gln Thr Leu Asn Ser Phe Met Arg Asp Lys Asn Ser		
	195	200
Ser Phe Ser Lys Arg Val Val Glu Thr Gly Glu Gln Arg Leu Arg Ser		
	210	215
Leu Leu Met Glu Pro Val Gln Arg Leu Pro Arg Tyr Ser Leu Leu Ile		
225	230	235
Asp Thr Met Thr Ser Ser Leu Pro Leu Ile His Pro Ala Val Arg Pro		
	245	250
Leu Leu Lys Ala Arg Asp Ile Ile Lys Asp Ile Cys Ser Leu Asp Asp		
	260	265
Pro Ser Ser Thr Asn His Asp Gln Ser Phe Arg Arg Leu Lys Glu Leu		
	275	280
		285

## 18896

Val Asp Gly Trp Pro Ala Thr Ile Leu Pro Val Gly Arg Leu Ile Thr  
 290 295 300  
 Ala Val Asp Phe Asn Glu Leu Ser Pro Pro Tyr His Ile Asp Pro Ser  
 305 310 315 320  
 Ser Pro Asn Gln Asn Gln Gly Ile Met Leu Ile Tyr Lys Asn Cys Leu  
 325 330 335  
 Val Leu Leu Ala Lys Ala Leu Gly Ser Arg Thr Thr Ala Arg Gly Leu  
 340 345 350  
 Leu Ala Asp Leu Asp Gly Ala Ala Ser Gly Pro Gly Gly Pro Ser Ala  
 355 360 365  
 Leu Gln Ser Ser Gly Glu Ile Lys Val Ala Gln Val Tyr Asp Leu Gln  
 370 375 380  
 Thr Val Arg Ser Met Gln Ser Thr Cys Gly Arg Ile Leu Phe Leu Ala  
 385 390 395 400  
 Pro Thr Ser Ala Lys Ala Arg Pro Asp Gln Asn Thr Thr Val Asp Leu  
 405 410 415  
 Phe Ala Leu Glu Leu Ala Gly Met Tyr Glu Gly Arg Ala Ser Arg Leu  
 420 425 430  
 Ile Glu Glu Met Ala Lys Ala Lys Ile Glu Gly Arg Phe Ser Glu Ser  
 435 440 445  
 Glu Arg Glu Asn Gly Lys Trp Thr Leu Arg Ser Pro Thr Gly Thr Val  
 450 455 460  
 Gly Asn Leu Gly Ile Leu Ala Cys Val Leu Glu Glu Gly Leu Asp Asn  
 465 470 475 480  
 Val Leu Gly Arg Ser Gly Leu Ser Lys Ile Arg Ile Val Phe Asp Thr  
 485 490 495  
 Pro Arg Ser Ile Ser Thr Lys Ala Leu Asn Thr Ser Asp Leu Glu Val  
 500 505 510  
 Val Ile Ser Val Ser Ser Thr Ser Glu Asp Ser Tyr Arg Val Asp Ile  
 515 520 525  
 Asp Ser Ile Val Gly Val Ala Ser Ser Asp Ile Val Thr Val Asp Ser  
 530 535 540  
 Phe Val Pro Val Leu Ser Lys Arg Arg Lys Phe Ser Ser Ser Tyr Gln  
 545 550 555 560  
 Thr Asp Gly Leu

&lt;210&gt; 42303

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (71)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42303

Leu Ala Arg Ala Ala Pro Ile Ser Ile Leu Asn Pro Arg Tyr Leu Asp  
 1 5 10 15  
 Glu Arg Ser Ser Gln Ser Ser Lys Lys Glu Lys Glu Leu Phe Ile Arg  
 20 25 30  
 Ser Glu Ala Arg Asp Gly Val His Gly His Val Cys Cys Ile Ala Ser  
 35 40 45  
 Pro Gly Ser Ala Ala Cys His Ser Cys Thr Ile Asn Gln Ser Phe Arg  
 50 55 60

## 18897

```

Asn Arg Ile Gly Asp Ala Xaa Tyr Thr Ala Gln Thr Thr Asp Gln Ser
65          70          75          80
Trp His Arg Phe Tyr Glu Gln Lys His Val Ala His Gln Lys Gln Leu
          85          90          95
Pro Phe Ser Ile Gly Leu Ala Lys Pro Thr Ile Thr Asp Thr Ser Ser
          100        105        110
Tyr Pro Lys Pro Gln Arg Glu His
          115          120

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&lt;210&gt; 42304

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42304

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Gln Ser Thr His Ser Arg Ser Val Pro Asn Gly Asn Gly Val Asn Asn
1          5          10          15
Ser Arg Leu Asn Ala Asn Arg Met Leu Arg Ala Lys Lys Ile Leu Ala
          20          25          30
Tyr Val Ala Glu Arg Ile Asp Pro Ser Tyr Ser Glu Asp Pro Gln Glu
          35          40          45
Gly Ala Leu Lys Pro Glu Glu Tyr Leu Glu Leu Tyr Cys Gln Lys Met
          50          55          60
Val Cys Thr Ala Ser Thr Gln Asp Asp Leu Val Ser Phe Ala Asn Leu
65          70          75          80
Asn Gln Leu Ile Pro Pro Asn Met Thr Leu Ala Thr Ile Arg Ala His
          85          90          95
Ile Trp Arg Ser Ser Gly Asp Met Val Leu Tyr Tyr Arg Ala Asn Gly
          100        105        110
Lys Lys Glu Ile Pro Met Pro Gly Ser Gly Arg Glu Gly Asp Gln Gly
          115        120        125
Ser Gln Ser Ala Asp Ala Thr Asn Thr Pro His Leu Ser Glu Thr Ala
          130        135        140
Gly Met Ala Asn Gly Asp Gly Gly Ser Ala Gln Pro Ser Ser Val His
145          150        155        160
Ser Gln Ser Ala Ser Gly Ser Ala Ser Val Ser Ile Gln Asn Ser
          165        170        175

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&lt;210&gt; 42305

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42305

```

Ser Lys Thr Pro Ser Pro Thr Pro Thr Ile Tyr Tyr Arg Asn Ala Ala
1          5          10          15
Ser Tyr Thr Ser Thr Arg Ala Gln Gly Gln Cys Ala Ser Asp Ser Pro
          20          25          30
Ala Tyr Ser Ser Ser Arg Ser Ser Asn Ser His Cys Pro Pro Ala
          35          40          45
Ala Leu Thr Ser Lys Pro Arg Ser Asn Pro Ser Ala Cys Ala Ala Ser
          50          55          60
Gln Asn Ser Ser Pro Arg Thr Arg Thr Thr Thr Ser Pro Tyr Leu Ala
65          70          75          80
Ser Arg Ser Leu Pro Gln Asn Ser Ser Pro Pro Leu Pro His Pro His
          85          90          95

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## 18898

Gln Arg Thr Ala Ser Leu Leu His Trp Val Ala Ser Cys Ser Ile Leu  
 100 105 110  
 Ser Asn Pro Pro Pro Pro Leu His Pro Ile Lys Arg Thr Thr Ser Glu  
 115 120 125  
 Thr Lys Ile His Gly Ser Ser Pro Ala Asn His Thr Cys Ala Thr Ala  
 130 135 140  
 Pro Pro Gln  
 145

&lt;210&gt; 42306

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42306

Gln Cys Arg Asp His Pro Leu Glu Ala Val Tyr Arg Cys Leu Arg Cys  
 1 5 10 15  
 Trp Leu Gly Arg Asp Pro Ala His Arg Pro Asp Ser Arg Val Ser Trp  
 20 25 30  
 Ser Leu Arg Arg Leu Gly Glu Trp Leu Asp Gly Asp Pro Pro Pro Ser  
 35 40 45  
 Arg Gln Gln Arg Arg Arg Thr Leu Cys Ser Phe Trp Glu His Asp His  
 50 55 60  
 Ile Ala Ser Ala Gly Gln Arg Arg Gly Gln Thr Ala Arg Leu Pro His  
 65 70 75 80  
 Gly His Arg Trp His Ser Pro Leu Pro Ala Pro Pro Arg Leu Pro Gln  
 85 90 95  
 Gly Leu Pro Pro Arg Asn Leu Pro Ser Thr Pro His Ser Leu Arg Leu  
 100 105 110  
 Arg Pro Asp Lys Leu Arg Ser Asn Pro His Ala Ala Gln Arg Asp Pro  
 115 120 125  
 Gln Pro Arg Val Ser Asp Phe Ser Ala Thr Pro Ala Ala Arg Pro Pro  
 130 135 140  
 Gly Arg Val His Pro Leu Ser Asp Gln Ile Lys Pro Arg Pro Asn Arg  
 145 150 155 160  
 Arg Arg His Arg Pro Leu Gln Gln Ser Thr Ile Ala Met Pro Pro Pro  
 165 170 175  
 Thr Leu Gln Pro Glu His Arg Asp Asn Ala His Pro Ile Pro Gln Pro  
 180 185 190  
 Thr Ala Ala Ala Glu Ala Ala Ala Ile Pro Thr Ala His Pro Gln Pro  
 195 200 205  
 Ser Leu Pro Asn Pro Gly Pro Ile Pro Gln Pro Ala Pro His His Arg  
 210 215 220  
 Thr His Leu Pro Ala Pro Val Gln Pro Leu Pro Pro Thr  
 225 230 235

&lt;210&gt; 42307

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42307

Arg Lys Lys Arg Glu Arg Lys Thr Ile Cys Gln Glu Arg Gly Thr Thr  
 1 5 10 15  
 Thr Thr Val Thr Arg Val Leu Arg Cys Asp Gln Ile Lys Gly Gly Arg  
 20 25 30

## 18899

Ile Tyr Tyr Val Lys Arg His Lys Glu Arg Lys Glu Ser Lys Val Lys  
           35                          40                          45  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
       50                          55                          60  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Gln Met Asn Glu  
       65                          70                          75                          80

&lt;210&gt; 42308

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42308

Ser Ser Val Thr Ala Pro Val Asp Ile Pro Ser Pro Asn Ala Lys Asn  
 1                  5                          10                          15  
 Leu Gly Ile Gln Ile Pro Tyr Asp Pro Ser Ser Leu Ser Met Arg Pro  
           20                          25                          30  
 Gly Asn Glu Ser Phe Gly Ser His Thr Ala Pro Gly Phe Gly Ile His  
       35                          40                          45  
 Leu Ala Thr Thr Pro Gly Phe Leu Thr Ser Ser Met Leu Asn Thr Ser  
       50                          55                          60  
 Asn Asn His Phe Gly Thr Ser Pro Gly Asp Val Gly Asp His Leu Ala  
       65                          70                          75                          80  
 Ser Pro His Pro Asp Val Val Arg Asn Ser Met Ser Asp Lys Ser Asp  
                   85                          90                          95  
 Tyr Phe Ser Ser Pro Arg Gln Gln Gly Ser Asn Ala Val Asp Ala Thr  
           100                          105                          110  
 Thr Pro Gly Asp Pro Thr Pro Thr Ala Leu Pro Gln Ser Pro Ala Glu  
       115                          120                          125  
 Pro Asp Lys Glu Glu Arg Lys Arg Thr Gly Ser Ile Phe Gly Lys Lys  
       130                          135                          140  
 Phe Arg Met Glu Phe Pro Lys Lys Leu Gly Arg Thr Ser Ser Glu Val  
       145                          150                          155                          160  
 Lys Pro Gln Val Pro Gly Gly Lys Gly Lys Gly Ala Pro Lys Glu Pro  
           165                          170                          175  
 Trp Pro Val Lys Glu Glu Lys Val Phe Ile Asn His Leu Gly Gly Phe  
           180                          185                          190  
 Asn Glu Arg Ile Arg His Glu Ser Asp Glu Phe Leu Ala Pro Asn Pro  
       195                          200                          205  
 Asp Lys Arg Phe Val Ser Ala Ile Thr Pro Ser Pro Asn Asn Glu Thr  
       210                          215                          220  
 Pro Met Leu Asp Ile Pro Pro Arg Thr Ala Val Ile Ile Gln Glu Glu  
       225                          230                          235                          240  
 Ser Gly Asp Thr Ala Val Ala Ser Asp Leu Tyr Arg Gly Ser Val Gly  
           245                          250                          255  
 Ser Ile Gly Gln Glu Val Asp Arg Leu Glu Lys Ser Ile Pro Met Trp  
       260                          265                          270  
 Leu Ala Glu Leu Leu Leu Lys Val Arg Phe Leu Gln Pro Phe Glu Phe  
       275                          280                          285  
 Glu Leu Trp Leu Thr Leu Gly Arg Thr Lys Ser Leu Pro Arg Asn Pro  
       290                          295                          300  
 Ser Lys Ser Pro Leu Cys  
       305                          310

&lt;210&gt; 42309

&lt;211&gt; 98

18900

<212> PRT

<213> A.fumigatus

<400> 42309

Glu	Ser	Ser	Gly	Glu	Ala	Arg	Thr	Val	Ala	Thr	Trp	Leu	Ser	Asp	Met
1				5					10					15	
Gly	Lys	Pro	Asp	Asp	Asp	Leu	Val	Asn	Ser	Pro	Gly	Thr	Asn	Ser	His
			20					25					30		
Thr	Gly	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Glu	Trp	Pro	Gln	Gly	Ser
			35				40					45			
Ser	Val	Ser	Ala	Phe	Glu	Thr	His	Ala	Arg	Arg	Leu	Arg	Phe	Gln	Ala
	50					55					60				
Leu	Gly	Ile	Ala	Cys	Arg	Asp	Arg	Arg	Ile	Ser	Ala	Leu	Leu	Met	Gly
65					70					75				80	
His	His	Gln	Asp	Asp	Asn	Val	Glu	Thr	Thr	Leu	Trp	Arg	Leu	Cys	Thr
				85					90					95	

Gly Ala

<210> 42310

<211> 470

<212> PRT

<213> A.fumigatus

<400> 42310

Gly	Ala	Gly	Leu	Ala	Gly	Ile	Pro	Pro	Ile	Ala	Arg	Ile	Pro	Glu	Cys
1				5					10					15	
His	Gly	Leu	Tyr	Gly	Val	Ser	Glu	Ser	Gly	Ser	Met	Val	Ile	Leu	Arg
			20					25					30		
Pro	Arg	Asp	Asn	Ser	Ala	Gly	Ala	Pro	Cys	Ala	Arg	Ser	Gly	Ser	Thr
		35				40						45			
Thr	Thr	Ser	Gln	Val	Gln	Gly	Lys	Asp	Glu	Gly	Lys	Gln	Pro	Gly	Phe
	50					55					60				
Pro	Met	Ala	Thr	Gly	Gly	Ile	Leu	Leu	Cys	Arg	Pro	Leu	Leu	Ala	Phe
65					70					75				80	
Pro	Lys	Ala	Ser	Leu	Leu	Ala	Thr	Cys	His	Gln	His	Arg	Ile	Pro	Tyr
				85					90					95	
Val	Ser	Asp	Pro	Thr	Asn	Phe	Asp	Pro	Thr	Leu	Thr	Pro	Arg	Asn	Ala
			100					105					110		
Ile	Arg	Ser	Leu	Val	Ser	Pro	Thr	Phe	Pro	Pro	Arg	Leu	Pro	Arg	Ala
			115				120					125			
Leu	Gln	Ala	Ala	Ser	Ile	Leu	Ser	Leu	Ile	Lys	Ser	Ser	His	Ala	Leu
						135					140				
Ile	Glu	Asp	Ala	Ile	Ala	His	Ser	Asn	Asn	Leu	Leu	Ser	Gln	Cys	Arg
145					150					155				160	
Leu	Leu	His	Phe	Asn	Pro	Ser	Thr	Gly	Thr	Met	Arg	Ile	Arg	Phe	Pro
				165					170					175	
Ser	Leu	Gln	Gln	Gln	Gln	Lys	Gln	Gln	Gln	Phe	Pro	Leu	Pro	Thr	Arg
			180					185				190			
Ser	Pro	His	Phe	Gln	Thr	Gln	Val	Gln	Ser	Leu	Ser	Leu	Arg	Arg	Ile
		195					200					205			
Thr	Glu	Leu	Ile	Ser	Pro	His	Pro	Tyr	Asn	His	Phe	Pro	Leu	Pro	Ser
	210					215					220				
Phe	Glu	Lys	Phe	Thr	Thr	Glu	Leu	Phe	Pro	Ser	Ser	Pro	Ser	Ser	Pro
225					230					235				240	
Pro	Thr	Asp	Arg	Leu	Pro	Phe	Thr	Leu	Gly	Gly	Ile	Met	Phe	His	Pro

## 18901

245 250 255  
 Phe Gln Pro Thr Ser Thr Ser Ala Pro Asp Gln Thr Asn Asn Ile Arg  
 260 265 270  
 Asp Glu Asn Thr Trp Leu Leu Thr Arg Gln Pro Tyr Met Arg Asn Arg  
 275 280 285  
 Ala Pro Ser Met Thr Leu Asp Leu Pro Ser Pro Glu Ser Glu Asp Phe  
 290 295 300  
 Tyr Ser Pro Trp Lys Leu Trp Asp Asn Arg Tyr Trp Val Arg Ala Ala  
 305 310 315 320  
 Val Val Pro Asp Lys Gly Gly Val Asp Ser Asp Met Cys Ala His Tyr  
 325 330 335  
 Thr Gln Ser Glu Leu Asp Glu Val Arg Arg Cys Phe Asp Ala Gln Gly  
 340 345 350  
 Leu Ser Leu Val Val Arg Pro Leu Arg Gln Ser Asp Ser Gln Ala Ile  
 355 360 365  
 Arg Ala Met Ile Asp Gly Gln Gly Arg Gly Lys Lys Gln His His Pro  
 370 375 380  
 Ala Leu Ala Val Ala Leu Lys Arg Leu Ala Leu Glu Ala Pro Gly Gln  
 385 390 395 400  
 Ala Arg Phe Thr Val Pro Leu Leu Val Val Gln Lys Ile Ser Gly Gly  
 405 410 415  
 Asn Ala Glu Gln Leu Pro Leu Ala Leu Pro Thr Leu Ser Cys Arg Leu  
 420 425 430  
 Leu Ser Ala Ser Gln Ala Gln Arg Leu Leu Glu Ser Ser Val Pro Trp  
 435 440 445  
 Thr Val Arg Trp Gln Trp Met Tyr Lys Met Ile Asp His Asp Ser Leu  
 450 455 460  
 Lys Leu Met Gly Trp Leu  
 465 470

&lt;210&gt; 42311

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42311

Arg Ser Cys Ser Arg Glu Gly Ser Leu Asp Asn Ser Asp Leu Cys Arg  
 1 5 10 15  
 Glu Cys Gly Gly Arg Gly Gln Leu Leu Cys Cys Asp Gly Cys Val Asn  
 20 25 30  
 Ser Phe His Phe Ser Cys Leu Glu Pro Pro Leu Asp Pro Ala Asn Pro  
 35 40 45  
 Pro Glu Gly Asp Trp Phe Cys Pro Lys Cys Ser Val Ser Arg Pro Ile  
 50 55 60  
 Arg Lys Met Val Asp Lys Leu Asp Arg Leu Ala Asn Lys Glu Phe Met  
 65 70 75 80  
 Leu Pro Ala Ser Ile Arg Asn His Phe Ala Gly Val Lys Thr Gly Ser  
 85 90 95  
 Arg Pro Glu Asp Lys Asn Asp Arg Thr Arg Tyr Thr Glu Cys Ser Tyr  
 100 105 110  
 Asn Leu Val Asn Gly Val Gly Arg Gly Val Cys Asn Gly Phe Tyr Asp  
 115 120 125  
 Asp Pro Asn Leu Arg Lys Ile Thr Asp Ser Asp Gly Asn Leu Ile Ile  
 130 135 140  
 Cys Tyr Ala Cys Gly Arg Pro Ser Asp Gly Asp Lys Pro Ile Leu Gln  
 145 150 155 160

## 18902

Cys Asp Phe Cys His Leu Asn Trp His Met Asp Cys Leu Asp Pro Pro  
                   165                  170                  175  
 Met Ala Lys Pro Pro Gln Gln Glu Asn Lys Ser Asp Lys Arg Trp Arg  
                   180                  185                  190  
 Cys Pro Met His Val Glu His Glu Met Tyr Tyr Tyr His Trp Asn Asp  
                   195                  200                  205  
 Glu Gly Ala Tyr Asp Ala Arg Lys Ile Arg Arg Pro Ala Arg Pro Arg  
                   210                  215                  220  
 Met Ile Asp Ile Glu Ile Leu Pro Ser Glu Glu Glu Ser Glu Arg Ile  
 225                  230                  235                  240  
 Glu Asn Glu Glu Asp Val Gly Gly Gly Ile Leu Tyr Arg Val Ser Glu  
                   245                  250                  255  
 Lys Gly Val Glu Ala Ala Phe Leu Ala Lys Val Lys Arg Ser Val Ile  
                   260                  265                  270  
 Leu

&lt;210&gt; 42312

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42312

Asn Pro Phe Leu Ser Leu Ala Asp Tyr Leu Asp Arg Glu Asn Ala Glu  
 1                  5                  10                  15  
 Phe Glu Tyr Asn Lys Gln Gln Ala Asp Lys Tyr Phe Glu Glu Ala Arg  
                   20                  25                  30  
 Ala Gln Arg Asp Glu Leu His Ala Arg Ala Val Glu Phe Tyr Ala Ala  
                   35                  40                  45  
 Gln Gln Pro Arg Pro Leu Pro Asp Ala Ala Glu Ala Ile Asp Asn Ser  
 50                  55                  60  
 Arg Ser Ala Ala Asp Arg Glu Ala Ala Lys Asn Leu Leu Ala Phe Ala  
 65                  70                  75                  80  
 Ala Gln Asn Gln Thr Glu Pro Ala Asp Asp Asn Ser Arg Ile Thr Phe  
                   85                  90                  95  
 Leu Ile Asp Ala Leu Arg Ala Gln Ala Pro Asn Asp Leu Pro Glu Ala  
                   100                  105                  110  
 His Thr Glu Ile Glu Ser Leu Arg Asn Leu Gln Gln Leu Ile Glu Arg  
                   115                  120                  125  
 Arg Ile Gln Ala Leu Ser Ser Gln Thr Glu Leu Glu Ala Thr Thr Ala  
                   130                  135                  140  
 Gln Val Ser Glu Ala Ala Ser Ser Pro Phe Pro Asn Phe Ala Ile Glu  
 145                  150                  155                  160  
 His Gly Ser Asn Met Asp Glu Pro Val Glu Ala Thr Ser Ala  
                   165                  170

&lt;210&gt; 42313

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42313

Ser Thr Leu Met Pro Phe Leu Lys Ser Pro Trp Met Ile Ser Phe Ala  
 1                  5                  10                  15  
 Ser Gln Arg Thr Arg Tyr Phe Lys Leu Leu Cys His Leu Phe Trp Trp  
                   20                  25                  30



## 18903

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Ser Asn His Val Gln Val Gly Leu Pro Thr Gly Asn Asn Phe Gly Ile
    35                      40                      45
Thr Ala Ala Thr Pro Glu Asn Pro Asp Ser Phe Glu Ile Phe Lys Phe
    50                      55                      60
Val Val Gln Pro Thr Ala Ser Gly Thr Asn Ala Ala Pro Pro Ala Gln
    65                      70                      75                      80
Pro Gln Ala Asn Gln Gln Pro Ile Val Asn Gln Gly Gln Ala Arg Pro
    85                      90                      95
Val Asp Pro Arg Ser Val Asn Ser Asp Gln Leu Ala Asp Leu Ser Ser
    100                     105                     110
Arg Leu Gln Arg Leu Asn Asp Ala Thr Asn Ser Ile Ala Arg Asp Ala
    115                     120                     125
Ser Ser Gln Ser Ser Lys Ala Glu Asn Arg His Val Glu Leu Leu Gln
    130                     135                     140
Lys Met Ala Thr Lys Glu Gln Val Ala Asn Leu Asp Ala Arg Leu Gln
    145                     150                     155                     160
Lys Ile Glu Leu Leu Leu Gln Asn Ile Gln Arg Asp Leu Glu Gly Lys
    165                     170                     175
Asp Tyr Arg Asp Arg Phe Asn Gln Leu His Glu Asn Leu Arg Ser Ser
    180                     185                     190
His Met Ser Leu Ala Glu Asn Leu Gln Asn Thr Ile Leu Asn Gly Lys
    195                     200                     205
Asn Ser Met Arg Ile Pro Pro
    210                     215

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&lt;210&gt; 42314

&lt;211&gt; 699

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42314

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Gly Tyr Arg Ser Gln Ile Lys Glu Asn Thr Asn Gly Asn Arg Cys Pro
1      5      10      15
Leu Leu Leu Val Val Leu Arg Ser Asp Leu Asp Ala His Ala Met Ala
    20      25      30
His Arg Gln Gln Gly Leu Ser Arg Thr Leu Pro Lys Asn Phe Thr Phe
    35      40      45
Asn Ser Thr Gly Thr Glu Glu Pro Arg Thr Pro Glu His Ala Ser Ile
    50      55      60
His Val Asp Gly Pro Pro Pro Pro Pro Arg His Ser Ser Cys Arg Leu
    65      70      75      80
Arg Arg Ser Arg Ile Arg Ser Gly Thr Asp Leu Val Ala Gln Val Glu
    85      90      95
Tyr Asp Arg Thr Thr Leu Thr Ala Asn Pro Ser Asp Ile Pro Leu Pro
    100     105     110
Ser Ile Glu Leu Pro Pro Ser Tyr Asp Ala Ser Ile Ala Gln Ser Tyr
    115     120     125
Pro Gly Ser Ile Ala Lys Asp Asp Arg Phe Leu Ala Pro Pro Arg Asp
    130     135     140
Arg Met Ala Leu Lys Thr Pro Pro Ala Gln Ile Arg Gly Ser Pro Ser
    145     150     155     160
Glu Leu Thr Asp Gly Trp Pro Ser Trp Asp Ser Gln Ala Ile Gly Gln
    165     170     175
Ser Leu Gln Arg Pro Gly Ser Ala Cys Ser Gln Ala Ser Asp Ser Ser
    180     185     190
Ile Ser Ser Cys Glu Thr Phe Ala Ser Arg Arg Ser Val Gly Gly Ser

```

	195		200		205										
Cys	Thr	Ser	Ala	Glu	Ser	Asp	Ser	Tyr	Asp	Pro	Phe	Phe	Tyr	Leu	Glu
	210					215					220				
Ile	Pro	Pro	Lys	Gln	Leu	Ala	Glu	Lys	Pro	Ser	Val	Ala	Thr	Ala	Asn
225					230				235						240
His	Lys	Lys	Thr	Asn	Arg	Gly	Phe	Pro	Lys	Arg	Glu	Arg	Trp	Thr	Leu
				245					250					255	
Asp	Met	Asp	Asn	His	Leu	Trp	Asn	Thr	Tyr	Gln	Leu	Tyr	Ile	Gln	Asp
			260					265					270		
Pro	Thr	Ile	Thr	Pro	Phe	Lys	Met	Thr	Pro	Gly	Ser	Ile	Pro	Pro	Leu
	275						280					285			
Gly	Val	Thr	His	Arg	Val	Ala	Arg	Glu	Ala	Lys	Arg	Ser	Trp	Glu	Arg
	290					295					300				
Lys	Arg	Tyr	Arg	Leu	Ala	Arg	Pro	Phe	Thr	Phe	Ser	Val	His	Gln	Pro
305					310					315					320
Gln	Gln	Pro	Gln	Ser	Gly	Glu	Thr	Thr	Pro	Thr	Pro	Arg	Thr	Glu	Ser
				325					330					335	
Pro	Lys	Asn	Ala	Trp	Pro	Lys	Thr	Glu	Ala	Ser	Thr	Arg	Arg	Arg	Leu
			340					345					350		
Lys	Leu	Leu	Cys	Lys	Arg	Lys	Phe	Ser	Ile	Ala	Pro	His	Tyr	Gln	Arg
	355						360					365			
Leu	Met	Gln	Ser	Arg	Ser	Pro	Ser	Pro	Phe	Leu	Asp	Leu	Phe	Ser	Gln
	370					375					380				
Pro	Ser	His	Glu	Glu	His	Pro	Leu	Asp	Ser	Pro	Gly	Asn	Ser	Ser	Thr
385					390					395					400
Thr	Tyr	Ala	Thr	Arg	Asp	Leu	Gly	Val	Ser	Leu	Val	Ser	Ser	Ser	Val
				405					410					415	
Pro	Gly	Pro	Leu	Ser	Gln	Leu	Ala	Val	Glu	Asp	Arg	Ser	Pro	Gln	Asn
			420					425					430		
Pro	Ala	Tyr	Asp	Trp	Pro	Arg	Asn	Gln	Thr	Val	Pro	Gln	Ala	Ser	Trp
	435						440					445			
Glu	Glu	Pro	Leu	Ala	Arg	Thr	Thr	Gln	Leu	Gln	Ala	Glu	His	Pro	Gly
	450					455					460				
Ser	Ile	Pro	Arg	Leu	Gly	Ser	Pro	Phe	Thr	Tyr	His	Thr	Trp	Gly	Pro
465					470					475					480
Thr	Ser	Ser	Arg	Lys	Lys	Asn	Ser	Arg	His	Thr	Pro	Arg	Thr	Arg	Arg
				485					490					495	
Glu	Thr	Ile	His	Val	Thr	Gly	Ser	Arg	Leu	Cys	Ser	Pro	Pro	Cys	Thr
			500					505					510		
Glu	Val	Leu	Pro	Ala	Thr	Asp	Asp	Ser	Asn	Ile	Val	Tyr	Ser	Val	Pro
	515					520						525			
Arg	Pro	Thr	Glu	Ala	Ser	Pro	Gly	His	Glu	Asn	Gln	Asp	His	Leu	Glu
	530					535						540			
Thr	Leu	Ile	Arg	Asp	Gly	Lys	Leu	Ser	Asp	Ile	Gly	Asn	Arg	Arg	Leu
545					550					555					560
Arg	Ile	Arg	Ser	Arg	Gly	Ala	Thr	Thr	Ser	Ser	Ile	Ala	Pro	Gln	Asn
				565					570					575	
Leu	Asp	Gln	Leu	Phe	Ser	Pro	Pro	Ser	Ser	Ala	Ser	Arg	Asn	Glu	Ala
			580					585					590		
Ser	Thr	Thr	Phe	Val	Glu	Lys	Ala	Leu	Pro	Asn	Pro	Leu	Leu	Asn	Leu
	595						600					605			
Ser	Gly	Glu	Asn	Leu	Lys	Arg	Leu	Gly	Ser	Pro	Phe	Lys	Val	Asp	Ala
	610					615					620				
Ser	Lys	Arg	His	Glu	Gly	Arg	Arg	Ile	Arg	His	Lys	Pro	Ser	Leu	Ser
625					630					635					640
Asp	Pro	Phe	Ala	Ser	Gly	Leu	Leu	Pro	Gln	Val	Arg	Pro	Val	Asn	Gln

[illegible]

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<210> 42315
<211> 95
<212> PRT
<213> A.fumigatus
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<210> 42316
<211> 186
<212> PRT
<213> A.fumigatus
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<400> 42316
Leu Val Ala Cys Thr Glu Ser Arg Phe Thr Phe Ser Cys Ile Gln Ser
1 5 10 15
Asn Pro Asn Leu Ser Val Ser Glu Thr Met Gln Ala Lys Gln Leu Pro
20 25 30
Asp His His Val Arg Glu Ala Val Asn Pro Arg Thr Gly Arg Arg Glu
35 40 45
Arg Val Phe Val Asn Leu Glu Ala Val Tyr Pro Asp Tyr Lys Asp Pro
50 55 60
Thr Lys Glu Val Ser Phe Glu Glu Leu Arg Ala Met His Arg Gly Trp
65 70 75 80
Met Asp Lys Asp Trp Arg Pro Gln Met Ala Pro Phe Lys Lys Ile Pro
85 90 95
Gly Asn Ile Ala Gly Ser Glu Arg Pro Ala Gly Asn Val Ile Glu Gln
100 105 110
Ser Leu Asp Gln Gly Leu Ser Glu Gln Phe Ser Gln Lys Leu Lys Val
115 120 125
Lys Asp Ala Gly Ser Gln Gly Thr Gln Arg Ala Ile Glu Asp Gly Leu
130 135 140
Asn Glu Ser Lys Ala Asn Lys Ala Arg Lys Ile Lys Leu Arg Glu Val
145 150 155 160
Lys Gly Glu Thr Gln Thr Ser Lys Gln Tyr Leu Val Ile Ala Val Ser
165 170 175
Phe Pro Asn Ser Glu Phe Leu Thr Asn Arg

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## 18906

180

185

<210> 42317  
 <211> 220  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 42317

Phe	Ala	Ser	Thr	Ile	Ser	Leu	Leu	His	Pro	Leu	Trp	Ser	Thr	Trp	Lys
1				5					10					15	
Lys	Arg	Ser	Pro	Thr	His	Ala	Arg	Ser	Thr	Thr	Pro	Pro	Val	Asp	Cys
			20					25					30		
Ala	Ala	Gly	Arg	Asn	Lys	Gly	Leu	Ser	Leu	Ile	Asp	Phe	Ala	Arg	Gly
		35					40					45			
Ile	Asp	Met	Arg	Ala	Phe	Gln	Pro	Ser	Val	Gln	Phe	Ile	Ala	Asp	Trp
	50					55					60				
Glu	Thr	Gly	Glu	His	Glu	Cys	Asn	Glu	Ile	Arg	Glu	Met	Arg	Pro	Trp
65					70					75					80
Thr	His	Gln	Ile	Asp	Leu	Tyr	Gly	Ile	Ala	Gly	Thr	Val	His	Val	Met
				85					90					95	
Leu	Phe	Gly	Lys	Tyr	Ile	Glu	Ser	Thr	Pro	Val	Arg	Lys	Ser	Glu	Gly
			100					105					110		
Gly	Thr	Val	Ser	Val	Arg	Thr	Tyr	Arg	Ile	Arg	Glu	Ser	Leu	Lys	Arg
		115					120					125			
Tyr	Trp	Asp	Arg	Glu	Ile	Trp	Thr	Asp	Val	Phe	Asp	Leu	Leu	Leu	Asn
	130					135					140				
Pro	Cys	Thr	Glu	Arg	Trp	Ala	Arg	Met	Glu	Leu	Asp	Ala	Ala	Gly	Pro
145					150					155					160
Asp	Gln	Asp	Leu	Arg	Gly	Ala	Gly	Asn	Gln	Ile	Ile	Leu	Pro	Val	Thr
				165					170					175	
His	Ser	Met	Arg	Tyr	Val	Arg	Glu	Lys	Met	Glu	Ala	Trp	Leu	Leu	Ala
			180					185					190		
Asn	Ala	Glu	Lys	Lys	Gly	Leu	Gly	Leu	Gln	Ile	Arg	Lys	Leu	Glu	Ala
		195					200					205			
Val	Phe	Ala	Glu	Lys	Lys	Lys	Lys	Leu	Glu	Arg	Ser				
		210				215					220				

<210> 42318  
 <211> 437  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 42318

Arg	Tyr	Arg	Val	Ala	Leu	Asp	Lys	Ser	Phe	His	Asp	Ser	Pro	Thr	Asp
1				5					10					15	
Tyr	Pro	Phe	Gly	Pro	His	Ala	Cys	Leu	Ser	Val	Ala	Ala	Met	Ala	Ala
			20					25					30		
Ser	Glu	Asp	Leu	Ile	Asn	Phe	Asp	Ile	Ile	Glu	Asn	Gln	Lys	Glu	Asn
		35					40					45			
Ile	Gln	Ser	Leu	Pro	Gly	Gly	Arg	Ser	Ala	Lys	Glu	Leu	Ala	Arg	Ile
	50					55					60				
Phe	Ser	Pro	Arg	Asp	Ser	Ser	Asp	Lys	Leu	Ala	Ala	Pro	Ser	Pro	Asn
65					70					75					80
Glu	Thr	Arg	Thr	Leu	Asn	Asp	Ala	Ile	Arg	Gln	Glu	Tyr	Glu	Ala	Glu
				85					90					95	
Leu	Gln	Ala	Ile	Asp	Asp	Ser	Asp	Asp	Pro	Leu	Asp	Ile	Tyr	Asp	Arg

18907

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      100      105      110
Tyr Val Lys Trp Thr Leu Asn Ala Tyr Pro Ser Ala Gln Ala Thr Ala
      115      120      125
Glu Ser Gly Leu Leu Pro Leu Leu Glu Arg Ala Val Arg Ala Phe Leu
      130      135      140
Ser Ser Ala His Tyr Lys Asn Asp Pro Arg Tyr Leu Arg Leu Trp Leu
145      150      155      160
His Tyr Ile Arg Leu Phe Ser Asp Ser Pro Arg Glu Thr Phe Ala Phe
      165      170      175
Leu Ala Arg His His Ile Gly Glu Gly Leu Ala Leu Phe Tyr Glu Glu
      180      185      190
Phe Ala Ala Trp Leu Glu Gly Ala Gly Arg Trp Thr Gln Ala Glu Glu
      195      200      205
Val Tyr Arg Leu Gly Ile Asp Arg Glu Ala Arg Pro Thr Glu Arg Leu
      210      215      220
Ile Arg Lys Tyr Thr Glu Phe Gln Lys Arg Tyr Glu Gln Arg Thr Gln
225      230      235      240
Asp His Gly Pro Ser Ser Pro Ala Leu Pro Ala Val Arg Pro Ala Leu
      245      250      255
Ala Ala Lys Val Asp Pro Phe Ser Leu Ser Ala Ala Ala Pro Val Ala
      260      265      270
Asp Pro Gln Ala Gln Arg Pro Ala Pro Ala Ala Ala Ala Pro Arg
      275      280      285
Thr Lys Ser Gly Lys Pro Lys Met Thr Ile Phe Ser Asp Ala Asp Ser
      290      295      300
Ala Ala Ser Gln Pro Ala Ile Ser Gly Gln Thr Lys Gly Trp Asp Ser
305      310      315      320
Ile Gly Ser Met Arg Glu Arg Arg Lys Glu Asn Ser Val Glu Ala Lys
      325      330      335
Pro Trp Val Gly Glu Thr Leu Lys Ala Gly Lys Lys Ala Ala Pro Lys
      340      345      350
Glu Lys Met Pro Ile Phe Arg Asp Glu Val Ser Pro Cys Ser Leu Cys
      355      360      365
Cys His Pro Phe Leu Lys Phe His Ile Phe Thr Ile Thr Gly Leu Ile
      370      375      380
Gly Gly Met Tyr Arg Ile Ser Val Tyr Val Phe Met Tyr Ser Val Lys
385      390      395      400
Ser Lys Ser Ile Cys Leu Arg Asn Asp Ala Ser Lys Thr Thr Ser Arg
      405      410      415
Ser Ser Cys Lys Gly Ser Gly Lys Ser Thr Asn Arg Thr Ala Arg Ala
      420      425      430
Cys Phe Arg Gln Ser
      435

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<210> 42319  
 <211> 580  
 <212> PRT  
 <213> A.fumigatus

<400> 42319  
 Pro Leu Thr Asn Cys Pro Val Lys Met Lys Phe Asp Ser Pro Thr Gly  
 1 5 10 15  
 Gly Lys Ile Arg Arg Lys Ser Thr Ala Glu Pro Thr Met Thr Ile His  
 20 25 30  
 Thr Arg Ala Ala Thr Asp Glu Ile Tyr Ser Ile Phe Asn Gln Pro Leu  
 35 40 45

## 18908

Lys Ala Glu Thr Glu Asn Val Ala Asp Ser Ser Asp Phe Glu Asp Asp  
 50 55 60  
 Asp Tyr Thr Ser Ala Gly Glu Ser Thr Cys Thr Gly Arg Ile Ser Ile  
 65 70 75 80  
 Thr Ser Ser Asp Phe Cys Asp Asp Glu Thr Thr Thr Phe His Arg Ser  
 85 90 95  
 Asp Asp Glu Ala Glu Glu Glu Asp Phe Glu Asp His Thr His Ala Glu  
 100 105 110  
 Ser Val Val Asp Gly Glu Trp Thr Gln Phe Ser Ser Lys Glu Asp Pro  
 115 120 125  
 Thr His Ser Leu Gly Val Asp Pro Ile Ser Pro His Gly Asn Thr Leu  
 130 135 140  
 Asp Ala Ala Glu Thr Ser Arg Arg Glu Arg Phe Val Pro Glu Met Pro  
 145 150 155 160  
 Glu Asp Tyr Asn Pro Pro Tyr Gly Pro Tyr Arg Asp Pro Ala Val Val  
 165 170 175  
 Ala Gln Asn Arg Leu Pro Phe Met Thr Pro Ile Val Glu Gln Thr Glu  
 180 185 190  
 His Ser Leu Pro Ser Met Thr Ala Ala Arg Asn Ala Leu Tyr Asn Thr  
 195 200 205  
 Lys Thr Pro Ser Lys Pro Gln Met Gly Asn Phe Phe Thr Thr Pro Leu  
 210 215 220  
 Ile Gly Ala Thr Pro Gln Gln Thr Glu Asn Leu Thr Val Phe Thr Glu  
 225 230 235 240  
 Asp Val Ala Met Ser Pro Thr Val Lys Lys Ala Arg Ser Gly Leu Lys  
 245 250 255  
 Ile Leu Ser Pro Leu Lys Glu Gln Gln Gln Gln His Arg Val Ile  
 260 265 270  
 Ile Asn Asp Ser Gln Cys Asn Pro Thr Asp Arg Ser Ile Arg Glu Ser  
 275 280 285  
 Ile Leu Gln Ala Val Asp Pro Pro Leu Ala Ser Tyr Pro Gly Tyr His  
 290 295 300  
 Cys His Pro Glu Val Glu Ser His Tyr Ala Pro Ala Ile Gln Lys Phe  
 305 310 315 320  
 Val Lys Arg His Val Lys Arg Pro Arg Ser Gly Asp Glu Ala Ser Phe  
 325 330 335  
 Asp Val Pro Ile Leu Glu Leu Pro Gly Ala Gln Arg Cys Tyr Ile Ile  
 340 345 350  
 Arg Arg Glu Leu Gly Ala Gly Ala Tyr Ala Pro Val Tyr Leu Ala Glu  
 355 360 365  
 Ser Val Asp Ser Leu Glu Asn Tyr Pro Ser Ser Asp Ser Glu Ala Glu  
 370 375 380  
 Pro Ala Asp Asp Asp Ser Pro Asp Ser Gln Phe Thr Asn Gly Lys Lys  
 385 390 395 400  
 Ala Val Thr Arg Ser Ser Ser Arg Tyr Gly Phe Glu Ala Ile Lys Leu  
 405 410 415  
 Glu Val Gly Pro Pro Asn Ala Trp Glu Phe Tyr Met Ile Arg Ile Ala  
 420 425 430  
 His Glu Arg Ile Ser Gln Leu Pro Glu Leu Ser Arg Ala Thr Asp Ser  
 435 440 445  
 Ile Ile Arg Ala His Glu Leu His Val Tyr Lys Arg Glu Thr Ile Leu  
 450 455 460  
 Val Glu Asp Tyr His Gly Gln Gly Thr Leu Leu Asp Leu Val Asn His  
 465 470 475 480  
 Met Arg Asn Glu Ser Ile Lys Ala Asn Gly Thr Gly Glu Gly Gly Leu  
 485 490 495

## 18909

Asp Glu Ala Leu Ala Met Phe Phe Thr Val Glu Leu Phe Arg Thr Val  
                   500                  505                  510  
 Glu Ala Leu His Ser Cys Gly Ile Leu His Gly Asp Ile Lys Ala Asp  
                   515                  520                  525  
 Asn Cys Leu Ile Arg Phe Asp Asp Lys Pro Thr Ala Pro Ser Leu Val  
                   530                  535                  540  
 Asp Leu Glu Glu Glu Ile Thr Asp Pro Arg Glu Ile Tyr Tyr Ser Pro  
 545                  550                  555                  560  
 Arg Gly Leu Cys Gly Trp Ala Gln Gln Gly Pro Val Ala His Arg Phe  
                   565                  570                  575  
 Arg Pro Arg Tyr  
                   580

&lt;210&gt; 42320

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42320

Asp Arg Arg Ala Val Phe Pro Ala Ala Met Ala Ser Ser Gln Ser Phe  
 1                  5                  10                  15  
 Ala Lys Pro Phe Gln Lys Ile Leu Asp Pro Thr Lys Ile Gly Thr Trp  
                   20                  25                  30  
 Asn Val Val Arg Arg Pro Pro Ile Glu Asn His Ser Val Ile Gln Gly  
                   35                  40                  45  
 Lys Pro Arg Glu Gln Asn Ser Asn Ala Phe Lys Thr His Gln Trp Lys  
                   50                  55                  60  
 Glu Gly Val Arg Leu Arg Lys Ala Leu Asn Ala Ile Thr His Gly Lys  
 65                  70                  75                  80  
 Asn Ile Phe Val Tyr His Asn Ile Arg Thr Asn Gln Val Val Tyr Ser  
                   85                  90                  95  
 Leu Thr Arg Tyr Leu Glu Val Arg Thr Ala Ile Val His Pro Ser Gln  
                   100                  105                  110  
 Ser Val Phe Leu Ile Cys Phe Val Gln Met  
                   115                  120

&lt;210&gt; 42321

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42321

Lys Asn Asn Val Leu Arg Gln Leu Ile Tyr His Gly Lys Lys Thr Val  
 1                  5                  10                  15  
 Pro Ala Thr Leu Arg Lys Asp Met Trp Val Pro Tyr Tyr Ser Val His  
                   20                  25                  30  
 Phe Thr Asp Ser Lys Val Gly Leu Arg Ala Tyr His Leu Leu Arg Glu  
                   35                  40                  45  
 Phe Ser Met Gln Arg Gln Leu Ala Pro Pro Arg Glu Met Ile Thr Ile  
                   50                  55                  60  
 Thr Glu Gln Phe Leu Ala Gln Lys Arg Pro Arg Asn Pro Glu Glu Ala  
 65                  70                  75                  80  
 Lys Lys Phe Asp Glu Lys Tyr Ala Asn Lys Val Gly Trp Leu Met Glu  
                   85                  90                  95  
 Lys Lys Asp Arg Ala Arg Ala Val Met Asp Gln Lys Ala Thr Ser Val  
                   100                  105                  110

## 18910

Ala Asp Ile Ala Ala Val Leu Ser Ile Gln Glu Asp Glu Ile Ala Asn  
 115 120 125  
 Gly Phe Ala Asp Gly Lys Arg Gly Tyr Leu Thr Pro Ala Ala Arg Arg  
 130 135 140  
 Arg Arg Arg Glu Ala Arg Lys Lys Glu His Glu Lys Ser Ala Glu Gln  
 145 150 155 160  
 Ala Glu Arg Val Ala Ala Phe Ala Gln Thr Leu Ser Thr Pro Glu Val  
 165 170 175  
 Asp Tyr Ser Ile Glu Asp Pro Asn Glu Asp Ala Glu Leu Leu Gly Asp  
 180 185 190  
 Asn Gly Val Lys Ile Leu Trp Ala Asp Ile His Asp Ala Arg Phe Ala  
 195 200 205  
 Glu Lys Trp Pro Asp Arg Val Trp His Gly Glu Leu Asp Leu Ser Arg  
 210 215 220  
 Asp His Val Met Pro Gly Glu Lys Gln Ile Pro Gly Lys Lys Asp Leu  
 225 230 235 240  
 Leu Ala Ser Gly Gln Phe Lys Glu Lys Gln Ala  
 245 250

&lt;210&gt; 42322

&lt;211&gt; 432

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42322

Ile Thr Cys Arg Ile Gln Gly Ser Ser Met Arg Ser Glu Pro Gly His  
 1 5 10 15  
 Val Cys Asp Leu Phe Val Gln Val Gly Leu Pro Ser Arg Asn Pro Trp  
 20 25 30  
 His Thr Trp His Ser Lys Cys Ser Thr Phe Leu Ser Cys Pro Leu Asn  
 35 40 45  
 Ala Ser Ile Leu Thr Asp Tyr Ser Tyr Tyr Glu His Leu Ala Pro Leu  
 50 55 60  
 Ser Pro Ile Val Ile Pro Asp Phe Ser Gln Pro Ser Thr His Arg Thr  
 65 70 75 80  
 Leu Leu Thr Asp Glu Pro Val Leu Ala Val Thr Ile Leu Thr Thr Ala  
 85 90 95  
 Ser Arg His Met Lys Pro Lys Gly Asp Gly Ala Tyr Thr Arg Ser Phe  
 100 105 110  
 Tyr Ile His Asp Arg Leu Trp Ser Tyr Leu Arg Gly Met Ile Glu Arg  
 115 120 125  
 Leu Phe Trp Gly Gln Glu Lys Phe Gly Gly Asn Gly Ile Gly Ile Ser  
 130 135 140  
 Lys Pro Arg Ser Phe Asp Leu Ala Pro Ser Ala Ala Lys Val Ser Leu  
 145 150 155 160  
 Lys Gly Asn Leu Arg Ser Leu Gly Ser Ile Glu Ala Leu Leu Ile Leu  
 165 170 175  
 Thr Asp Trp His Pro Arg Asn Leu His Phe Pro Pro Gly Asp Asp Glu  
 180 185 190  
 Asn Thr Leu Leu Asp Leu Asp Ala His Thr Gln Ala Arg Leu Glu Lys  
 195 200 205  
 Asp Val Glu His Asp Gly Glu Pro Thr His His Arg Ser Ser Gln Thr  
 210 215 220  
 Ser Gly Glu Gly Arg Leu Ala Phe Gln Lys Trp Leu Glu Pro Ala Trp  
 225 230 235 240  
 Arg Ser Asp Arg Met Ser Trp Met Leu Leu Ser Thr Ala Gln Ala Leu



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<210> 42323
<211> 591
<212> PRT
<213> A.fumigatus
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Asn	Arg	Lys	Leu	Arg	His	Leu	Gln	Gly	Ile	Ser	Ile	Arg	Asn	Leu	Val
1				5					10					15	
Ile	Thr	Pro	Pro	Leu	Ser	Arg	Pro	Arg	Gly	Lys	Thr	Ile	Asp	Asp	Glu
			20					25					30		
Glu	Ile	Pro	Asn	Ser	Leu	Gln	Ser	Pro	Ser	Lys	Leu	Leu	Ala	Gln	Ser
		35				40					45				
Ala	Ser	Arg	Pro	Leu	Pro	Gln	Ser	Arg	Ser	Phe	Ala	Asp	Leu	Lys	Thr
	50					55				60					
Val	Pro	Ala	Thr	Ser	Asp	Ser	Arg	Asp	Asp	Ala	Glu	Gln	Gln	Pro	Ala
65				70					75					80	
Trp	Arg	Leu	Arg	Arg	Arg	Ser	Met	Leu	Pro	Trp	Asn	Asp	Pro	Asn	Pro
			85						90					95	
Gln	Met	Arg	Gln	Ile	Lys	Leu	Glu	Asp	Ile	Thr	Lys	Thr	Arg	Met	Ala
			100					105					110		
Asp	Thr	Trp	Phe	Ser	Ile	His	Cys	Asp	Gly	Ile	Asp	Thr	Pro	Val	Tyr
		115				120					125				
Val	Ser	Glu	Val	Val	Glu	Asn	Ala	Thr	Asn	Pro	Ser	Phe	Lys	Ala	Phe
	130					135				140					
Asp	Leu	Asn	Val	Cys	Gly	Pro	Lys	Val	Ser	Arg	Ala	Asp	Cys	Leu	Thr
145				150						155				160	
Leu	Lys	Leu	Trp	Ala	Lys	Ser	Thr	Thr	Met	Lys	Glu	Tyr	Val	Leu	Leu
			165					170						175	
Val	Glu	Leu	Gln	Leu	Cys	Leu	Gln	Ser	Leu	His	Phe	Leu	Gly	Lys	Ser
		180					185						190		
Leu	Asp	Ser	Phe	His	Gln	Pro	Leu	Pro	Ser	Asn	Ser	Ile	Leu	Phe	His
		195				200						205			

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Leu Thr Asp Gly Val Tyr Thr Asn Leu Thr Gly Ile Pro Ser Ser Asn
 210                      215                      220
Thr Leu Ile Pro Ser Ala Ala Ser Lys Phe Ser Asp Gly Val Val Leu
225                      230                      235                      240
Pro Thr Ser Ser Tyr Asp Ala Leu Met Arg Leu Ala Asn Leu Asp Glu
                      245                      250                      255
Cys Ile Gln Asp Ala Leu Ala Thr Arg Glu Lys Leu Glu Ser Gln Ile
                      260                      265                      270
Ser Ala Ile Leu Glu Gln Asn His His Ala Met Thr Leu Thr Ser Asp
                      275                      280                      285
Val Ser Arg Ala Gln Asp Lys Leu Ala Leu Thr Lys His Ala Val Ala
                      290                      295                      300
Ala Gly Lys Lys Gln Leu Arg Ala Thr Trp Lys Arg Lys Glu Glu Leu
305                      310                      315                      320
Ile Ala Ser Ile Lys Ala Arg Arg Glu Ala Met Glu Arg Gly Arg Tyr
                      325                      330                      335
Ser Gln Glu Lys Ala Arg Cys His Leu Pro Asp Ala Gln Gln Lys Leu
                      340                      345                      350
Ala Ser Cys Ser Gln Val Leu Lys Gln Asn Thr Glu Glu Thr Lys Gly
                      355                      360                      365
Gln Ile Arg Arg Ile Ala Glu Asp Leu Leu Ala Ile Tyr Pro Ile Glu
                      370                      375                      380
Pro Ile Pro Asp Lys Pro Leu Ala Phe Thr Ile Ala Gly Leu Ala Leu
385                      390                      395                      400
Pro Asn Ser Asn Phe Gly Asp Ile Asp Arg Asp Ala Val Ala Ala Ala
                      405                      410                      415
Leu Gly Tyr Thr Ala His Leu Val Tyr Leu Leu Ser Phe Tyr Leu Ser
                      420                      425                      430
Val Pro Ile Pro Tyr Pro Val Tyr Pro Tyr Leu Ser Asn Ser Leu Ile
                      435                      440                      445
Gln Asp Pro Val Ser Ala Ser Leu Pro Gln Arg Thr Tyr Pro Leu Tyr
                      450                      455                      460
Pro Val Asn Val Gln Tyr Arg Phe Glu Tyr Gly Val Phe Leu Leu Asn
465                      470                      475                      480
Lys Asp Ile Glu Phe Leu Leu Asn Lys Leu Ser Leu Arg Ala Leu Asp
                      485                      490                      495
Ile Arg His Thr Leu Pro Asn Leu Lys Tyr Leu Leu Tyr Val Leu Thr
                      500                      505                      510
Ser Gly Thr Ser Glu Ile Pro Ala Arg Lys Ser Gly Gly Ile Arg Gly
                      515                      520                      525
Leu Leu Gln Gly Arg Leu Thr Pro Ser Leu Ser Arg Arg Gly Ser Glu
                      530                      535                      540
Asp Ser Val Gly Tyr Thr Glu Ser Ile Phe Pro Arg Lys Glu Val Arg
545                      550                      555                      560
Pro Ser Ser Lys Leu Asn Gly Asp Leu Ala Ser Asp Lys Ala Lys Gln
                      565                      570                      575
Thr Ser Pro His Phe Pro Ser Thr Ala Thr Ser Tyr Gln Val Thr
                      580                      585                      590

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&lt;210&gt; 42324

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42324

Ser Thr Ser Leu Cys Cys Ala Gly Arg Arg Arg Leu Tyr Thr Ile Met

## 18913

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1           5           10           15
Met Ala Ala Ser Asn Thr Gln Gln Glu Asn Gly Ile Tyr Ala Gln Asn
      20           25           30
Gly Gln Ala Gln Lys Ser Pro Ser Pro Gln Pro Gln His Arg Arg Gly
      35           40           45
Tyr Gln Ala Cys Asp Pro Cys Arg Lys Arg Lys Val Lys Cys Asp Leu
      50           55           60
Gly Ser Lys Leu Tyr Pro Ile Phe Arg Leu Tyr Ile Leu His Gly Asn
      65           70           75           80

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&lt;210&gt; 42325

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42325

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Glu Cys Ile Asn Ile Ala Pro Ser Thr Glu Arg Tyr Pro Pro Cys Phe
1           5           10           15
Pro Ser Phe Ser Pro Arg Gln Gly Ser Ser Ser Arg Leu Gln Gly Gln
      20           25           30
Ala Gly Leu Cys Tyr Leu Pro Cys Pro Cys Glu Thr Trp Trp Pro Gln
      35           40           45
Glu Ala Cys Ala Gln Gly Cys His Leu Arg Tyr Val Ala His Ser Gly
      50           55           60
Ser Phe Ser Met Trp Glu Lys Leu Gly Leu Thr Met Val Ser Ser Ser
      65           70           75           80
Gly Lys Pro Thr Asn Met Gly Val Asn Gln Leu Lys Tyr Gln Arg Ala
      85           90           95
Leu Arg Ala Thr Ala Glu Glu Arg Val Gly Arg Arg Cys Ala Asn Leu
      100          105          110
Arg Val Leu Asn Ser Tyr Trp Ile Asn Gln Asp Ser Thr Tyr Lys Tyr
      115          120          125
Tyr Glu Val Ile Leu Val Asp Pro Gln His Lys Ala Ile Arg Arg Asp
      130          135          140
Pro Arg Ile Asn Trp Ile Cys Asn Ala Val His Lys Val Arg Leu Gln
      145          150          155          160
Arg Ser Cys Asn Ser Ala Arg Phe Trp Glu Ile Cys Asp Ala Leu Ala
      165          170          175
Asn Ile Phe Cys Thr Ala Pro Arg Glu Pro Trp Ser His Cys His Arg
      180          185          190
Gln Glu Val Pro Trp Tyr Gln Gln Gly Ser Pro Leu Gln Gln His Pro
      195          200          205
Cys Trp Pro Pro Ser His Leu Glu Asp Pro Gln His Pro Glu Leu Leu
      210          215          220
Glu Ile Pro Leu Asp Val Glu Asn Trp Val Phe Met Gly Val Gly Gly
      225          230          235          240
Tyr Gly Lys Ser Leu Ser Ser Arg Met Cys Leu Ile Arg Arg Lys Leu
      245          250          255
Ala Ser Met Thr Leu Ser Leu Asn His Gln Gly Ala Ser Leu Met Gln
      260          265          270
Gln Ile Phe Arg Ile Gly Cys
      275

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&lt;210&gt; 42326

&lt;211&gt; 620

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42326

Phe Gln Ala Leu Val Pro Ser Asn Pro Thr Ser Pro Ala Thr Asp His  
 1 5 10 15  
 Thr Gly Trp Pro Ser Gly Thr Ser Pro Gly Leu Ser Ser Pro Met Asn  
 20 25 30  
 Trp Asn His Val Gly Asn Ser Ser Phe Thr Trp Gly Thr Gly Ile Trp  
 35 40 45  
 Asn Ser Glu Ser Arg Lys Glu Pro Pro Pro Arg Leu Ser Glu Ile Val  
 50 55 60  
 Pro Ser Pro Thr Met Ser Asn Ala Ser Ala Ala Asn Asn Tyr Phe Ser  
 65 70 75 80  
 Asp Glu Leu Leu Ser Pro Thr Ala Arg Thr Thr Ser Gly Glu Ser Ala  
 85 90 95  
 Ile Pro Phe Ser Ile Pro Leu His Pro Thr Pro Lys Thr Tyr Arg Ser  
 100 105 110  
 Gln Ser Tyr Ser Val Gly Gln Met Asp Pro Glu Tyr Leu Asn Thr Met  
 115 120 125  
 Ala Asn Lys Ser Ala Ala Pro Phe Ser Gly Gly Arg Val Arg Asn Ala  
 130 135 140  
 Gly Gln Tyr Ser Ala Leu Gln His Arg Ser Ser Arg Pro Ser Leu Leu  
 145 150 155 160  
 Gly Glu Leu Gly His Asp Pro Ala Thr Leu Gly Arg Val Cys Glu Asp  
 165 170 175  
 Asp Asp Asp Gly Gly Ser Gly Asn Ser Ser Asp Gly Ser Leu Asn Ala  
 180 185 190  
 Tyr Ser Ala Asn Gln Ala Arg Thr Ile Glu Gln Leu Ser Arg Glu Asn  
 195 200 205  
 Ala Ile Leu Arg Gln Ala Ala Gly Gln Leu Asp Asn Arg Leu Arg Asp  
 210 215 220  
 Arg Ala Met Ser Ser Ala Ser Thr Ala Ser Gly Tyr Ala Val Gly Thr  
 225 230 235 240  
 Asn Leu Arg Asn Leu His Arg Ile Arg Gly Thr Val Pro Glu Glu Thr  
 245 250 255  
 Asp Leu Ala Val Glu Asp Leu Asp Glu Val Gly Asp Met Thr Gly Tyr  
 260 265 270  
 Ser Asn Ile His Ser Ser Leu Arg Lys Arg Phe Ser Glu His Ser Gly  
 275 280 285  
 Asn Leu Glu Lys Gln Leu Pro Ser Thr Leu Asn Pro Leu Glu Asn Arg  
 290 295 300  
 Ala Leu Glu Ser Ile Arg Lys Ala Asn Trp Gln Thr Ser Leu Gly Phe  
 305 310 315 320  
 Gly Ser Ile Ala Asp Ile Pro Gln Ser Arg Arg His Ser Phe Ala Asp  
 325 330 335  
 Ile Pro Ile Arg His Ala Ser Val Ser Gly Asp Ser Gln Val Ala Thr  
 340 345 350  
 Thr Ser Arg Ala Gly Met Gly Asp Arg Glu Asp His Leu Ala Asn Ile  
 355 360 365  
 Ser Asp Ser Ser Leu Ser Asn Ala Gln Ser Gln Asn Arg Glu Tyr His  
 370 375 380  
 Arg Leu His Met Ala Ser Arg Pro Glu Glu His Glu Met Glu Met Glu  
 385 390 395 400  
 Tyr Leu Arg Ala Arg Gln Phe Ala Glu Ser Tyr Phe Ala Arg Asp Gln  
 405 410 415  
 Ala Leu Arg Val Ala Glu Gly Pro Ser Ala Val Pro Thr Ser Leu His

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<210> 42327
<211> 184
<212> PRT
<213> A.fumigatus
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[illegible]

<210> 42328  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 42328  
 Leu Arg Gln Leu Asn Ala Ile His Arg Ala Ser Arg Pro Ser Arg Pro  
 1 5 10 15  
 Asp Lys Ala Arg Arg Leu Gly Tyr Lys Ala Lys Gln Gly Tyr Val Ile  
 20 25 30  
 Tyr Arg Val Arg Val Arg Arg Gly Gly Arg Lys Arg Pro Val Pro Lys  
 35 40 45  
 Gly Ala Thr Tyr Gly Met Leu Arg Ile Gln Asp Leu Ser Gln Cys Gly  
 50 55 60  
 Arg Ser Trp Asp  
 65

<210> 42329  
 <211> 112  
 <212> PRT  
 <213> A.fumigatus

<400> 42329  
 Thr Pro Thr Gly Ser Thr Arg Thr Pro Pro Thr Ser Thr Thr Arg Ser  
 1 5 10 15  
 Ser Ser Leu Thr Pro Asn Thr Arg Leu Phe Ala Ala Ile Pro Ala Ser  
 20 25 30  
 Thr Gly Ser Ala Thr Leu Ser Thr Arg Phe Val Tyr Ser Ala Arg Ala  
 35 40 45  
 Thr Arg Arg Asp Ser Gly Arg Phe Ala Thr Leu Leu Thr Phe Ser  
 50 55 60  
 Val Gln His Arg Glu Ser Arg Gly Leu Thr Ala Thr Gly Lys Lys Ser  
 65 70 75 80  
 Arg Gly Ile Asn Lys Gly His Arg Tyr Asn Asn Thr Arg Ala Gly Arg  
 85 90 95  
 Arg His Thr Trp Lys Ile His Asn Thr Gln Ser Tyr Trp Arg Tyr Arg  
 100 105 110

<210> 42330  
 <211> 1013  
 <212> PRT  
 <213> A.fumigatus

<400> 42330  
 Trp Met Asn Arg Asn Asp Gly Asn Gly Arg Asn Cys Lys Arg Ser Lys  
 1 5 10 15  
 Ser Ser Leu Glu Arg Arg Thr His Asn Arg Leu Ser Thr Thr Leu Ser  
 20 25 30  
 Arg Pro Val Arg Ser Thr Ala Leu Thr Ser Leu Pro Leu Pro Phe Leu  
 35 40 45  
 Lys Leu Pro Ser Gly Val Val Lys Pro Pro Pro Ala Arg Ala Pro Gly  
 50 55 60  
 Tyr Trp Leu Ala Arg Pro Ala Gly Phe Ser Phe Arg Glu Asn Val Pro  
 65 70 75 80  
 Ala Tyr Glu Asp Phe Tyr Gln Arg Thr Arg Leu Asp Trp Met Ile Leu

85																90				95			
Phe	Asp	Leu	Arg	Leu	Trp	Lys	Lys	Thr	Arg	Thr	Asp	Leu	Arg	Asp	Leu								
100				105				110															
Tyr	Ile	Gly	Thr	Val	Val	Ser	Val	Pro	Gln	Phe	Lys	Arg	Ile	Leu	Gly								
115				120				125															
Leu	Arg	Met	Ser	Ala	Leu	Tyr	Thr	Ala	Leu	Ala	Gln	Leu	Tyr	Leu	Ile								
130				135				140															
Ala	Asp	Arg	Glu	Pro	Asp	His	Ser	Ile	Val	Asn	Leu	Ser	Leu	Gln	Ile								
145				150				155															
Leu	Thr	Thr	Pro	Ser	Ile	Thr	Glu	Glu	Ile	Val	Arg	Arg	Gly	Asn	Phe								
165				170				175															
Leu	Thr	Lys	Val	Met	Ala	Ile	Leu	Tyr	Thr	Phe	Leu	Thr	Thr	Arg	Gln								
180				185				190															
Val	Gly	Glu	Ala	Tyr	Glu	Val	Asn	Pro	Asn	Ala	Thr	Leu	Ala	Phe	Asp								
195				200				205															
Ala	Gly	Thr	Val	Thr	Asn	Arg	Arg	Leu	Tyr	His	Phe	Phe	Leu	Asp	Leu								
210				215				220															
Arg	Tyr	Leu	Leu	Gln	Ser	Glu	Tyr	Val	Gln	His	His	Val	Arg	Thr	Glu								
225				230				235															
Glu	Gln	Tyr	Leu	Ser	Gln	Phe	Leu	Asp	Leu	Val	Lys	Leu	Ser	Gln	Gly								
245				250				255															
Ile	Cys	Pro	Asn	Ile	Arg	Ala	Val	Gly	Glu	His	Val	Glu	Tyr	Glu	Pro								
260				265				270															
Asp	Ala	Trp	Ile	Ser	Ala	Ser	Ile	Leu	Met	Arg	Glu	Ile	Asn	Arg	Leu								
275				280				285															
Cys	Arg	Gln	Phe	Cys	Glu	Ala	Phe	Arg	Asn	Pro	Glu	Val	Asp	Gly	Gly								
290				295				300															
Lys	Asn	Leu	Phe	Arg	Ala	Ile	Arg	Met	Ala	Thr	Val	Ser	Ala	Ile	Val								
305				310				315															
His	Ser	Ala	Gly	Leu	Glu	Arg	Gln	Arg	Phe	Glu	Gln	Ala	Glu	Val	Lys								
325				330				335															
Glu	Tyr	Val	Arg	Phe	Lys	Leu	Leu	Pro	Cys	Phe	Asp	Phe	Glu	Val	Asp								
340				345				350															
Gln	Thr	Gly	Gln	Ile	Pro	Arg	His	Arg	Val	Val	Asp	Phe	Val	Val	Glu								
355				360				365															
Lys	Gly	Ser	Ile	Ser	Phe	His	His	Ala	Leu	His	Tyr	Thr	Leu	Ser	Trp								
370				375				380															
Leu	Leu	Glu	Cys	Ala	Arg	Asn	Val	Ser	Gly	Gly	Gln	Met	Arg	Asp	Val								
385				390				395															
Leu	Leu	Asp	Ala	Ala	Arg	Met	Ala	Asn	Asp	Asn	Ile	Ile	Arg	Asp	Ser								
405				410				415															
Ser	Leu	Thr	Pro	Asp	Asp	Phe	Leu	Leu	Thr	Met	Phe	Asp	Tyr	Pro	Leu								
420				425				430															
Arg	Val	Cys	Ala	Trp	Leu	Ala	Gln	Met	Lys	Ala	Gly	Met	Trp	Val	Arg								
435				440				445															
Asn	Gly	Leu	Ser	Leu	Arg	His	Gln	Met	Ser	Gln	Tyr	Arg	Gly	Val	Ser								
450				455				460															
Ser	Arg	Asp	Phe	Ala	Tyr	Tyr	Arg	Asp	Ile	Phe	Leu	Leu	Gln	Thr	Ala								
465				470				475															
Leu	Val	Thr	Cys	Asp	Pro	Ser	Arg	Val	Leu	Ala	Ser	Ile	Ala	Asp	Arg								
485				490				495															
Phe	Gly	Met	Val	Asp	Trp	Met	Thr	Arg	Asn	Tyr	Thr	Pro	Arg	Ala	Gly								
500				505				510															
Tyr	Glu	Asp	Ala	Gln	Ile	Ile	Asp	Val	Ala	Glu	Glu	Phe	Val	His	Leu								
515				520				525															
Leu	Ile	Ile	Leu	Leu	Thr	Asp	Arg	Asn	Ser	Leu	Glu	Ala	Ile	Asp	Asp								

530	535	540
Asn Glu Thr Val Thr Arg Asp Asn Ile Arg Arg Asp Ile Ala His Val		
545	550	555
Leu Cys Phe Lys Pro Leu Ser Phe Ser Asp Leu Ser Thr Arg Leu Ser		
565	570	575
Asp Lys Leu Leu Asp Ser Ser Met Phe Gln Glu Thr Leu Glu Glu Val		
580	585	590
Ala Val Phe Arg Pro Pro Glu Gly Leu Asn Asp Thr Gly Thr Phe Glu		
595	600	605
Leu Lys Pro Lys Tyr Ile Asp Leu Ile Asp Pro Tyr Ser Ala His Tyr		
610	615	620
Thr Lys Asn Gln Arg Asp Glu Ala Glu Ser Ile Tyr Arg Glu Trp Val		
625	630	635
Ala Lys Lys Thr Gly Lys Lys Ala Ser Asp Ile Val Phe Glu Pro His		
645	650	655
Leu Arg Pro Ile Thr Ser Gly Ala Phe Ser Asp Leu Ser His Phe Thr		
660	665	670
Lys Thr Pro Leu Phe Ala Gln Leu Ile His His Cys Leu Asp Tyr Val		
675	680	685
Met Ser Ser Lys Asp Cys Ser Pro Asn Ile Pro Ser Thr Arg Val Glu		
690	695	700
Thr Phe Leu Gln Val Val Leu His Leu Ile Leu Ala Ala Thr Leu Glu		
705	710	715
Asp Asn Ser Gln Glu Asp Glu Met Ala Asp Glu Ala Arg Glu Ser Phe		
725	730	735
Ile Ser Asn Ala Leu Ser Arg Ala Arg Gly Thr Gln Ala Gly Asn Leu		
740	745	750
Thr Ile Ile Gly Leu Leu Glu Lys Ile Ser Val Met Pro Glu Phe Ser		
755	760	765
Ala Cys Gly Pro Lys Ile Arg His Ile Leu Lys Arg Leu Trp Gln Lys		
770	775	780
Arg Pro Arg Ala Tyr Ala Ser Ala Thr Ala Ser Leu Thr Phe Pro Phe		
785	790	795
Asp Arg Val Asp Thr Asn Ser Pro Ala Ile Asp Val Asp Ser Glu Lys		
805	810	815
Glu Leu Lys Lys Lys Gln Ala Leu Glu Arg Gln Ala Arg Val Met Ala		
820	825	830
Gln Phe Gln Gln Gln Gln Gln Asn Phe Leu Asn Ser Gln Gly Ala Ile		
835	840	845
Asp Trp Gly Glu Glu Asp Phe Ser Asp Leu Glu Ser Glu Pro Glu Ala		
850	855	860
Ala Pro Glu Ala Lys Leu Trp Lys Tyr Pro Ser Gly Thr Cys Ile Leu		
865	870	875
Cys Gln Glu Glu Thr Asn Asp Ser Arg Leu Tyr Gly Thr Phe Ala Leu		
885	890	895
Val Gln Asp Ser Asn Ile Leu Arg Gln Thr Asp Val Gln Asp Pro Asp		
900	905	910
Trp Ile Arg Glu Val Leu Lys Thr Pro Leu Ser Leu Asp Lys Ser Ala		
915	920	925
Glu Asp Ile Arg Pro Phe Gly Val Ala Gly Glu Asn Gln Ile Thr Val		
930	935	940
Lys Arg Leu Asp Ser Thr Gly Gly Glu Val Ile Ser Glu Lys Ile Gly		
945	950	955
Leu Ser Lys Gly Phe Asp Ala Lys Asn Thr Val Arg Gly Pro Val Thr		
965	970	975
Thr Gly Cys Gly His Ile Met His Phe Ser Cys Phe Glu Val Tyr Tyr		



## 18919

980 985 990  
 Ala Ala Thr Gln Arg Arg His Thr His Gln Ile Ala Arg Asn His Pro  
 995 1000 1005

Glu Arg Leu Phe Leu  
 1010

<210> 42331  
 <211> 609  
 <212> PRT  
 <213> A.fumigatus

<400> 42331  
 Arg Leu Ala Val Gly Thr Ser Cys Thr Phe His Val Ser Lys Ser Ile  
 1 5 10 15  
 Met Gln Pro Pro Ser Val Val Ile Leu Thr Lys Ser Arg Glu Thr Ile  
 20 25 30  
 Leu Ser Ala Cys Ser Phe Lys Glu Phe Val Cys Pro Leu Cys Lys Ala  
 35 40 45  
 Leu Gly Asn Ala Phe Leu Pro Ile Val Trp Lys Gly Lys Glu Glu Ser  
 50 55 60  
 Tyr Pro Gly Leu Leu Ser Thr Thr Val Pro Phe Asn Ser Phe Leu Ser  
 65 70 75 80  
 Thr Glu Leu Arg Thr Ala Leu Ser Gln Pro Gln Asn His Ala Ile Leu  
 85 90 95  
 Val Gly Glu Asp Ser Leu Gln Leu Gln Leu Tyr Gln Asp Met Phe Leu  
 100 105 110  
 Asp Tyr Leu Gln Arg Ala Phe Val Pro Pro Val Ala Asn Gln Ile Glu  
 115 120 125  
 Gln Leu Val Ser Gly Ser Pro Pro Pro Thr Thr Glu His Pro Pro Gln  
 130 135 140  
 Val Arg Met Pro Met Pro Gly Leu Phe Pro Ser His Glu Asp Ala Ser  
 145 150 155 160  
 Ala Ser Ser Pro Leu Gln Pro Val Ser Ser Thr Pro Asp Glu Ser Pro  
 165 170 175  
 Met Phe Glu Leu Leu Gln Ile Tyr Lys Arg Leu Lys Lys Thr Leu Arg  
 180 185 190  
 Thr Asn His Ile His Ser Thr Phe Asn His Pro Pro Glu Thr Ile His  
 195 200 205  
 Ser Val Asn Asp Asp Leu Val His Thr Asp Ser Leu Phe Ser Ser Phe  
 210 215 220  
 Gly Tyr Ser Ile Ala Ala Val Glu Ile Ala Gln Arg Gly Val Glu Ser  
 225 230 235 240  
 Glu Ala Gly Ser Thr Leu Leu Asp Lys Ile Pro Gln Leu Thr Leu Thr  
 245 250 255  
 His Leu Arg Val Leu Ala Glu Thr Ala Leu Ser Tyr Ala Ala Val Gly  
 260 265 270  
 Cys Leu Tyr Lys Ser Gly Gly Asn His Ser Arg Ala Ala Asp Glu Phe  
 275 280 285  
 Gln Glu Ile His Arg Gln Lys Ile Cys Gln Leu Phe Val Gly Tyr Pro  
 290 295 300  
 Phe Val Val Gly Thr Ala Leu Leu Asp Gly Ala Arg Asp Ile Glu Pro  
 305 310 315 320  
 Met Leu Ala Lys Asp Thr Phe Val Phe Leu Ala Glu Cys Ser Leu Ser  
 325 330 335  
 Leu Leu Pro Val Leu Lys Ile Asp Val His His Leu Val Gln Leu Cys  
 340 345 350

18920

Tyr Val Ala Glu Ile Val Lys Val Ala Met Thr Tyr Ile Leu His Pro  
355 360 365  
Gln Gly Leu Lys Lys Glu Leu Ala Glu His Gly Asp Ala His Tyr Leu  
370 375 380  
Leu Asp Val Glu Leu Ser Asp Glu Arg Tyr Glu Tyr Thr Arg His Phe  
385 390 395 400  
Phe Asn Ala Ile Val Gly Glu Leu Arg Glu Asn Ser Phe Arg His Asp  
405 410 415  
Glu Gly Ser Ser Phe Ala Ala Asp Ser Gly Tyr Val Lys Asp Gly Glu  
420 425 430  
Asp Ser Ala Thr Pro Gly Ile Ile Ile Ala Leu Arg Arg Leu Val Ser  
435 440 445  
Ser Tyr Ala Leu Ala Phe Leu Arg Lys Val Val Ile Leu Leu His Val  
450 455 460  
Gln His Gly Val Glu Phe Leu Thr Ala Gly Ser Asn Asp Met Gly Ala  
465 470 475 480  
Ser Glu Leu Asp Arg Leu Thr Lys Leu Leu Gln Leu Pro Ser Leu Asp  
485 490 495  
Asp Ile Phe Ser Ser Val Asn Pro Ala Lys Lys Ala Asn Glu Leu Asp  
500 505 510  
Ala Val Val Ala Gly Trp Ile Ser His Trp Asn Ser Ser Arg Val Gly  
515 520 525  
Thr Arg Ile Thr Asp His Gln Leu Trp Pro Ser Leu Pro His Pro Ala  
530 535 540  
Ile Phe Glu Leu Ile Gly Leu Pro Lys Tyr Tyr Asp Ile Leu Ile Glu  
545 550 555 560  
Glu Val Asn Arg Arg Arg Cys Pro Lys Thr Lys Lys Glu Leu Thr Asp  
565 570 575  
Pro Ser Ile Cys Leu Phe Cys Gly Asp Ile Phe Cys Ser Gln Ala Val  
580 585 590  
Cys Cys Ser Val Asp Asn Arg Ile Gly Gly Cys Asn Gln His Leu Gln  
595 600 605  
Lys

<210> 42332  
<211> 61  
<212> PRT  
<213> A.fumigatus

<400> 42332  
Val Tyr Ala Ile Ser Arg Ser Ser Cys Phe Ile Tyr Arg Leu Leu Ser  
1 5 10 15  
Val Tyr Ile Asn Asp Leu His Asp Val Asn Ala Phe Leu Pro Ile Ile  
20 25 30  
Tyr Pro Tyr Glu Val Glu His Ser Glu Ser Pro Ser Phe Val Pro Pro  
35 40 45  
His Arg Ala Pro Ser His His Thr Asp Ser Thr Gln Tyr  
50 55 60

<210> 42333  
<211> 585  
<212> PRT  
<213> A.fumigatus

<400> 42333

Met Met Leu Thr Glu Cys Glu Arg Lys Leu Gly Glu Gly Leu Leu Arg  
 1 5 10 15  
 Leu Pro Phe Glu His Gly Cys Arg Tyr Gly Pro Glu Ala Glu Arg Asp  
 20 25 30  
 Leu Leu Glu Leu Leu Phe Arg Ser Leu Val Gly Phe Asp Glu Asp Arg  
 35 40 45  
 Leu Arg Gln Leu Phe Pro Asn Gly Phe Pro Glu Gly Pro Trp Lys Leu  
 50 55 60  
 Ala Glu Ala Gln Gly Ala Gln Glu Gly Ala Glu Tyr Thr Glu Ala Ala  
 65 70 75 80  
 Arg Gly Lys Arg Cys Gly His Ile Phe Arg Ala Gly Glu Ala Thr Tyr  
 85 90 95  
 Arg Cys Val Thr Cys Ala Val Asp Asp Thr Cys Val Leu Cys Ser Lys  
 100 105 110  
 Cys Phe Asp Ala Ser Asp His Ser Gly His Gln Tyr Gln Ile Ser Leu  
 115 120 125  
 Ser Ser Gly Asn Cys Gly Cys Cys Asp Cys Gly Asp Asp Glu Ala Trp  
 130 135 140  
 Arg Tyr Pro Leu Phe Cys Ala Ile His Thr Asp Arg Gly Asp Thr Lys  
 145 150 155 160  
 Gly Lys Gln Arg Ala Gln Thr Phe Leu Pro Pro Asp Trp Ala Glu Asn  
 165 170 175  
 Ile Arg Leu Thr Ile Ser Arg Val Met Asp Tyr Phe Cys Asp Val Ile  
 180 185 190  
 Ser Cys Ser Pro Glu Gln Leu Arg Leu Pro Lys Thr Glu Asp Gly Ile  
 195 200 205  
 Arg Gln Asp Glu Val Ala Ser Arg Leu Thr Gly Asp Trp Tyr Gly Gly  
 210 215 220  
 Gly Asp Gln Glu Glu Glu Glu Pro Glu Trp Ala Cys Ala Leu Trp Asn  
 225 230 235 240  
 Asp Glu Lys His Thr Ile Arg Asp Val Ala Asn Gln Val Ala Arg Ala  
 245 250 255  
 Cys Arg Glu Arg Ile Arg Phe Gly Glu Lys Lys Ala Tyr Glu Thr Asn  
 260 265 270  
 Asp Ile Gly Arg Thr Val Val Arg Gln Ser Lys Asp Leu Ala Gln Leu  
 275 280 285  
 Leu Lys Val Ser Gln Val Leu Glu Gln Ile Lys Val Thr Thr Thr Val  
 290 295 300  
 Arg Ser Ala Arg Asp Thr Phe Arg Glu Gln Met Cys Gly Thr Ile Val  
 305 310 315 320  
 Glu Trp Leu Ser Asp Ile Ala Gly Cys Thr Val Leu Glu Asp Asp Gln  
 325 330 335  
 Ile Leu Arg His Val Ile Cys Glu Glu Leu Leu Ser Pro Trp Arg Gln  
 340 345 350  
 Gly Ser Gly Ala Tyr Asn Ala Ser Ile Gly Leu Lys Gly Ile Asp Asp  
 355 360 365  
 His Ala Arg Gln Asp His Ser Pro Tyr His Thr Leu Met Leu Ala Ala  
 370 375 380  
 Val Ala Pro Gln Ala Gln Val Ile Phe Ala Pro Glu Ala Asp Ile Glu  
 385 390 395 400  
 Gly Asp Glu Glu Asp Asn Gly Asn Gly Asn Glu Ala Glu Gly Asp Asp  
 405 410 415  
 Asp Glu Asp His Ala Asp Thr His Glu Asp Ala Asp Asp Glu Asp Glu  
 420 425 430  
 Glu Met Glu Ile Asp Leu Asn Arg Leu Arg Glu Glu Val Glu Glu Asp  
 435 440 445

## 18922

Glu Asp Met Val Met Gly Thr Ile Asp Asp Ser Val Thr Leu Glu Met  
 450 455 460  
 Ala Asn Met Leu Glu Asp Met Arg Gln Arg Arg Met Ala Leu Met Asp  
 465 470 475 480  
 Glu Gln Glu Arg Arg Glu Arg Glu Glu Leu Gln Ala Gln Gln Glu Gln  
 485 490 495  
 Ser Arg Ala Gln Asp Ala Gln Gln Ala Gln His Asn Thr Leu Pro Ala  
 500 505 510  
 Gly Glu Glu His Cys Ala Asp Ile Ser Thr Val Ala Ile Pro Lys Thr  
 515 520 525  
 Pro Leu Arg Gly Gly Gln Ala Pro Ser Ser Gln Gly Ala Arg Val Leu  
 530 535 540  
 Ala Gly Ser Ala Cys Trp Leu Phe Val Gln Gly Glu Arg Thr Cys Leu  
 545 550 555 560  
 Arg Gly Leu Leu Ser Ala Tyr Ala Thr Gly Leu Asp Asp Ser Leu Arg  
 565 570 575  
 Ser Glu Ile Val Glu Glu Asn Ala His  
 580 585

&lt;210&gt; 42334

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42334

Glu Val Leu Thr Pro His Thr Thr Arg Cys Gly Lys Asn Val Gly Leu  
 1 5 10 15  
 Phe Ile Asn Ile Arg Lys Cys Ala Ile Leu Tyr Leu His Asn Lys Asn  
 20 25 30  
 Gly Ser Trp His Phe Ala Pro Tyr Leu Asp Arg His Gly Glu Val Asp  
 35 40 45  
 Pro Gly Leu Arg Arg Asn Arg Gln Leu Ile Leu Asn Gln Lys Arg Tyr  
 50 55 60  
 Asp Arg Leu Leu Arg Asp Val Trp Leu Asn His Asn Ile Pro Ala Thr  
 65 70 75 80  
 Ile Ser Arg Lys Leu Glu Ala Asp Ile Asn Asn Gly Gly Trp Glu Thr  
 85 90 95  
 Leu

&lt;210&gt; 42335

&lt;211&gt; 494

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42335

Leu Gly Phe Val Ser Met Ile Arg Arg Ser Val Thr Lys Val Asp Phe  
 1 5 10 15  
 Ala Arg Gln Leu Ala Glu Gln Arg Arg Glu Ser Gln Gln Pro Pro Thr  
 20 25 30  
 Lys Arg Phe Lys Ser Ala Ala Ala Pro Lys Gly Thr Lys Leu Pro Thr  
 35 40 45  
 Gly Tyr Gln Asp Arg Ala Ala Leu Leu Arg Gln Glu Gln Asp Glu Ser  
 50 55 60  
 Arg Ser Asp Ile Glu Arg Arg Val Gln Ala Leu Glu Glu Met Val Thr  
 65 70 75 80

## 18923

Leu Gly Gln Ile Asp Gln Ala Thr Phe Asp Lys Ile Arg Ser Glu Leu  
 85 90 95  
 Gly Val Gly Gly Asp Leu Lys Ser Thr His Met Val Lys Gly Leu Asp  
 100 105 110  
 Trp Glu Leu Leu Arg Arg Val Lys Ala Gly Glu Asp Val Thr Lys Ala  
 115 120 125  
 Ser Glu Glu Gly Pro Asp Ser Ala Gly Pro Gln Asn Ile Glu Gly Leu  
 130 135 140  
 Asp Gln Ala Glu Asp Val Asp Glu Glu Phe Asp Arg Val Leu Glu Glu  
 145 150 155 160  
 Lys Glu Gln Thr Val Leu Pro Ser Ala Pro Lys Glu Lys Lys Glu Lys  
 165 170 175  
 Lys Gly Thr Met Ala Pro Pro Pro Leu Pro Ala Lys Lys Thr Arg Asp  
 180 185 190  
 Glu Ile Leu Arg Glu Leu Lys Ala Ser Arg Ala Ala Ala Ala Ala  
 195 200 205  
 Thr Thr Thr Ser His Ser Pro Glu Pro Val Leu Gly Gly Lys Phe Lys  
 210 215 220  
 Arg Ile Gly Glu Ser Lys Val Glu Lys Lys Arg Phe Ile Glu Gln Asp  
 225 230 235 240  
 Glu Asn Gly Arg Arg Lys Glu Val Leu Val Ile Thr Asp Ala Glu Gly  
 245 250 255  
 Lys Thr Lys Arg Lys Val Arg Trp Leu Asp Lys Pro Gly Glu Gly Asn  
 260 265 270  
 Gly Leu Leu Val Pro Glu Lys Asp Thr Lys Pro Leu Gly Met Glu Val  
 275 280 285  
 Pro Ala Glu Ile Ala Ala Lys Val Ala Ala Pro Pro Thr Asp Gln Asp  
 290 295 300  
 Asp Asp Ile Phe Glu Gly Val Gly Ala Asp Tyr Asn Pro Leu Gly Asp  
 305 310 315 320  
 Glu Asp Glu Asp Asp Ser Ser Ser Asp Gln Asp Glu Gly Gln Thr Gln  
 325 330 335  
 Thr Thr Glu Asn Thr Val Ile Ser Thr Lys Glu Glu Glu Pro Ala Val  
 340 345 350  
 Lys Pro His Lys Pro Arg Asn Tyr Phe Ser Thr Ser Ala Lys Asp Glu  
 355 360 365  
 Pro Pro Glu Ser Asp Arg Arg Ala Asn Pro Leu Thr Thr Asp Pro Thr  
 370 375 380  
 Leu Leu Ala Ala Leu Lys Arg Ala Ala Ala Leu Arg Gln Ser Ser Pro  
 385 390 395 400  
 Ser Ala Gly Ala Val Ala Gly Glu Gly Glu Glu Asp Val Asp Asn Glu  
 405 410 415  
 Thr Leu Leu Arg Arg Lys Lys Phe Leu Glu Glu Ala Arg Arg Arg Glu  
 420 425 430  
 Glu Leu Asp Ala Ala Asp Leu Asp Phe Gly Phe Gly Gly Ser Arg Ile  
 435 440 445  
 Glu Asp Glu Glu Asp Asp Glu Ala Ile Val Phe Glu Asn Glu Gly Gly  
 450 455 460  
 Lys Lys Arg Lys Arg Gly Pro Lys Lys Lys Lys Gly Asp Lys Asn Ser  
 465 470 475 480  
 Ala Ala Asp Val Leu Arg Val Leu Glu Gly Arg Lys Lys Asp  
 485 490

&lt;210&gt; 42336

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42336

Ser Asp Leu Val Val Lys Gly Leu Val Leu Asn Phe Leu Gln Leu Phe  
 1 5 10 15  
 Gly Lys Arg Phe Ala Leu Met Val Gly Ala Met Thr Ser Gly Phe Cys  
 20 25 30  
 Ser Leu Gln Leu Asn Tyr Cys Gln His Met Pro Asn Thr Ile Asp His  
 35 40 45  
 Tyr Glu Gly Thr Asn Leu Arg Leu Pro Glu Val Arg Ile Gly Leu Gln  
 50 55 60  
 Leu  
 65

&lt;210&gt; 42337

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42337

Arg Gln Asn Phe Gln Met Asp Phe Asp Phe Phe Ala Asp Phe Glu Asp  
 1 5 10 15  
 Thr Glu Lys Thr Ile Leu Leu Phe Val Pro Pro His Val His Ala Asn  
 20 25 30  
 Thr Arg Gln Ser Ser Val Asp Pro Phe Arg Ser Val Leu Ser Cys Ile  
 35 40 45  
 Ser Ser Lys Arg Asn Phe Val Thr Met Ala Lys Asp Lys Ser Glu Lys  
 50 55 60  
 Lys Asp Lys Arg Glu Lys Lys Glu Lys Arg Ser Glu Lys Asp Gly Val  
 65 70 75 80  
 His Lys Ser Lys Lys Asp Lys Lys Glu Lys Lys Asp Lys Thr Val Leu  
 85 90 95  
 Val Glu Ala Val Glu Gln Glu Leu Thr Ser Lys Val Leu Asp Gly Ile  
 100 105 110  
 Asp Lys Ala Val Ala Ala Glu Thr Ala Val Asn Gly Thr Ala Glu Ala  
 115 120 125  
 Glu Met Glu Val Asp Ser Arg Pro Val Gly Ala Leu Val Pro Phe Ala  
 130 135 140  
 Asn Pro Leu Val Glu Asp Lys Gln Ala Lys Lys Val Leu Lys Ser Val  
 145 150 155 160  
 Lys Lys Gly Glu Tyr Ser Glu Asn His Leu Asp Asn Leu Tyr Ile Lys  
 165 170 175  
 Ser Ser Ile Ser Gln Ser Glu Lys Thr Ser Thr Gly Leu Ile Val Tyr  
 180 185 190  
 Cys Val Ala Asn Asn Leu Leu Ala Ala Val Asn Lys Cys Leu Lys Arg  
 195 200 205  
 Gly Val Lys Glu Val Val Lys Ala Leu Arg Lys Ser Pro Thr Pro Ala  
 210 215 220  
 Ala Asn Ala Ala Ile Ser Thr Pro Thr Gly Ile Val Ile Leu Ala Ala  
 225 230 235 240  
 Asp Ile Ser Pro Met Asp Val Ile Ser His Ile Pro Val Leu Cys Glu  
 245 250 255  
 Asp His Gly Ile Pro Tyr Val Phe Val Thr Ser Arg Ala Glu Leu Gly  
 260 265 270  
 Asn Ser Ala Ala Thr Lys Arg Pro Thr Ser Val Val Met Val Val Pro  
 275 280 285

## 18925

Lys Ser Ala Ser Lys Gly Lys Lys Lys Asp Gly Glu Ser Glu Ala Asp  
 290 295 300  
 Gly Glu Asp Phe Ser Glu Val Tyr Glu Glu Leu Val Lys Leu Val Gln  
 305 310 315 320  
 Lys Glu Ser Lys Lys Val Asn Leu  
 325

&lt;210&gt; 42338

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42338

Lys Ser Phe Val Val Gly Glu Leu Ala Leu Ala Tyr Asn Ala Ser Ser  
 1 5 10 15  
 Gly Thr Thr Pro Glu Asn Ala Arg Val Arg Leu Asp Asn Phe Gln Val  
 20 25 30  
 Leu Glu Lys Val Ala Ala Asn Pro His Phe Val Gln Glu Glu Lys Gly  
 35 40 45  
 Ser Gly Asp Glu Lys Arg Gly Gln Tyr Ser Val Leu Leu Ser Asn Ile  
 50 55 60  
 Thr Arg Ser Ser Pro Thr Val Ala Phe Lys Tyr Gln Val His Ile Asp  
 65 70 75 80  
 Gln Leu Glu Ala Ser Ile Tyr Cys Pro Val Ile Phe Lys Pro Ala Trp  
 85 90 95  
 Asn Leu Glu Glu Phe Gln Ala Ser Val Ile Ile Phe Tyr Ser Met Asn  
 100 105 110  
 Ser Ser Phe Ala Ser Ser Val Pro Arg Glu Ser Ile Thr Ile Lys Asn  
 115 120 125  
 Leu Thr Leu Thr Val Asn Leu Asp Thr Ser Pro Glu Glu Gly Arg Glu  
 130 135 140  
 Pro Ala His Ala Thr Ser Ala Val Met Tyr Pro Asn Ser Gly Ala Thr  
 145 150 155 160  
 Phe Arg Arg Lys Gln Ser Ala Val Thr Trp Lys Ile Pro Glu Leu Glu  
 165 170 175  
 Val Arg Thr Gly Ala Asp Gly Lys Leu Leu Val Arg Phe Ala Thr Ser  
 180 185 190  
 Thr Ser Trp Pro Arg Lys Gly Lys Val Asp Ala Lys Phe Glu Leu Gln  
 195 200 205  
 Thr Ala Asp Ala Gly Ser Arg Leu Gly Ile Ser Thr Met Ser Gln His  
 210 215 220  
 Glu Asp Thr Pro Gln Thr Gly Thr Asp Pro Phe Ala Asp Glu Asp Gly  
 225 230 235 240  
 Ser Leu Gln Ala Ser Asp Ser Leu Ser Thr Ser Trp Glu Glu Val Pro  
 245 250 255  
 Thr Val Arg Lys Leu Val Ala Gly Lys Tyr Val Ser Tyr  
 260 265

&lt;210&gt; 42339

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42339

Asn Pro Trp Ser Trp Thr Cys Ala Leu Tyr Leu Ser Arg Asn Ala Ser  
 1 5 10 15

## 18926

Val Val Phe Ile Val Gly Gln Arg Ala Ile Thr Ala Thr Arg Phe Asn  
                   20                                  25                                  30  
 Pro Pro Ile His Asn Gln Phe Leu Val Thr Pro Leu Thr Gln Thr Ile  
                   35                                  40                                  45  
 Asp Leu Thr Val Ala Tyr Pro Ser Thr Ser Leu Gln His Glu Leu Asp  
                   50                                  55                                  60  
 Pro Phe His Asp Pro Asn Arg Gln His Ser  
 65                                  70

&lt;210&gt; 42340

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42340

Leu Gly Ile Asp Thr Glu Lys Glu Glu Leu Arg Val Gln Ile Ser Thr  
 1                  5                                  10                                  15  
 Leu Arg Tyr Glu Leu Glu Asn Ile Ile Gln Glu Arg Asp Leu Met Met  
                   20                                  25                                  30  
 Leu Arg His Asp Lys Glu Leu Arg Asp Leu Gln Leu Lys Ala Asp Ala  
                   35                                  40                                  45  
 Asp Phe Arg Lys Ala Gln Val Cys Ser Leu Val Val Val Asn Gly Val  
                   50                                  55                                  60  
 Gly His Met Leu Thr Ile Val  
 65                                  70

&lt;210&gt; 42341

&lt;211&gt; 641

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42341

Leu Gln Ala Ala Glu Ser Ala Ser His Arg Ala Asn His Lys Ser Glu  
 1                  5                                  10                                  15  
 Thr Leu Ala Lys Glu Leu Lys Glu Val Gln Asp Gln Ala Leu Asn Asp  
                   20                                  25                                  30  
 Lys Val Gly Leu Glu Arg Lys Leu Arg Ser Leu Gln Asp Glu Lys Gln  
                   35                                  40                                  45  
 Asn Ile Gln Glu Glu Leu Glu Glu Thr Gln Ala Gln Leu Leu Asp Gln  
                   50                                  55                                  60  
 Glu Arg Gln His Lys His Gln Ile Asn Glu Leu Glu Thr Ile Arg Ser  
 65                                  70                                  75                                  80  
 Ser Leu Gln Lys Thr Leu Glu Glu Leu Gln Asn Asp Leu Gln Asn Ala  
                   85                                  90                                  95  
 Arg Asn Ser Leu Gln Ser Thr Gln Glu Lys Leu Ser Gln Arg Asp Met  
                   100                                  105                                  110  
 Asp Val Ala Asn Leu Glu Thr Glu Asn Ile Arg Leu Lys Ala Glu Gly  
                   115                                  120                                  125  
 Ala Asp Gly Glu Thr Met Ser Val Leu Lys Arg Glu His Ser Asp Gln  
                   130                                  135                                  140  
 Val Ala His Ile Arg Asn Leu Glu Thr Ala Asn Arg Glu Gln Thr Ala  
                   145                                  150                                  155                                  160  
 Glu Leu Arg His Leu Arg Lys Val Gln Lys Asn Val Glu Val Val Glu  
                   165                                  170                                  175  
 Glu Gln Lys Lys Ser Leu Glu Asn Gln Leu Gln Leu Met Lys Glu Val  
                   180                                  185                                  190



Glu Ser Glu Leu Asn Thr Leu Arg Ile Gln Lys Gln Ile Leu Asp Asp  
 195 200 205  
 Glu Arg Ser Ser Trp Thr Ser Leu Leu Gln Glu Asn Asp Glu Pro Ala  
 210 215 220  
 Glu Phe Asp Ser Pro Glu Ala Val Val Lys Ala Leu Leu Gln Glu Arg  
 225 230 235 240  
 Ile Glu Lys Ala Thr Leu Val Asp Lys Leu Gly Ser Ile Glu Ala Gln  
 245 250 255  
 Phe Leu Glu Lys Asp Glu Ile Ile Lys Ser Leu Glu Thr Glu Arg Ala  
 260 265 270  
 Asn Leu Arg Gln Glu Leu Glu Lys Leu Arg Ala Ala Gly Ser Thr Thr  
 275 280 285  
 Gly Gly Ala Thr Ala Glu Ser Arg Ile Arg Ala Arg Leu Glu Arg Gln  
 290 295 300  
 Arg Ala Leu Ala Val Lys Glu Val Glu Tyr Leu Arg Ala Gln Leu Glu  
 305 310 315 320  
 Thr Phe Asp Thr Glu Glu Val Thr Leu Asn Ala Glu Gln Ser Gln Phe  
 325 330 335  
 Asp Gln Arg Lys Ser Glu Gln Ile Ala Asn Leu Glu Lys Leu Val Asp  
 340 345 350  
 Glu Tyr Arg Ala Glu Val Gln Lys Ala His Glu Glu Leu Ala Lys Arg  
 355 360 365  
 Glu Ala Pro Gln Gln Glu Asp Thr Gln Ala Arg Gly Val Lys Arg Pro  
 370 375 380  
 Leu Ser Pro Ala Glu Ser Asp Ala Glu Asn Glu Arg Leu Ser Val Leu  
 385 390 395 400  
 Thr Arg Lys Asn Arg Thr Leu Gln Asp Ser Leu Ser Lys Ser Glu Gln  
 405 410 415  
 Ala Ala Ala Leu Leu Arg Lys Glu Leu Glu Ala Thr Lys Thr Gln Leu  
 420 425 430  
 Lys Ser Leu Lys Ala Lys Ser Arg Thr Arg Ile Leu Glu Leu Arg Asp  
 435 440 445  
 Asn Pro Thr Ala Glu Ala Glu Lys Leu Lys Phe Ser Thr Ile Ala Thr  
 450 455 460  
 Leu Arg Ala Glu Asn Arg Asp Leu Leu Ala Gln Leu Gln Ala Asn His  
 465 470 475 480  
 Ala Asp Val Lys Val Val Pro Val Ser Thr Leu Glu Ser Met Lys Leu  
 485 490 495  
 Glu Leu Asn Glu Met Glu Lys Val Val Ala Asp Lys Glu Lys Arg Met  
 500 505 510  
 Arg Arg Leu Lys Glu Ile Trp Thr Ala Lys Ser Ser Glu Phe Arg Glu  
 515 520 525  
 Ala Val Ala Ser Leu Leu Gly Tyr Lys Leu Asp Phe Leu Pro Asn Gly  
 530 535 540  
 Arg Val Arg Val Thr Ser Met Phe His Leu Ser Pro Ala Tyr Arg His  
 545 550 555 560  
 Gly Asp Gly Ser Ala Ser Ser Asp Ser Arg Gly Pro Gly Ser Met Gly  
 565 570 575  
 Asn Gly Glu Glu Asn Ser Ile Ile Phe Asp Gly Glu Asn Gly Thr Met  
 580 585 590  
 Lys Ile Ser Gly Gly Pro Asn Ser Leu Phe Ala Met Glu Ile Lys His  
 595 600 605  
 Leu Ile Lys Phe Trp Val Glu Glu Arg Lys Asp Ile Pro Cys Phe Leu  
 610 615 620  
 Ala Ala Met Thr Leu Asp Phe Tyr Asp Lys Thr Thr Arg Ala Ala Arg  
 625 630 635 640

Met

<210> 42342  
 <211> 257  
 <212> PRT  
 <213> A.fumigatus

<400> 42342  
 Val Phe Glu Gln Val Thr Thr Asp Pro Glu Ala Arg Lys His Pro Asn  
 1 5 10 15  
 Lys Glu Ser Ser Gly Pro Val Thr Asn Asp Ser Leu Ala Ala Glu Ser  
 20 25 30  
 Ala Arg His Gly Gly Asp Tyr Ser Gln Asn Arg Gly Ala Glu Pro Leu  
 35 40 45  
 Gly Val Ser Gly Ser Gln Ser Thr Phe Asn Asn Thr Asn Thr Ser Gly  
 50 55 60  
 Ala Thr Lys Leu Ser Ser Ala Pro Asp Ala Ala Thr Arg Glu Glu Leu  
 65 70 75 80  
 Asp Lys Lys Glu Lys Tyr Pro Glu Asn Met Gly Gly Gln Gly Lys Phe  
 85 90 95  
 Pro Gly Ala His Val Pro Glu Thr Gly Tyr Thr Gly Gly Ser Thr Ala  
 100 105 110  
 Ala Lys Arg Asn Leu Gly Ile Asn Lys Gly Glu Tyr Ser Thr Thr Gln  
 115 120 125  
 Gln Ser Ser Arg Pro Gln Thr Arg Ser Gln Thr Gln Ser Gln Ser Gln  
 130 135 140  
 Phe Gln Ser Gln Pro Ala Glu Ala Ser Gly Ser Gly Tyr His Ser Gln  
 145 150 155 160  
 Tyr Asn Gly Gly Gln Ala Pro Ser Tyr Ile Gln Ser Val Thr Arg Gln  
 165 170 175  
 His Thr Gln Thr Lys Pro Lys Gly Lys Asn Leu Gln Glu Gly Ser Phe  
 180 185 190  
 Asp Ser Asp Pro Asn Asn Asn Ala Ser Phe Thr Ser Glu Ile Gly Ser  
 195 200 205  
 Asp Gln Asp Pro Gly Arg Phe Ala Glu Asn Tyr Ser Gln Arg Lys Ala  
 210 215 220  
 Ala Asp Thr Gly Ala Ala Asp Ala Ala Arg Gly Pro Val Glu Lys Lys  
 225 230 235 240  
 Gly Val Asp Asp Lys Thr Trp Tyr Gln Pro Leu Glu Ser Asp Gln Arg  
 245 250 255  
 Ala

<210> 42343  
 <211> 367  
 <212> PRT  
 <213> A.fumigatus

<400> 42343  
 Ile Ser Ala Leu Thr Tyr Gln Phe Pro Ser Leu Ser Ala Leu Ser Ala  
 1 5 10 15  
 Ser Ala Asn Gln Ile Thr Gln Ile Leu Thr Pro Ile Thr Asp Thr Ile  
 20 25 30  
 Thr Thr Leu Thr Leu Glu Asn Asn Asp Ile Ser Ser Leu Ser Ser Ile  
 35 40 45

## 18929

Ala Cys Leu Thr Ser Leu Ser Lys Leu Glu His Leu Ser Leu Arg Glu  
 50 55 60  
 Asn Arg Ile Gly Lys Val Tyr Ala Ser Gly Met Glu Gly Asn Ser Leu  
 65 70 75 80  
 Gln Phe Ser Glu Asn Leu Arg Ser Val Asp Leu Ser Arg Asn Asn Ile  
 85 90 95  
 Asp Ser Trp Leu Phe Val Asn Glu Leu Gln Arg Val Phe Pro Gly Leu  
 100 105 110  
 Gln Ser Leu Arg Ile Ser Gly Asn Pro Leu Tyr Asp Lys Pro Val Ala  
 115 120 125  
 Pro Ser Asn Val Thr Asn Leu Pro Glu Lys Pro Met Thr Val Asp Glu  
 130 135 140  
 Ala Tyr Met Leu Thr Leu Ser Arg Leu Ala Ser Ile Gln Thr Leu Asn  
 145 150 155 160  
 Tyr Ser Lys Ile Thr Ala Gln Asp Arg Ser Asn Gly Glu Leu Tyr Tyr  
 165 170 175  
 Leu Ser Leu Ile Gly Lys Glu Leu Ser Ala Tyr Pro Glu Ser Ala Glu  
 180 185 190  
 Arg Glu Ile Leu Ala Thr His Pro Arg Tyr Gln Glu Leu Cys Glu Lys  
 195 200 205  
 Tyr Gly Ala Pro Thr Ile Arg Arg Ala Glu Leu Ala Gly Ala Ala Val  
 210 215 220  
 Asn Pro Arg Ser Val Ala Ala Arg Val Val Lys Leu Ala Phe Cys Leu  
 225 230 235 240  
 His Ser Ser Val Ser Ser Gly Ala Asn Gln Glu Gln Phe Arg Val Gln  
 245 250 255  
 Lys Ile Pro Arg Ser Phe Asn Thr Tyr Gln Val Lys Ala Ile Ala Ser  
 260 265 270  
 Arg Leu Phe Asn Leu Pro Pro Tyr Gln Cys Arg Leu Val Trp Glu Thr  
 275 280 285  
 Asn Glu Leu Asp Pro Ile His Gln Glu Lys Lys Asp Asp Gly Asp Asp  
 290 295 300  
 Trp Asp Ser Asp Glu Asp Glu Ala Thr Ala Ile Gly Leu Gly Glu Ser  
 305 310 315 320  
 Asn Lys Leu Thr Pro Ala Thr Glu Asp Gly Lys Phe Ile Arg Arg Glu  
 325 330 335  
 Val Glu Leu Leu Asp Ser Thr Arg Asp Ile Gly Phe Trp Phe Gln Pro  
 340 345 350  
 Asp Thr Val Glu Ala Arg Ile Arg Val Glu Val Ala Thr Ser Asn  
 355 360 365

&lt;210&gt; 42344

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42344

Pro Arg Phe Trp Cys Lys Gln Cys Lys Ile Phe Ile Arg Asp Thr Pro  
 1 5 10 15  
 Phe Glu Lys Thr Gln His Glu Ala Ser Ala Lys His Gln Gly Asn Leu  
 20 25 30  
 Lys Arg Phe Leu Arg Asp Ile His Arg Glu Asn Glu Arg Lys Gln Arg  
 35 40 45  
 Glu Thr Gln Lys Ala Lys Asp Glu Val Glu Arg Leu Arg Gln Thr Val  
 50 55 60  
 Ala Gly Lys Pro Gly Ala Lys Asp Ser Gly Ala Thr Ala Trp Lys Arg

## 18930

65 70 75 80  
 Ala Ser Ala Ala Pro Pro Pro Ala Glu Arg Pro Val Ser Leu Glu Glu  
 85 90 95  
 Arg Lys Lys Gln Ile Ala Gln Leu Ala Glu Met Gly Ile Ala Ile Pro  
 100 105 110  
 Asp Glu Tyr Arg Gly Glu Leu Ala Leu Ala Gly Glu Trp Gln Thr Val  
 115 120 125  
 Ser Glu Arg Val Ile Arg Pro Asp Asp Asp Thr Glu Glu Gly Lys Pro  
 130 135 140  
 Gly Ser Ser Ile Gly Val Arg Lys Arg Lys Met Glu Gly Asp Glu Glu  
 145 150 155 160  
 Glu Gln Glu Ala Arg Gln Glu Ala Glu Arg Phe Val Ser Gln Gly Trp  
 165 170 175  
 Gly Ser Arg Thr Arg Gln Tyr Pro Gly Val Gln Ser Asp Ala Asp Leu  
 180 185 190  
 Asp Ala Leu Leu Asn Ser Thr Lys Asp Val Lys Lys Val Lys Leu Ser  
 195 200 205  
 Ala Pro Asp Glu Gly Ser Lys Glu Lys Ala Ser Lys Glu Gly Ala Thr  
 210 215 220  
 Pro Ser Asn Asp Thr Asp Gln Ala Ala Ala Gln Glu Ser Glu Leu Pro  
 225 230 235 240  
 Ser Val Lys Ser Glu Gly Lys Glu Ala Ala Gln Leu Ala Thr Thr Asp  
 245 250 255  
 Thr Pro Ala Val Lys Gln Glu Glu Glu Ala Ala Pro Thr Gly Val Val  
 260 265 270  
 Phe Lys Lys Arg Lys Pro Lys Val Leu Arg Lys  
 275 280

&lt;210&gt; 42345

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42345

Ala Cys Leu Leu Gly Cys Asp Val Val Tyr His Pro Val His Arg Phe  
 1 5 10 15  
 Arg Thr Leu Phe Ala Phe Arg Lys Leu Arg Phe Thr Gln Asn Pro Ile  
 20 25 30  
 Leu Ala Ser Thr His Gly Gly Ile Ser Arg Ile Gly Glu Trp Ala Trp  
 35 40 45  
 Gly Ile Ala Gln Thr Ser Asn Phe Val Asp Arg Thr Thr Arg Ser  
 50 55 60

&lt;210&gt; 42346

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42346

Cys Asp Glu Gly His Pro Val Cys Arg Asn Cys Val Lys Ser Lys Arg  
 1 5 10 15  
 Glu Cys Leu Gly Tyr Asp Pro Val Phe Arg Pro Gln Ala Ser Thr Pro  
 20 25 30  
 Ser Ala Ile Gln Pro Ala Pro Asn Pro Ala Pro Ser Leu Val Val Asn  
 35 40 45  
 Pro Gln Asp Pro Thr Pro Ser Tyr Pro Ser Ala Pro Pro Gly Tyr Val

## 18931

50                      55                      60  
 Pro Ala Ala Ser Gln Pro Phe Ala Pro Ser Leu His Ser Glu Ser Pro  
 65                      70                      75                      80  
 Ser Thr Ser Thr Asp Gln Gln Tyr Asp Tyr Gly Ala Ser Ser Ala Asp  
                     85                      90                      95  
 Pro Ser Leu Gly Gly Asn Asn Ser Thr Asn Met Ala Ser Ala Gln Asn  
                     100                      105                      110  
 Val Thr Gln Gly Gly Leu Gln Pro Thr Leu Asn Ala Thr Asn Ala Thr  
                     115                      120                      125  
 Val Thr Pro Ser Glu Thr Ser Ser Tyr Lys Gly Thr Ser Phe Ser Cys  
                     130                      135                      140  
 Gly Ile His Pro Leu Ile Leu His Ser Ser Thr Phe Ser Pro Arg Ser  
 145                      150                      155                      160  
 Ser Glu Thr Ser Ser Asp  
                     165

&lt;210&gt; 42347

&lt;211&gt; 381

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42347

Val Ala Thr Ser Tyr Ile Ile Gln Cys Ile Asp Phe Ala Arg Phe Leu  
 1                      5                      10                      15  
 Pro Ser Glu Ser Ser Val Ser Arg Arg Thr Leu Phe Ser Pro Ala Pro  
                     20                      25                      30  
 Met Glu Glu Ser Ala Glu Ser Ala Asn Gly Pro Gly Glu Ser Pro Lys  
                     35                      40                      45  
 Gln Ala Thr Ser Ser Thr Glu Gln Pro Ala Pro Glu Thr Ile Pro Asp  
                     50                      55                      60  
 Gln Thr Pro Arg Pro Pro Ala Glu Asn Ala Pro Glu Thr Ala Pro Gln  
 65                      70                      75                      80  
 Pro Met Pro Glu Gln Ala Pro Gln Ala Ala Glu Gln Pro Thr Glu  
                     85                      90                      95  
 Thr Ser Ser Ser Ala Pro Val Gln Ala Ile Pro Ala Leu Asp Thr Ser  
                     100                      105                      110  
 Leu Pro Pro Ile Asp Lys Ser Met Pro Ala Val Asp Thr Thr Leu Pro  
                     115                      120                      125  
 Pro Ile Asp Thr Ser Leu Pro Ser Leu Asp Ser Thr Leu Pro Pro Leu  
                     130                      135                      140  
 Asp Ser Asn Val Pro Ser Leu Pro Pro Ile Asp Thr Ser Leu Pro Pro  
 145                      150                      155                      160  
 Leu Asp Thr Thr Leu Pro Ala Ala Glu Ala Asn Phe Leu Leu Ser Gly  
                     165                      170                      175  
 Thr Arg Ala Ser Asn Pro Glu Pro Ala Ala Ser Glu Ser Thr Gly Thr  
                     180                      185                      190  
 Val Ser Gly Ala Ser Glu His Leu Thr Ser His Gln Ser Gly His Ala  
                     195                      200                      205  
 Ser Ala Glu Thr Ala Pro Tyr Gln Tyr Ser Asn Gly Thr Tyr Gln Ser  
                     210                      215                      220  
 Gln Pro Ala Gln Gln Pro His Gln Ala Ser Pro Pro Gln Lys Gln Gln  
 225                      230                      235                      240  
 Asp Val His Tyr Gln Gln Gln His Gln Ser Ala Gln Gln Tyr Ala Gln  
                     245                      250                      255  
 Pro Gln Pro Gln Pro Gln His Ser Gln Gln Thr His Gln Gln Tyr Gln  
                     260                      265                      270

## 18932

Gln His Asn His Asp Val Tyr Gln Asn His Gln Pro Ala Ser Ser Gln  
 275 280 285  
 Met Asn Ala Pro Pro Gln Pro Ser His Ile Pro Gln Ala Pro Ile Gly  
 290 295 300  
 Ser Pro Met Pro Ser Asn Met Pro Pro Met Ala Ser Val Gly Gln Tyr  
 305 310 315 320  
 Met Thr Gly Tyr Pro Ser Asn Val Ser Gln Met Gly Met Asn Thr Asn  
 325 330 335  
 Ala Gln Met Arg Tyr Gln Leu Pro Gly Asp Ser Asn Lys Met Leu Ser  
 340 345 350  
 Gly Gly Arg His Lys Lys Glu Val Lys Arg Arg Thr Lys Thr Gly Cys  
 355 360 365  
 Leu Thr Cys Arg Lys Arg Arg Ile Lys Val Cys Asn Leu  
 370 375 380

&lt;210&gt; 42348

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42348

Tyr Tyr Ile Leu Val His Ser His Pro Glu Ala Val Lys Arg Val Gln  
 1 5 10 15  
 Ile Ser Asp Leu Leu Ala Leu Arg Gly Ile Pro Pro Pro Pro Pro His  
 20 25 30  
 Pro Ile Thr Ser Leu Pro Pro Asn Arg Leu Glu Glu Ile Lys Ala Val  
 35 40 45  
 Phe Leu Ala Thr Tyr Ala Pro Ala Ile Asp Arg Phe Phe Glu Thr Arg  
 50 55 60  
 Trp Phe Ser Glu Lys Ala Leu Gly His Leu Leu Ala Asn Ala Gln Leu  
 65 70 75 80  
 Met Ala Glu Tyr Ser Ala Leu Ile Asp Ala Phe Asn Asp Arg Asn Leu  
 85 90 95  
 Ser Asp Pro Asn Val Val Ala Gln Leu Glu Ser Phe Glu Ala Ser Val  
 100 105 110  
 Val Trp Ser Thr Met Thr Leu Cys Arg His Val Met Asn Val Ser Asn  
 115 120 125  
 Gly Ser His Gly Lys Asp Phe Glu Leu Leu Ala Thr Ala Ser Arg Leu  
 130 135 140  
 Asp Val Ile Glu Ala Leu Ile Thr Gly Glu His Met Glu Arg Asn Pro  
 145 150 155 160  
 Leu Ala Gln Trp Pro Val Pro Glu Pro Ala Ala Asp Pro Pro Thr Leu  
 165 170 175  
 Pro Asp Gln Leu Met Arg Arg Ala Leu Asp Phe Trp Ser Ser Ile Gly  
 180 185 190  
 His Phe Leu Thr Leu His Asp Asn Glu Ala Ser Ser Ala Lys Glu Ile  
 195 200 205  
 Asp Asp Thr Leu Ala Arg Cys Arg Thr Leu Leu Asp Thr Tyr Glu Asn  
 210 215 220  
 Arg Asp Val Ile Tyr Ser Ile Ala Ile Ala Arg His Ile Gly Gln Arg  
 225 230 235 240  
 Trp Ala Asp Phe Pro His Ser Leu Pro Gln His Val Thr Thr Asn Glu  
 245 250 255  
 Lys Asp Ala Gly Ala Lys Leu Tyr Val Ala Gln Lys Phe Leu Glu Gln  
 260 265 270  
 Glu Ala Ser Gly Lys Gly Thr Thr Gln Val Val Lys Arg Ile Cys Gly

## 18933

275 280 285  
 Met Val Val Arg Ser Trp Tyr Ile Ser Arg Glu  
 290 295

<210> 42349  
 <211> 194  
 <212> PRT  
 <213> A.fumigatus

<400> 42349  
 Gly Arg Leu Ala Leu Leu Tyr Lys Thr Tyr Leu Ser Asp Leu Thr Pro  
 1 5 10 15  
 Leu Pro Gly Ala Gly Tyr Asp Gln Ile Asp Val His Ala Cys Ser Ala  
 20 25 30  
 Arg Asn Pro Pro Leu Arg Val Ser Asn Val Ser Thr Ala Val Asp Asp  
 35 40 45  
 Ala Thr Ala Asp Val Asn Met Phe Leu Ile Ile Gly Ala Leu Arg Asn  
 50 55 60  
 Phe Asn Ala Gly Met Gln Ala Leu Arg Glu Gly Lys Trp Arg Gly Gln  
 65 70 75 80  
 Pro Leu Pro Ala Leu Gly His Asp Pro Glu Gly Lys Val Leu Gly Ile  
 85 90 95  
 Leu Gly Met Gly Gly Ile Gly Arg Asn Leu Lys Lys Lys Ala Glu Ala  
 100 105 110  
 Phe Gly Met Arg Val Ile Tyr His Asn Arg Arg Gln Leu Ser Glu Glu  
 115 120 125  
 Leu Ala Ala Gly Ala Glu Tyr Val Thr Phe Asp Glu Leu Leu Ala Lys  
 130 135 140  
 Ser Asp Val Ile Ser Leu Asn Leu Pro Leu Asn Val Gly Cys Leu Phe  
 145 150 155 160  
 Trp Leu Trp Leu Gly Val Ser Ala Gly Tyr Val Cys Val Ile Leu Thr  
 165 170 175  
 Ile Gln Arg Arg Asn Thr His Gly Thr Ser Ser Ala Lys Pro Ser Ser  
 180 185 190  
 Arg Arg

<210> 42350  
 <211> 237  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (11)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42350  
 Leu Leu Ser Val Leu Ser Trp Arg Val Arg Xaa Leu Val Val Arg Thr  
 1 5 10 15  
 Pro Pro Ile Ala Pro Val Ile Ser Leu Ala Thr Arg Thr Tyr Leu Thr  
 20 25 30  
 Leu Pro Thr Glu Pro Glu Leu Ser Glu Gly Cys Ala Thr Ile Val Pro  
 35 40 45  
 Ile Gln His Arg Thr Asn Leu Met Glu Cys Asp Asp Asp Glu Trp Glu  
 50 55 60

## 18934

Glu Ile Arg Asn Phe Met Lys Ser Leu Thr Arg Met Tyr His Asp Gln  
 65 70 75 80  
 Gly Arg Asp Val Ile Phe Tyr Glu Asn Ala Ala Gln Pro His Arg Lys  
 85 90 95  
 Arg His Ala Ala Met Glu Ala Val Pro Leu Pro Tyr Ser Leu Gly Glu  
 100 105 110  
 Thr Ser Pro Ala Phe Phe Arg Glu Ala Ile Leu Ala Ala Asp Ser Glu  
 115 120 125  
 Trp Thr Gln His Arg Lys Leu Ile Asp Thr Leu Ala Lys Ala Lys Gln  
 130 135 140  
 Gly Leu Gly Arg Asn Ala Cys Arg Arg Thr Leu Ala Lys Glu Met Pro  
 145 150 155 160  
 Tyr Phe His Val Trp Phe Glu Leu Asp Gly Gly Leu Gly His Val Val  
 165 170 175  
 Glu Asp Glu His Arg Trp Pro Arg Gly Asp Leu Phe Ala Arg Glu Val  
 180 185 190  
 Ile Gly Gly Met Leu Asp Leu Gly Pro Glu Val Ile Lys Arg Gln Gly  
 195 200 205  
 Arg Trp Asn Gln Gly Gly Asp Arg Arg Val Glu Gly Phe Lys Lys Arg  
 210 215 220  
 Trp Arg Lys Phe Asp Trp Thr Arg Val Leu Val Glu Gly  
 225 230 235

&lt;210&gt; 42351

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42351

Leu Pro Asn Ser Ser Cys Leu Thr Gly Pro Arg Pro Ser His Val Pro  
 1 5 10 15  
 Ile Asp Val Ser Cys Leu Ala Ile Asp Ala Asp Ala Arg Thr Asp Ser  
 20 25 30  
 Pro Arg Ile Asn Pro His Ala Thr Leu Thr Tyr Arg Ser Gln Ala Phe  
 35 40 45  
 Ser Asp Phe Pro His Ser Gly Lys Thr Ser Thr Asn Gln Asn Glu Ser  
 50 55 60  
 His Arg His Arg Lys Tyr His Leu Ile  
 65 70

&lt;210&gt; 42352

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42352

Pro Ser Leu Phe Phe Ala Ser Ser Ala His Lys Thr Trp Gln Ser Leu  
 1 5 10 15  
 Ser Glu Ile Ala Glu Leu Ile Thr Pro Thr Ala Thr Asn Arg Ala Glu  
 20 25 30  
 Phe Leu Gln Glu Cys Arg Ser Gly Lys Leu Asp Gly Val Val Ala Ala  
 35 40 45  
 Tyr Arg Thr Phe Asp Ser Ile Thr Ile Thr Gly Phe Ile Asp Glu Glu  
 50 55 60  
 Leu Val Asn Ala Leu Pro Arg Ser Val Ser Phe Leu Ala His Cys Gly  
 65 70 75 80



## 18935

Lys Val Ala Trp Arg Ser Ser Thr Lys Arg Ile Ser Val Ile  
85 90

<210> 42353  
<211> 63  
<212> PRT  
<213> A.fumigatus

<400> 42353  
Leu Glu Val Thr Arg Arg His Leu Thr Met Gly Ser Thr Gly Thr Lys  
1 5 10 15  
Pro Lys Val Leu Leu Leu Gly Ser Ile Val Gln Tyr Ala Leu Ala Ser  
20 25 30  
Leu Pro Val Ser Leu Asn Tyr Ser Ser Asp Pro Val Ser Ser Ser His  
35 40 45  
Pro Ala His Thr Arg His Gly Asn Arg Tyr Pro Arg Leu Arg Asn  
50 55 60

<210> 42354  
<211> 125  
<212> PRT  
<213> A.fumigatus

<400> 42354  
Ser Asp Pro Pro Ser Arg Arg Arg Ile Arg Pro Asn Arg Cys Pro Arg  
1 5 10 15  
Leu Gln Arg Ser Gln Ser Ala Pro Ala Arg Leu Gln Arg Leu His Ser  
20 25 30  
Cys Gly Arg Arg Asn Arg Arg Arg Glu His Val Pro Asp His Arg Cys  
35 40 45  
Ala Ala Gln Leu Gln Arg Arg His Ala Gly Pro Pro Arg Arg Glu Met  
50 55 60  
Ala Gly Pro Thr Pro Pro Arg Thr Arg Pro Arg Pro Arg Gly Gln Gly  
65 70 75 80  
Pro Arg Asp Ser Gly His Gly Gly Asn Trp Ala Gln Pro Gln Glu Glu  
85 90 95  
Gly Arg Gly Val Arg His Ala Ser His Leu Pro Gln Ser Pro Pro Val  
100 105 110  
Lys Arg Gly Ala Gly Arg Arg Ser Gly Val Cys Asp Val  
115 120 125

<210> 42355  
<211> 143  
<212> PRT  
<213> A.fumigatus

<400> 42355  
Ala Ala Gly Gln Glu Arg Arg Asp Gln Ser Lys Leu Ala Pro Glu Cys  
1 5 10 15  
Arg Leu Ser Ile Leu Ala Leu Ala Gly Ser Phe Cys Gly Leu Cys Met  
20 25 30  
Arg Asp Ser Asn His Pro Glu Lys Lys His Thr Arg His Ile Ile Ser  
35 40 45  
Lys Ala Glu Phe Glu Lys Met Lys Asp Gly Val Val Ile Val Asn Thr  
50 55 60  
Ala Arg Gly Ala Val Met Asp Glu Glu Ala Leu Val Gln Ala Leu Asp

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.52	0.50	0	1	-0.05	3.0	0.99
Marital Status	0.68	0.48	0	1	0.10	3.1	0.99
Education	12.5	2.1	9	16	-0.20	3.3	0.97
Income	15000	8000	5000	35000	0.30	3.4	0.96
Occupation	1.2	0.8	0	2	-0.10	3.0	0.99
Health Status	0.75	0.43	0	1	0.05	3.1	0.99
Stress Level	2.5	1.2	1	4	0.20	3.2	0.98
Life Satisfaction	3.8	1.5	1	5	-0.15	3.3	0.97
Resilience	2.2	1.0	1	4	0.10	3.1	0.99
Optimism	3.5	1.3	1	5	-0.10	3.2	0.98
Emotional Stability	2.8	1.1	1	4	0.05	3.1	0.99
Self-Esteem	3.2	1.2	1	5	-0.15	3.3	0.97
Life Satisfaction	3.8	1.5	1	5	-0.15	3.3	0.97
Resilience	2.2	1.0	1	4	0.10	3.1	0.99
Optimism	3.5	1.3	1	5	-0.10	3.2	0.98
Emotional Stability	2.8	1.1	1	4	0.05	3.1	0.99
Self-Esteem	3.2	1.2	1	5	-0.15	3.3	0.97

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<210> 42356
<211> 63
<212> PRT
<213> A.fumigatus
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<210> 42357
<211> 79
<212> PRT
<213> A.fumigatus
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<210> 42358
<211> 239
<212> PRT
<213> A.fumigatus
```

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<400> 42358
Lys Met Tyr Gly Lys Ala Asp Cys Gly Ala Lys Pro Pro Arg Ala Asp
1      5      10      15
Ile Tyr Gly Leu Gln Pro Ala Ala His Leu Pro His Ala Leu Glu His
      20      25      30
Leu Thr Gln Val Phe Pro Glu Gln Ser Ser Phe Leu Leu Ile Thr Leu
      35      40      45
Ser Ser Tyr Ile His Pro Gly Thr Ser Ala Ala Glu Leu Pro Cys Ser
      50      55      60

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## 18937

Arg Asn Arg Glu Val Val Gly Leu Arg Trp Thr Pro His Gln Phe Ser  
65 70 75 80  
Pro Ser Lys Gly His Phe Pro Arg Lys Met Ser Asp Leu Leu Ser Ile  
85 90 95  
Thr Ala Ser Val Ile Thr Val Leu Glu Leu Ala Ala Thr Ala Thr Asn  
100 105 110  
Tyr Leu Arg Gly Ile Arg Asn Gly Asp Thr Asp Arg Val Asn Leu Arg  
115 120 125  
Asp Glu Leu Arg Ser Thr Thr Cys Leu Val Glu Met Leu Arg Asp Arg  
130 135 140  
Ile Glu Asp Ala Glu Asp Ala Ala Thr Thr Ser Gly Leu Ser Arg Pro  
145 150 155 160  
Leu Tyr Ile Lys Asp Leu Ser Gly Pro Asp Lys Pro Leu Val Gln Phe  
165 170 175  
Gln Arg Ile Leu Glu Asp Ile Ile Lys Gln Leu Ser Pro Gln Ser Lys  
180 185 190  
Leu Arg Gln Arg Ser Leu Pro Met Thr Trp Pro Phe Thr Lys Lys Asp  
195 200 205  
Ile Ala Glu Lys Leu Ser Cys Leu Glu Arg Leu Lys Ser His Phe Ile  
210 215 220  
Leu Val Leu Gln Asn Asp Leu Ala Tyr Gly Ser Cys Pro Thr Ile  
225 230 235

&lt;210&gt; 42359

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42359

Ser Ala Asn Asp Thr Glu Leu Ser Ala Phe Leu Arg Asp Met His Arg  
1 5 10 15  
Phe Ile Arg Phe Phe Arg Gln Val Ile Asp Val Ala Pro Leu Gln Ala  
20 25 30  
Tyr Phe Ser Gly Leu Val Phe Ala Pro Gln Arg Ser Leu Val Arg Gln  
35 40 45  
Thr Phe Glu Arg Phe Leu His Thr Arg Ile Ser His Ile Pro Asn Pro  
50 55 60  
Gln Leu Asp Trp Ser Pro Arg Leu Tyr Thr Leu Asp Leu His Gly Asn  
65 70 75 80  
Thr Pro Glu Ser Val Ala Phe Ser Glu Ala Gly Asp Arg Leu Ala Ser  
85 90 95  
Gly Leu Lys Asn Gly Leu Ile Lys Ile Trp Asp Thr Gly Thr Gly Gly  
100 105 110  
Pro Met Gln Thr Leu Gln Gly His Asp Asp Met Val Asn Ser Val Ala  
115 120 125  
Phe Ser Arg Asp Gly Asn Leu Leu Ala Ser Gly Ser Arg Asp His Thr  
130 135 140  
Val Lys Ile Trp Asp Thr Ala Thr Trp Asp Cys Val Gln Ile Leu Glu  
145 150 155 160  
Gly His Asn Gly Pro Val Thr Ser Val Ser Phe Ser Ala Thr Ser Glu  
165 170 175  
Gln Val Ala Ser Gly Ser Ala Asp Glu Thr Ile Lys Ile Trp Asp Val  
180 185 190  
Val Ala Gly Lys Cys Val Gln Ile Val Val Phe Thr Thr Gly Leu Glu  
195 200 205  
Gly Ser Ala Val Ala His

210

&lt;210&gt; 42360

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42360

```

Val Leu Trp Ala Leu Glu Leu Ser Arg Ser Gly Ala Arg Thr Glu Ser
1          5          10          15
Gln Asn Gln Asn Pro Thr Arg Val Lys Leu Tyr Pro Arg Ile Tyr Phe
          20          25          30
Tyr Leu Ala His Asp Cys Thr Ile Ser Asn Ile Glu Asp Ala Thr Thr
          35          40          45
Asp Cys Leu Cys Leu Thr Val Phe Ala Val Glu Ile Val Leu Trp Ala
          50          55          60
His Pro
65

```

&lt;210&gt; 42361

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42361

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Pro Val Gly Phe Ala Lys Asn Leu Thr Ala Asp Ser Ser Arg Val Ser
1          5          10          15
Pro Glu Leu Arg Asn Leu Gln Asn Leu Glu Lys His Ser Glu Arg Ser
          20          25          30
Leu Ala Leu Lys Phe Asn Val Gln Ile Phe Asn Ser Phe Arg His Gln
          35          40          45
Gly Pro Asn Gly Val His Gln Cys Phe Val Phe Glu Leu Leu Gly Pro
          50          55          60
Ser Val Asp Lys Val Leu Asn Asp Tyr Tyr Asp Phe Gly Asp Thr Leu
65          70          75          80
Glu Thr Glu Asp Ile Leu Arg Met Thr Asp Gln Leu
          85          90

```

&lt;210&gt; 42362

&lt;211&gt; 707

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42362

```

Ala Val Ile Ala Arg Pro His Leu Gly Gln Ile Met Phe Ala Gln Ile
1          5          10          15
Leu Leu Asn Pro Ala Gln Ala Thr Lys Ser Asn Leu Ala Gly Ile Ala
          20          25          30
His Val Thr Ser Arg Met Asp Trp Tyr Cys Ala Val Thr Gly His Leu
          35          40          45
Leu Asn Lys Asn Asn Ile Met Thr Gly Thr Glu Ser Phe Gln Glu Val
          50          55          60
Leu Glu Leu Leu Glu Lys Ala Val Val Leu Leu Tyr Lys Glu Leu Leu
65          70          75          80
Leu Tyr Gln Met Lys Ser Val Cys Ser Tyr Tyr Arg Asn Arg Gly Val
          85          90          95

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## 18939

Gly Phe Leu Arg Gly Leu Ala Asn Leu Asp Asp Trp Asp Gly Asn Leu  
 100 105 110  
 Ala Cys Val Lys Asn Ala Glu Val Val Val Arg Glu Tyr Ser Glu Gln  
 115 120 125  
 Tyr Cys Arg Glu Tyr His Lys Ser Ser Leu Arg Gln Leu Val Asp Ser  
 130 135 140  
 Ser Ser Glu Met Glu Lys Tyr Leu Gly Asp Ile His Gln Asn Leu Arg  
 145 150 155 160  
 Asp Phe Ile Ala Leu Gln Lys Thr Thr Arg Arg Asn Asp Glu Asp Lys  
 165 170 175  
 Glu Cys Leu Gln Asp Leu Phe Ala Val Asp Pro Gln Tyr Asp Leu Lys  
 180 185 190  
 Asp Ile Glu Glu Lys Lys Asp Lys Leu Leu Asp Asp Val Tyr Asp Trp  
 195 200 205  
 Val Phe Arg Thr Asp Glu Tyr Ala Val Phe Thr Asp Trp Leu Asp Asp  
 210 215 220  
 Gly Arg Asn Gly Ala Ser Tyr Arg Met Leu Trp Ile Asp Gly Pro Ala  
 225 230 235 240  
 Gly Thr Gly Lys Thr Met Leu Phe Met Gly Ile Ile Arg Lys Leu Ser  
 245 250 255  
 Asp Gln Pro Ser Ala Leu Ser Pro Ser Val Ser Tyr Phe Phe Cys Gln  
 260 265 270  
 Gly Thr Asp Gln Thr Arg Asn Ser Ala Thr Thr Ile Trp Arg Ser Leu  
 275 280 285  
 Val Trp Gln Leu Leu Val Gln Gln Pro Leu Leu Ile Ser His Leu Arg  
 290 295 300  
 Asp Gln Arg Arg Asn Ala Gly Ala His Leu Leu Arg Gly Glu Arg Ala  
 305 310 315 320  
 Phe Tyr Val Leu Ser Asp Ala Leu Arg Ser Met Leu Gln Asp Pro Cys  
 325 330 335  
 Leu Ser Pro Val Tyr Phe Ala Ile Asp Ala Leu Asp Glu Cys Asp Arg  
 340 345 350  
 Lys Thr Pro Gly Leu Asp Gln Leu Leu Gln Leu Ile Glu Ser Ser Leu  
 355 360 365  
 Ala Leu Ser Ser Lys Val Lys Trp Leu Val Ser Ser Arg Pro Glu Val  
 370 375 380  
 Leu Leu His Ala Arg Gly Lys Gln Leu Lys Glu Ile His Ala Ser Thr  
 385 390 395 400  
 Ala Ser Val Thr Leu Gly Pro Arg Arg Leu Glu Gly Pro Val Asn Ala  
 405 410 415  
 Tyr Ile Asp His Lys Leu Asp Ser Met Lys Gly Lys Asp Gly Tyr Asp  
 420 425 430  
 Thr Glu Thr Leu Ala Gln Leu Ser Asp Glu Ile Arg Gln Arg Ala Lys  
 435 440 445  
 Ser Thr Phe Leu Trp Val Ala Leu Ala Phe Lys Glu Leu Asp Gly Val  
 450 455 460  
 Asp Gly Trp Asp Ala Val Glu Thr Ile Gln Arg Ile Pro Ser Gly Leu  
 465 470 475 480  
 Ser Asn Val Tyr Asp Leu Ile Met Ala Gln Ile Glu Lys Gly Ser Ser  
 485 490 495  
 Glu Asn Gln Lys Arg Cys Lys Asn Ile Leu Val Ala Val Val Leu Ala  
 500 505 510  
 Tyr Arg Thr Leu Ser Leu Pro Glu Leu Ala Val Leu Ala Gly Leu Gln  
 515 520 525  
 Pro Lys Ile Asn Pro Arg Thr Ile Val Glu Lys Cys Gly Ser Phe Leu  
 530 535 540

## 18940

Thr Ile Ser Ser Gln Gly Val Ser Leu Ile His Gln Ser Ala Lys Asp  
 545 550 555 560  
 Tyr Leu Glu Ala Asn Tyr Thr Gln Lys Leu Gly Ser Ser Val Gly Gln  
 565 570 575  
 Gly Asn Ala Asp Ile Cys Ala Arg Ser Ile Asn Ala Met Gly Ser Ile  
 580 585 590  
 Leu Arg His Asn Ile Tyr Ala Leu Pro His Pro Gly Val Asp Ile Arg  
 595 600 605  
 Asp Val Thr Pro Pro Asp Pro Asp Pro Leu Ala Pro Ile Arg Tyr Ser  
 610 615 620  
 Cys Val Phe Trp Val Gly His Leu Cys Lys Ala Lys Ser Gln Gly Phe  
 625 630 635 640  
 Gly Asn Asp Leu Thr Glu Gly Gly Ala Val Leu Arg Val Phe Lys Glu  
 645 650 655  
 His Phe Leu His Trp Leu Glu Ala Leu Ser Leu Ile Gly Gly Met Ser  
 660 665 670  
 Glu Ser Ile Arg His Leu Lys Glu Leu Gln Thr Val Val Asp Val Ser  
 675 680 685  
 His Tyr Ser Ser Leu Cys Glu Arg Met Leu Thr Lys Val Ile Val Arg  
 690 695 700  
 Gln Arg His  
 705

&lt;210&gt; 42363

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42363

Arg Leu Arg Ala Ser Ile Thr Gly Met Ile Gln Met Asp Asp Cys Pro  
 1 5 10 15  
 Val Pro Ala Glu Asn Met Phe Pro Asp Val Glu Gly Leu Lys Gly Pro  
 20 25 30  
 Phe Thr Cys Leu Asn Ser Ala Arg Leu Gly Ile Ala Phe Gly Ala Met  
 35 40 45  
 Gly Ala Leu Glu Asp Cys Ile Asp Arg Ala Arg Thr Tyr Ala Leu Glu  
 50 55 60  
 Arg Lys Gln Phe Lys Gly Asn Pro Leu Ala Lys Tyr Gln Leu Ile Gln  
 65 70 75 80  
 Lys Lys Leu Ala Asp Ala Ala Thr Asp Ala Ala Tyr Gly Thr Leu Ala  
 85 90 95  
 Ala Thr Gln Val Ala Arg Leu Lys Asp Ala Gly Lys Ser Thr Pro Glu  
 100 105 110  
 Met Ile Ser Met Val Lys Arg Gln Asn Cys Asp Arg Ala Leu Ala Asn  
 115 120 125  
 Ala Arg Leu Tyr Val Ser Pro Phe Pro Gln Ile Leu Leu Leu Lys Val  
 130 135 140  
 Glu Leu Tyr  
 145

&lt;210&gt; 42364

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42364

## 18941

Gln Leu Val Phe Leu Thr Val Ser Leu Ala Ser Asn Asn His Gly Ser  
 1 5 10 15  
 Cys Lys Ser Pro His Leu Ile Ser Val Ala Gly Gly Ile Cys Ala Ala  
 20 25 30  
 Arg Glu Phe Gly Phe Asn Ala Asp Ile Pro Leu Arg Gln Gly Asp Ser  
 35 40 45  
 Pro Tyr Ser Gly Gly Val Phe Phe Leu Thr Ile His Phe Pro Thr Asp  
 50 55 60  
 Tyr Pro Phe Lys Pro Pro Lys Val Asn Phe Thr Thr Arg Ile Tyr His  
 65 70 75 80  
 Pro Asn Ile Asn Ser Asn Gly Ser Ile Cys Leu Asp Ile Leu Arg Asp  
 85 90 95  
 Gln Trp Ser Pro Ala Leu Thr Ile Ser Lys Gly Ile His Arg Cys Glu  
 100 105 110  
 Met Ile Tyr Phe Arg Lys Cys  
 115

&lt;210&gt; 42365

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42365

Ile Ile Leu Thr Pro Phe Ser Met Arg Arg Leu Gln Glu Ile Phe Gly  
 1 5 10 15  
 Gly Asn Ala Thr Ser Asp Glu Tyr His Ile Gly Arg His Val Ala Asn  
 20 25 30  
 Leu Phe Val Val Gln Thr Tyr Glu Gly Gln Ser Asp Ile His Gly Glu  
 35 40 45  
 Tyr Pro Ala Gly Tyr His Ser Leu Ser Phe Pro Thr Arg  
 50 55 60

&lt;210&gt; 42366

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42366

Ser Thr Leu Cys Phe Gly Ser Ile Arg Ile Phe Pro Phe Phe Val Arg  
 1 5 10 15  
 Leu Ser Lys Ile Phe Phe Ser Pro Pro Phe Pro Lys Gln Thr Pro Phe  
 20 25 30  
 Ser Ile Leu Ser Glu Arg Val Thr His Ala Arg Val Ser Leu Leu Arg  
 35 40 45  
 Ile Gln Thr Ala Pro Leu Pro Ser Pro Leu Glu Leu Asp Leu Phe His  
 50 55 60  
 Leu Pro Gly Ser Gly Asp His Leu Thr Pro Leu Leu Val Leu His Leu  
 65 70 75 80  
 Pro Arg Ser Ser Ser Asn Met Thr Asp Arg Asp Arg Ser Ser Gly Thr  
 85 90 95  
 Gln Ser Cys Pro Pro Pro Glu Leu Pro Gln Leu Val Ala Glu Gln His  
 100 105 110  
 Val Pro Ile Pro Pro Asn Asp Lys Glu Thr Lys Arg Leu Ile Val Val  
 115 120 125  
 Leu Ser His Ala Ser Leu Glu Thr Tyr Arg Ala Ser His Gly Gly Arg  
 130 135 140

## 18942

Asn Gly Ser Gly Arg Asp Glu Lys Tyr Ser Leu Leu Asn Ser Asp Glu  
 145 150 155 160  
 His Ile Gly Val Met Arg Lys Met Asn Arg Asp Ile Ser Glu Ala Arg  
 165 170 175  
 Pro Asp Ile Thr His Gln Val  
 180

<210> 42367  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 42367  
 Thr Phe Gln Glu Tyr Thr Gly Arg Val Asp Ser Asn Ala Asp Met Pro  
 1 5 10 15  
 Leu Ser His Leu Thr Leu Thr Val Ser His Leu Pro Thr Ser Thr Ser  
 20 25 30  
 Phe Phe Leu Ser Cys Leu Gln Pro Leu Gly Tyr Gln Phe Ile Gly Arg  
 35 40 45  
 His Asp Asp Tyr Ile Gly Phe Gly Gln Lys Ser Gly Glu Pro Ala Asp  
 50 55 60  
 Phe Trp Ile Thr Glu Gln Lys Pro Gly Ser Val Phe Phe Arg Asn Ile  
 65 70 75 80  
 Leu Ser

<210> 42368  
 <211> 285  
 <212> PRT  
 <213> A.fumigatus

<400> 42368  
 Arg Gly Arg Asn His Arg Ser Pro Ala Gly Ala Ala His Val Ala Phe  
 1 5 10 15  
 Pro Ala Pro Ser Lys Asp Ala Val Gly Ser Phe Phe Ile Ser Ala Leu  
 20 25 30  
 Lys Ala Gly Ala Lys Ile His Gly Glu Pro Lys Thr Arg Asp Thr Glu  
 35 40 45  
 Ser Gly Tyr Tyr Ser Ala Ala Val Ile Asp Phe Asp Gly Asn Ser Ile  
 50 55 60  
 Glu Ala Val Tyr Arg Pro Gly Ile Ser Ala Lys Ser Glu Val Ser Ala  
 65 70 75 80  
 Ser Pro Ile Gly Leu Leu Glu Asn Gly Ser Val Val Ser Arg Ala Ser  
 85 90 95  
 Thr Lys Val Ser Ser Val Lys Pro Gln Ser Ile Ala Pro Ser Val Arg  
 100 105 110  
 Ser Glu Ala Lys Ser Cys Val Ser Arg Ala Thr Thr Ala Val Glu Arg  
 115 120 125  
 Val Ala Pro Ser Glu Arg Thr Ala Pro Thr Ile Ile Ser Arg Glu Val  
 130 135 140  
 Gln Gln Ala Pro Ser Pro Thr Tyr Ile Val Asn His Thr Thr His Thr  
 145 150 155 160  
 Thr Gln Lys Lys Asp Asp Ser Thr Ala Lys Thr Ile Val Gly Ser Leu  
 165 170 175  
 Ile Gly Ala Ala Ala Gly Ala Ala Ile Ala Tyr Ala Leu Thr Lys Ser  
 180 185 190



## 18943

Glu Ser Gln Ser Gln Ser Ser Glu Ala Thr Pro Pro Pro Gln Tyr Thr  
 195 200 205  
 Pro Arg Asp Phe Pro Gln Leu Ala Ser Pro Ser Gln Ala Pro Ser Leu  
 210 215 220  
 Ala Gln Glu His Gln Asp Tyr Arg Ala Ile Asp Ala Pro Pro Ala Arg  
 225 230 235 240  
 Ser Thr Phe Ser Arg Ser Asp Ala Arg Ser Thr Leu Thr Arg Ser Val  
 245 250 255  
 Ser Ser Lys Asn Pro Arg Ala Ser Thr Ile Tyr Glu Gly Thr Glu Phe  
 260 265 270  
 Val Pro Pro Arg Gly Arg Lys Trp Gln Cys Val Pro Arg  
 275 280 285

&lt;210&gt; 42369

&lt;211&gt; 235

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42369

Lys Trp Ala Ser Cys Leu Gly Trp Glu Cys Leu His Gly Glu Gly Tyr  
 1 5 10 15  
 Pro Ser Glu Ser Asp Arg Val Ser Pro His Gly Pro Phe Gln Leu Arg  
 20 25 30  
 Phe Pro Cys Asn Pro Ser Thr Leu Ile Ser Ser Phe Pro Asp Lys Ser  
 35 40 45  
 Arg Phe Asn Asp Lys Glu Ser Val Tyr Ser Ala Ser Thr Ala Lys Pro  
 50 55 60  
 Ser Lys Ala Asn His Gln Asp His His Ser Ser Arg His Ser Ser His  
 65 70 75 80  
 Gln Ser Ala Ala Arg Ser Met Ala Gly Ser Thr Ala Ser Ser Ala Arg  
 85 90 95  
 Thr Ala Arg Gln Val Pro Leu Pro Glu Gly Ser Val Thr Ser Tyr Ala  
 100 105 110  
 Ser Tyr Arg Ser Gly Ala Lys Ser Gly Val Ser Ala Arg Glu Ile Pro  
 115 120 125  
 Leu Pro Gln Ser Val Val Asp Asp Phe Glu Ile Gln Thr Asn Ile Thr  
 130 135 140  
 Pro Asp Asp Ser Ile Ser Gln Val Asp Phe Ser Arg Arg Ser Ser Tyr  
 145 150 155 160  
 Ser His Gln Ser His Arg Ser Lys Ala Pro Ser His Ala Ser Lys Arg  
 165 170 175  
 Ser Ser Lys Phe Asp Glu Pro Val Gln Pro Ser Asp Ser Val Ser Gln  
 180 185 190  
 Val Ser Thr Asn Val Ser Lys Thr Ser Gln Arg Thr Ile Lys Ala Asn  
 195 200 205  
 Gly Ser Ile Ala Gly Gly Ala Ser Lys Ala Pro Ser Lys Ala Pro Thr  
 210 215 220  
 Thr Val Ser Ser Arg Arg Gly Ser Gln Val Ala  
 225 230 235

&lt;210&gt; 42370

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42370

## 18944

Ser Leu Arg Cys Phe Ser Thr Arg Gln Cys Leu Leu Thr Leu Leu Asp  
 1 5 10 15  
 Ser Pro Ile Asn Lys Ala Gly Lys Leu Gln Ile Tyr Ile His Thr Ala  
 20 25 30  
 Lys Gly Val Leu Ile Glu Val Asn Pro Ser Val Arg Ile Pro Arg Thr  
 35 40 45  
 Phe Lys Arg Phe Ala Gly Leu Met Val Gln Leu Leu His Arg Leu Ser  
 50 55 60  
 Ile Arg Ser Thr Asn Ser Gln Glu Lys Leu Leu Lys Val Ile Lys Asn  
 65 70 75 80  
 Pro Ile Thr Asp His Leu Pro Pro Asn Cys Arg Lys Val Thr Leu Ser  
 85 90 95  
 Tyr Glu Ala Pro Val Val Arg Val Lys Asp Tyr Ile Asp Ser Leu Gly  
 100 105 110  
 Pro Lys Glu Ser Ile Cys Ile Phe Val Gly Ala Met Ala Lys Gly Gln  
 115 120 125  
 Asp Asp Phe Ala Asp Ser Phe Lys Asp Asp Thr Ile Ser Ile Ser Asn  
 130 135 140  
 Tyr Ser Leu Ser Ala Ser Val Ala Cys Ser Lys Phe Cys His Ala Ala  
 145 150 155 160  
 Glu Glu Ser Trp Gly Ile Leu  
 165

&lt;210&gt; 42371

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42371

Lys Gln Gln Lys Cys Pro Asn Thr Asn Arg Ile Gly Ala Ser Asp Ser  
 1 5 10 15  
 Ser Arg Glu Ile Pro Ser Ser Ser Ala Ser Leu Ala Pro Tyr Asp Tyr  
 20 25 30  
 Ser Gly Gln Val Cys Leu Ser Phe Thr Val Ala Pro Gln Ser Phe Gly  
 35 40 45  
 Asp Leu Val Gly Leu Ile Ser Ala Ile Thr Leu Ser Gly Phe Tyr Ser  
 50 55 60  
 Val Arg Tyr Pro Ser Gln  
 65 70

&lt;210&gt; 42372

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42372

Thr Val Pro Thr Thr Leu Leu Leu Leu Ile Pro Pro Cys Leu Gln Lys  
 1 5 10 15  
 Ala Ser His Phe His Pro Leu Lys Tyr Phe Arg Asn Ser Ser Pro Asn  
 20 25 30  
 Leu Leu Ser Phe Asn Glu Leu Arg Ser Thr Ile Pro Met Ala Ser Pro  
 35 40 45  
 His Ala Gln Thr Val Ile Asn Thr Ile Val Arg Gln Ile Pro Thr Ile  
 50 55 60  
 Thr Ala Phe Thr Glu Ile Val Tyr Glu Asp Val Ala Pro Glu Asp Gly  
 65 70 75 80

## 18945

Asp Leu Ile Thr Arg Ser Leu Ala Glu Ser Ala Val Val Glu Gln His  
                   85                  90                  95  
 Ser Ala Arg

<210> 42373  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 42373  
 Asn Ser Ser His Ala Ser Gln Lys Ala Pro Tyr Ser Ile Thr Val Tyr  
 1                  5                  10                  15  
 Lys His Ala Ile Trp Tyr Thr Leu Tyr Leu Asp Thr Gly Pro Ile Pro  
                   20                  25                  30  
 Leu Lys Gln Gln Glu Ala His Pro Ala Ser Gln His Tyr Ser Thr Ser  
                   35                  40                  45  
 Ser Arg Ser Ser Ser Ile Leu Ser Gln Leu Ala Arg Gln Pro Asn Arg  
                   50                  55                  60  
 Ser Lys Thr  
 65

<210> 42374  
 <211> 311  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (56)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42374  
 Glu Ser Val Leu Gly Val Arg Leu Leu His Arg Glu Ser Arg Leu Pro  
 1                  5                  10                  15  
 Trp Thr Pro Ser Val Arg Gly Gln Arg Leu Ser Val Ile Ala Ser Gly  
                   20                  25                  30  
 Ser Ile Gly Thr Asn Val Phe Ser Ile Ser Ser Gly Gln Thr Leu Lys  
                   35                  40                  45  
 Gly Cys Gly Pro Ile Asp Val Xaa Asn Lys Arg Ala Arg Gly Ala Ile  
                   50                  55                  60  
 Glu Ser Leu Asn Thr Asp Gly Val Ser Ile Pro Thr Phe Thr Met Thr  
 65                  70                  75                  80  
 Gly Asn Pro Asn Phe Gly Met Arg Phe Tyr Gly Val Lys Arg Leu Ser  
                   85                  90                  95  
 Leu Gly Asn Ile Thr Met Lys Leu Ser Gly Gly Leu Gly Ile Arg Phe  
                   100                  105                  110  
 Glu Arg Asp Lys Ala Ala Asn Ser Asp Val Ser Met Asp Thr Ile Thr  
                   115                  120                  125  
 Val Thr Gly Ala Gly Ser His Ala Val Glu Thr Trp Asn Ile Asp Gly  
                   130                  135                  140  
 Leu Thr Ile Asn Lys Val Val Ala Arg Asp Val Gly Glu Cys Gly Leu  
 145                  150                  155                  160  
 Leu Leu Gln Thr Thr Thr Asn Ala Lys Val Gly Leu Val Asp Gly Asp  
                   165                  170                  175  
 Asn Val Ala Ala Gly Thr Gly Tyr Ala Thr Phe Arg Met Ala Asn Ala

## 18946

	180		185		190
Asn Gly Arg Leu Ala Asp Gly Ser Tyr Lys Thr Asn Val Phe Val Asp					
195			200		205
Lys Val Val Ser Arg Gly Gly Gly Arg Gly Val Phe Cys Val Ser Glu					
210			215		220
Ser Gly Gly Val Glu Ile Ser Asn Val Asp Leu Ala Asp Asn Gly Asn					
225			230		235
Asn Ala Ile Leu Ile Glu Asn Cys Tyr Gly Val Ser Ile Arg Gly Gly					
	245			250	255
Thr Val Lys Gly Gly Gly Glu Val Arg Leu Ala Ala Arg Asp Glu Phe					
	260			265	270
Lys Asn Asn Arg Asp Val Ser Ile Thr Leu Lys Val Asn Gly Asn Thr					
	275			280	285
Val Arg Glu Asn Pro Cys Gly Glu Asn Ile Thr Trp Asn Ile Ser Gly					
	290			295	300
Asp Ala Ser Leu Asn Val Cys					
305			310		

&lt;210&gt; 42375

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42375

Arg Leu Arg Leu Val Leu His His Val Lys Phe Glu Ser Val Val His					
1	5		10		15
Cys Arg Gln Cys Leu Phe Ala Val Gly Asp Ser Leu Ala Gln Gln Ala					
	20		25		30
Val Glu Lys Arg Gly Ile Ala Gln His Asp Val Ala Arg Thr Gly Arg					
	35		40		45
Met Ala Phe Tyr Gly Gly Gly Asn Val Gln Pro Phe Pro Tyr Lys Leu					
	50		55		60
Pro Leu Leu Thr Val Val Ala Val Phe Gly Pro Leu Ala Thr Lys Trp					
	65		70		75
Phe Gln Val Leu Gln Arg Arg Ile Asn Leu Pro Ser Ala Gln Arg Thr					
	85		90		95
Val Val Gly Arg Val Ala Ala Asp Gln Leu Leu Phe Ala Pro Thr Met					
	100		105		110
Ile Gly Val Phe Leu Ser Ser Met Ser Val Leu Glu Gly Gly Ser Leu					
	115		120		125
Ser Glu Lys Leu Glu Arg Ser Tyr Trp Pro Ala Leu Lys Ala Asn Trp					
	130		135		140
Thr Val Trp Pro Phe Leu Gln Leu Val Asn Phe Ala Leu Val Pro Leu					
	145		150		155
Gln Phe Arg Val Leu Thr Val Asn Val Leu Asn Ile Gly Met Ile Pro					
	165		170		175
Ile His Val Leu Leu Arg Phe Gly Cys Leu Ala Asn					
	180		185		

&lt;210&gt; 42376

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42376

Leu Val Val Asn Met Leu Phe Arg Lys Pro Lys Leu Pro Gln Ala Asn

## 18947

```

1           5           10           15
Pro Asp Ala Tyr Tyr Gln Asp Asp Asn Val Ala Ser Asp Thr His Ser
      20           25           30
Gln Ala Ala Ile Ala Gly Glu Asp Gly Gln Leu Val Asp Thr His Ile
      35           40           45
Pro Leu Leu Thr Trp Arg Ser Phe Val Met Gly Val Phe Val Ser Met
      50           55           60
Gly Gly Phe Leu Phe Gly Tyr Asp Thr Gly Gln Ile Ser Gly Phe Leu
65           70           75           80
Glu Met Lys Asn Phe Leu Gln Arg Tyr Gly Gln Lys Lys Ser Asp Gly
      85           90           95
Thr Leu Tyr Phe Ser Asn Val Arg Ser Gly Leu Ile Val Ala Leu Val
      100          105          110
Arg Leu Phe Asp Leu Leu Cys His Val His Leu Leu Thr Ser Asp Ser
      115          120          125
Tyr Arg Leu Glu His
      130

```

&lt;210&gt; 42377

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42377

```

Pro Gly Ile Ser Pro Asn Gly Thr His Thr Ala Gly Val Val Met Val
1           5           10           15
Val Phe Ala Cys Leu Phe Ile Leu Gly Phe Ala Ser Thr Trp Gly Pro
      20           25           30
Met Val Trp Thr Ile Ile Ala Glu Leu Tyr Pro Ser Gln Tyr Arg Ala
      35           40           45
Arg Ala Met Ser Leu Ala Thr Ala Ser Asn Trp Met Trp Asn Phe Leu
      50           55           60
Leu Ala Phe Phe Thr Pro Phe Ile Thr Gly Ala Ile Asp Phe Arg Tyr
65           70           75           80
Gly Tyr Val Phe Ala Gly Cys Leu Phe Leu Ala Ala Met Val Tyr
      85           90           95
Phe Thr Val Met Glu Gly Gln Gly Arg Thr Leu Glu Glu Ile Asp Thr
      100          105          110
Met Tyr Val Trp Lys Ile Lys Pro Trp His Ser Ser Lys Tyr Val Phe
      115          120          125
Pro Asp Gln Thr Asp Arg Arg Asp Glu Ser Glu Lys Arg Thr Ala Gly
      130          135          140
Thr Asn Glu His Met Glu Thr Ser Gly Ala Gln Pro Glu Thr Glu Ile
145          150          155          160
Val

```

&lt;210&gt; 42378

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42378

```

Arg Val Thr Ala Ile Asp Trp Asn Ile Asp Gly Ser Phe Gly Arg Ser
1           5           10           15
Thr Tyr Cys Arg Ser His Arg Ser Glu Met Val Asp His Gln Leu Val

```

```
<210> 42379
<211> 87
<212> PRT
<213> A.fumigatus
```

<400> 42379  
Gln Leu Ser Ile Gly Thr Leu Met Gly Ala Leu Val Ala Ala Pro Ile  
1 5 10 15  
Ala Asp Arg Ile Gly Arg Lys Trp Ser Ile Thr Ser Trp Ser Leu Met  
20 25 30

## 18949

```

Ile Cys Val Gly Ile Thr Val Gln Ile Ser Ser Pro Thr Gly Lys Trp
    35                      40                      45
Tyr Gln Val Ala Leu Gly Arg Trp Val Ala Gly Leu Gly Val Gly Ala
    50                      55                      60
Leu Ser Leu Leu Val Pro Met Tyr Met Ala Glu Ser Gly Pro Arg His
65                      70                      75                      80
Ile Arg Gly Ser Leu Val Arg
                      85

```

&lt;210&gt; 42380

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42380

```

Leu Ser Pro Val Leu Ile Phe Phe Gly Gly Met Val Gln Ile Phe Gly
1                      5                      10                      15
Gly Ile Gly Glu Trp Ile Ile Gly Asn Thr Phe Ser Cys Ala Leu Phe
    20                      25                      30
Phe Thr Tyr Gly Thr His Val His Ile Lys Ser Lys Ala Trp Gln Asn
    35                      40                      45
Ile Tyr Thr Phe Val Thr Gly Thr Leu Trp Ile Val Gln Gly Thr Thr
    50                      55                      60
Leu Met Pro Leu Phe Asp Thr Gly Ile His Phe Ser Ser Thr Gly Asn
65                      70                      75                      80
Phe Leu Glu Gly Gln Gln Thr Pro Met Tyr Asn Ala Ser Ile Gly Leu
    85                      90                      95
Leu Asn Lys Trp Gln Met Ala Leu Ala Leu Ala Met Val Asp Arg Phe
    100                      105                      110
Asn Ser Ile Leu Phe Cys Gly Pro Asp Ser His Asn Leu His Ile His
    115                      120                      125
Asp Met Leu Pro Ser Asn Gln Arg Leu Pro Leu Leu Arg Ala Leu Leu
    130                      135                      140
Ala
145

```

&lt;210&gt; 42381

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (153)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42381

```

Cys Ala Thr Ala Val His Lys Pro Gln Gly Val Thr Ser Ala Asp Val
1                      5                      10                      15
Ile Arg Thr Leu Gln His His Phe Asn Pro Ser Lys Leu Phe Lys Pro
    20                      25                      30
Trp Leu Glu Glu Glu Arg Ala Arg Arg Asn Arg Glu Ser Ser Tyr Gln
    35                      40                      45
Arg Asn Arg Arg Arg Ser Arg Arg Leu Asp Val Lys Ile Gly His Gly
    50                      55                      60
Gly Thr Leu Asp Pro Leu Ala Thr Gly Val Leu Val Thr Gly Val Gly

```

## 18950

65                      70                      75                      80  
 Lys Gly Thr Lys Ser Leu Asn Asp Phe Leu Gly Cys Thr Lys Thr Tyr  
                             85                      90                      95  
 Glu Thr Val Val Leu Phe Gly Ala Glu Thr Asp Thr Tyr Asp Lys Leu  
                             100                      105                      110  
 Gly Lys Ile Val Arg Arg Ala Pro Tyr Glu His Ile Thr Arg Glu Ala  
                             115                      120                      125  
 Val Glu Lys Ala Leu Glu Gln Phe Arg Gly Lys Ile Met Gln Arg Pro  
                             130                      135                      140  
 Pro Ile Phe Ser Ala Leu Lys Val Xaa Gly Lys Lys Leu Tyr Glu Tyr  
 145                      150                      155                      160  
 Ala Arg Glu Ser Lys Glu Pro Pro Ile Glu Ile Gln Ser Arg Pro Val  
                             165                      170                      175  
 Glu Val Ser Asp Leu Arg Ile Leu Glu Trp Tyr Glu Pro Gly Thr His  
                             180                      185                      190  
 Glu Tyr Glu Trp Ala Gln Gly Arg Gly Cys Arg  
                             195                      200

&lt;210&gt; 42382

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42382

Phe His Lys Val His Gly Arg Arg Tyr Ser His Cys Asn Trp Ala Ile  
 1                      5                      10                      15  
 Ser Asn Lys Arg Trp Leu Tyr Ser Gln Gly Asn Ser Val Asn Cys Ser  
                             20                      25                      30  
 His Phe Ser Ala Phe Asp Ser Tyr Ile Ser Gln Gly Ala Asp Tyr Leu  
                             35                      40                      45  
 Ser Arg His Phe Ser Ile Ala Leu Met Leu Gln Leu Arg Tyr Cys  
                             50                      55                      60

&lt;210&gt; 42383

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42383

Ala Ile Cys Ala Ser Ser Ser Gly Thr Ser Leu Ala Pro Thr Asn Thr  
 1                      5                      10                      15  
 Ser Gly Pro Arg Glu Glu Ala Ala Gly Glu Glu Lys Glu Val Ala Glu  
                             20                      25                      30  
 Arg Leu Leu Ala Lys Asp Asp Thr Leu Pro Val Ala Pro Ala Ala Glu  
                             35                      40                      45  
 Asn Glu Val Pro Ala Glu Asp Ser Gly Glu Gln Glu Thr Ser Thr Gly  
                             50                      55                      60  
 Thr Lys Arg Lys Thr Pro Pro Pro Ala Glu Glu Pro Ala Lys Asp Glu  
 65                      70                      75                      80  
 Glu Asp Ala Pro Ser Ala Thr Asp Thr Glu Leu Ala Pro Ser Ala Ala  
                             85                      90                      95  
 Lys Lys Gln Lys Ile Thr Ala Asn Gly Asp Ser Ala Pro Ala Gln Asp  
                             100                      105                      110  
 Glu Leu Ser Asp Gly Ser Ser Glu Thr Val Thr Ala Ser Ala Asn Glu  
                             115                      120                      125  
 Pro Ser Pro Gln Pro Pro Ala Val Lys Ile Thr Met Thr Val Ser Ser



## 18951

130                                      135                                      140  
 Gly Phe Tyr Val Arg Ser Leu Ala His Asp Leu Gly Lys Ala Leu Gly  
 145                                      150                                      155                                      160  
 Ser Cys Gly Leu Met Ser Ser Leu Ile Arg Thr Arg Gln Ala Asp Phe  
                                     165                                      170                                      175  
 Glu Leu Glu Ser Asp Lys Val Leu Glu Tyr Lys Asp Leu Glu Ala Gly  
                                     180                                      185                                      190  
 Glu Asp Val Trp Gly Pro Lys Val Lys Arg Phe Leu Glu Glu Trp Glu  
                                     195                                      200                                      205  
 Lys Lys Arg Ala Glu Ala Asn Thr Lys  
                                     210                                      215

&lt;210&gt; 42384

&lt;211&gt; 1034

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42384

Arg Gly Leu Val Cys Val Ala Arg Thr Thr Val Gln Phe Gln Ser Ile  
 1                                      5                                      10                                      15  
 Leu Asp Lys Phe Ser Pro His Asp Thr Val Phe Ser Phe Thr Lys Ser  
                                     20                                      25                                      30  
 Ala Asp Leu Thr Glu Ser Ala Leu Ser Ser Ala Cys Leu Leu His Ala  
                                     35                                      40                                      45  
 Ala Ser Gly Ser Ile Thr Ser Ser Ser Ser Ser Leu Arg Arg Arg Arg  
                                     50                                      55                                      60  
 Leu Met Glu Ile Ala Glu Asp Ala Glu Glu Asn Asn Thr Thr Lys Asp  
 65                                      70                                      75                                      80  
 Gln Thr Gln Val Pro Ser Pro His Pro Asp Asn Arg Gln Arg Ser Thr  
                                     85                                      90                                      95  
 Ser His Val Ser Glu Ala Thr Val Val Pro Pro Ser Val Thr Ser Asn  
                                     100                                      105                                      110  
 Ala Arg Glu Ala Pro Ile Gly Asp Glu Ser Pro Thr Val Ala Asn Ile  
                                     115                                      120                                      125  
 Thr His Asn Ser Gln Ala Ser Asp Gln Val Ser Ile Ser Trp Asp Ser  
                                     130                                      135                                      140  
 Arg Ser Glu Arg Pro Ala Ser Arg Arg Arg Leu Glu Asp Asp Ile Ser  
 145                                      150                                      155                                      160  
 Tyr Ala Pro Ser Glu Ser Arg Arg Ser Thr Gln Ser Ala Arg Pro Ser  
                                     165                                      170                                      175  
 Leu Arg Asp Leu Glu Arg Ala Thr Thr Tyr Thr Pro Lys Val Lys Arg  
                                     180                                      185                                      190  
 Gly Pro Arg Pro Ser Val Asp Gly Ser Gly Arg Pro Arg Thr Ala Ser  
                                     195                                      200                                      205  
 Asn Leu Ser Arg Asn Ser Glu Gln Arg Ala Ile Thr Ser Leu Pro Ala  
                                     210                                      215                                      220  
 Gly Val Arg Thr Ser Ser Leu Arg Lys Gly Asn Pro Ser Pro Asn Arg  
 225                                      230                                      235                                      240  
 Pro Arg Ser Gln Gly Ser Pro Val Ala Ser Val Ser Ser Arg Thr Ala  
                                     245                                      250                                      255  
 Pro Pro Val Pro Pro Leu Leu Val Pro Pro Leu Ser Met Pro Ile Ser  
                                     260                                      265                                      270  
 Arg Ala Gln Leu Ser Pro Gly Ala Lys Ser Leu Ser Ala Leu Ser Ser  
                                     275                                      280                                      285  
 Ser Gly Thr Ser Asn Glu Lys Glu Arg Leu Met Lys Ala Leu Gln Leu  
                                     290                                      295                                      300

## 18952

Arg Lys Thr Gln Met Glu Lys Arg Ala Ala Glu Ser Lys Lys Asp Gly  
 305 310 315 320  
 Lys Thr Lys Asn Gly Arg Leu Thr Asp Val Asp Glu Asn Lys Glu Asn  
 325 330 335  
 Ile Asp Gln Ala Asp Asp Lys Ser Lys His Asp Gln Glu Thr Ala Ala  
 340 345 350  
 Val Ala Glu His Thr Lys Glu Leu Cys Leu Lys Thr Gln Leu Ser Ile  
 355 360 365  
 Lys Pro Gly Ser Ile Ala Leu Ser Glu Glu Lys Leu Ala Pro Gly Glu  
 370 375 380  
 Lys Leu Ala Thr Ser Asp Ser Thr Lys Pro Asp Ser Ala Val Gly Met  
 385 390 395 400  
 Glu Val Ser Asn Phe Asp Asp Glu Gln Leu Leu Asn Gln Ser Leu Leu  
 405 410 415  
 Asn Ala Asp Asn Ala Leu Ile Ala Asn Pro Glu Glu Ser Ser Glu Thr  
 420 425 430  
 Ala Gln Phe His Ala Ser Gln Val Ser Pro Glu Ile Glu Ala Val Thr  
 435 440 445  
 Thr Val Glu Asp Leu Ala Val Ser Val Asp Asn Asp Thr Lys Asn Gly  
 450 455 460  
 Pro Gly Leu Pro Ser Ala Asp Ile His Val Pro Pro Gln Asn Phe Glu  
 465 470 475 480  
 Lys Ala Ala Thr Glu Lys Asn Gln Gln Ile Val Pro Ser Pro Ser His  
 485 490 495  
 Pro Glu Asn Asn Pro Val Thr Gly Ser Asp Glu Ala Leu Ala Val Thr  
 500 505 510  
 Asn Pro Ala Asp Ser Ile Leu Pro Gln Ser Ile Pro Ile Pro Asp Ser  
 515 520 525  
 Pro Thr Ser Asn Ser Arg Leu Ser Ser Thr Pro Glu Ala Thr Val Ile  
 530 535 540  
 Ala Pro Cys Pro Ala Glu Pro Gln Asn Glu Leu Ile Pro Glu Thr Ser  
 545 550 555 560  
 Asn Ala Asp Ser Lys Asn Val Asn Pro Arg Lys Asp Lys Arg Lys Pro  
 565 570 575  
 Gln Leu Glu Pro Ile Gln Val Pro Thr Pro Asp Tyr Ser Asp Asp Glu  
 580 585 590  
 Asn Leu Leu Ser Asp Asp Ser Phe Met Glu Glu Leu Lys Ser Ala Thr  
 595 600 605  
 Val Glu Glu Ala Lys Pro Val Ser Val Gly Lys Ser Pro Leu Ser Pro  
 610 615 620  
 Val Tyr Pro Asn Asn Asn Asp Gln Ile Ser Ser His Ala Trp Lys Asn  
 625 630 635 640  
 Ser Arg Ala Val Ser Asn Pro Ser Ala Leu Gly His Arg Phe His Ser  
 645 650 655  
 Met Gln Ser Leu Ser Gly Glu Arg Ser Val Ser Gly Pro Cys Gly Asp  
 660 665 670  
 Val Asp Ser Ala Ala Gly Pro Val Leu Val Ala Lys Lys Ile Asn Val  
 675 680 685  
 Ser Ser Gly Ile Ser Lys Arg Ile Lys Ala Leu Glu Lys Phe Ser Asn  
 690 695 700  
 Ser Arg Glu Thr Ser Ser Asn Ser Gly Leu Asn Leu Ala Pro Pro Thr  
 705 710 715 720  
 Ala Ser Ser Ser Phe Glu Ala Leu Arg Lys Arg Ala Ser Leu Ser Leu  
 725 730 735  
 Ser Gly Ala Asn Ser Asp Ala Ser Ser Ile Phe Arg His Gly Ser His  
 740 745 750

## 18953

Thr Pro Glu Thr Phe Ser Arg Ala Pro Ser Val Lys Arg Arg Asp Ser  
 755 760 765  
 Gln Ser Ser Thr Asn Ala Ala Cys Thr Thr Ser Ser Ile Ser Val Thr  
 770 775 780  
 Ala Arg Ile Val Arg Asp Ala Thr Asn Ala Pro Ser Asp Ser Lys Ser  
 785 790 795 800  
 Asp Leu Pro Asp Ser Gly Val Leu Asn Leu Gln Ala Ser Pro Leu Thr  
 805 810 815  
 Val Glu Arg Gly Pro Pro Glu Glu Thr Ile Thr Lys Pro Glu Glu Arg  
 820 825 830  
 Ser Met Ser Ser Ser Ser Ala Thr Ser Gly His Gln Ser Arg Ala Ala  
 835 840 845  
 Ser Val Ser Arg Ser Glu Ser Arg Leu Ser Val Ser Ser Ala Ser Lys  
 850 855 860  
 Lys Glu Asp Ala Phe Leu Ser Lys Ser Thr Ser Asp Leu Ser Ser Ser  
 865 870 875 880  
 Pro Glu Glu Lys Arg Ala Ser Arg Ala Ser Arg Leu Leu Arg Arg Met  
 885 890 895  
 Ser Ser Ile Thr Ser Asn Ser Lys Lys Ser Val Ile Gly Ala Phe Ser  
 900 905 910  
 Pro Ser Val Lys Glu Glu Glu Ser Lys Pro Val Pro Ala Glu Lys Pro  
 915 920 925  
 Lys Thr Ser Val Ser Ser Ala Ala Ile Asp Val Gly Glu Val Asn Val  
 930 935 940  
 Gln Phe Pro Asp Thr Leu Leu Trp Lys Arg Arg Phe Ile Arg Ile Asp  
 945 950 955 960  
 Asp Lys Gly Tyr Leu Ile Leu Thr Pro Gly Asn Val Asp Ser Ser Ser  
 965 970 975  
 Arg Asn Met Val Lys Arg Tyr His Leu Thr Glu Phe Arg Thr Pro Cys  
 980 985 990  
 Ile Pro Asp Glu Asp Arg Gln Glu Leu Pro Asn Ser Ile Leu Leu Asp  
 995 1000 1005  
 Phe Leu Asn Gly Ser Thr Leu Gln Cys Ala Cys Glu Ser Arg Gln Gly  
 1010 1015 1020  
 Gln Ala Phe Val Leu Gln Ser Lys Ser Leu  
 1025 1030

&lt;210&gt; 42385

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42385

Gly Glu Gly Ser Phe Ala Asp Ala Val Thr Val Ser Glu Glu Pro Ser  
 1 5 10 15  
 Glu Ser Ser Ser Cys Ala Gly Ala Glu Ser Pro Leu Ala Val Ile Phe  
 20 25 30  
 Cys Phe Phe Ala Ala Asp Gly Ala Ser Ser Val Ser Val Ala Glu Gly  
 35 40 45  
 Ala Ser Ser Ser Ser Phe Ala Gly Ser Ser Ala Gly Gly Gly Val Leu  
 50 55 60  
 Arg Phe Val Pro Val Asp Val Ser Cys Ser Pro Leu Ser Ser Ala Gly  
 65 70 75 80  
 Thr Ser Phe Ser Ala Ala Gly Ala Thr Gly Arg Val Ser Ser Phe Ala  
 85 90 95  
 Arg Ser Leu Ser Ala Thr Ser Phe Ser Ser Pro Ala Ala Ser Ser Leu

## 18954

100 105 110  
 Gly Pro Leu Val Phe Val Gly Ala Arg Leu Val Pro Leu Glu Asp Ala  
 115 120 125  
 Gln Ile Ala His Phe His Gly Ala  
 130 135

<210> 42386  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 42386  
 Lys Asn Pro Asp Leu Arg Gln Ser Leu Asn Val Met Gln Asp Lys Asp  
 1 5 10 15  
 Glu Thr Ser Cys His Ala Thr Asn Thr Ser Leu Ala Gln Ser Pro Cys  
 20 25 30  
 Leu Ile Ser Arg Leu Pro Ser Ser Leu Leu Thr Asp Ile Leu Asp Tyr  
 35 40 45  
 Glu Leu Ser Pro Met Leu Trp Ser Phe Asp Leu Arg Ser Leu Tyr Pro  
 50 55 60  
 Tyr Ile Gln Ser  
 65

<210> 42387  
 <211> 784  
 <212> PRT  
 <213> A.fumigatus

<400> 42387  
 Arg Ile Ala Arg Pro Ile Pro Arg Ile Leu Cys Trp Phe Pro Asn Gln  
 1 5 10 15  
 Arg Lys Pro Tyr Leu Leu Tyr Leu Val Ser Gly Ile Asp Leu Ile Trp  
 20 25 30  
 Val His Ser Thr Pro Asn Cys Ser Leu Gly Ser Pro Glu Tyr Ala Asp  
 35 40 45  
 Thr Tyr Ser Arg Asp Ser Lys Arg Thr Thr Ile Leu Pro Ala Arg Ala  
 50 55 60  
 Arg Thr Asp Ser Cys Val Lys Pro Leu Lys Ile Ala Leu Met Thr His  
 65 70 75 80  
 Gln Val Glu Gly Val Thr Trp Met Lys Ser Met Glu Asp Ser Glu Trp  
 85 90 95  
 Lys Gly Gly Ile Leu Ala Asp Asp Met Gly Leu Gly Lys Thr Thr Gln  
 100 105 110  
 Ala Leu Ser Leu Val Lys Ser Arg Ile Cys Pro Asp Ala Arg Thr Leu  
 115 120 125  
 Pro Thr Leu Ile Val Thr Pro Ala Gly Leu Ile His Gln Trp Glu Arg  
 130 135 140  
 Glu Thr Glu Asn Ile Phe Gly Ser Gly Gln Arg Val Phe Val Tyr Tyr  
 145 150 155 160  
 Arg Arg Lys Gly Arg Leu Thr Phe Gln Asp Leu Cys Gln Tyr His Val  
 165 170 175  
 Val Leu Thr Thr Tyr Gly Thr Leu Cys Ser Glu Leu Lys Gln Lys Pro  
 180 185 190  
 Tyr Asp Ser Pro Ile Phe Gly Asp Gly Arg Ala Trp Gln Arg Ile Ile  
 195 200 205  
 Leu Asp Glu Ala Gln Cys Ile Lys Asn Ala Arg Ser Lys Thr Ala Met

210		215		220
Ala Cys Cys Glu Val	Ala Ala Thr Tyr Arg Trp Cys Leu Ser Gly Thr			
225	230	235		240
Pro Leu Met Asn His	Leu Gly Glu Leu Tyr Ser Leu Leu Lys Phe Leu			
	245	250		255
Arg Ile Gln Pro Tyr Val	Asn Thr Asp Ser Phe Asn Ser Val Ser Pro			
	260	265		270
Ile Gly Glu Ile Val Thr	Leu Thr Cys Leu Cys Ile Leu Leu Ile Trp			
	275	280		285
Leu Lys Ile Leu Lys Ser	Glu Ser Ile Gly Arg Gly Asn Asp Ala Glu			
	290	295		300
Thr Ala Arg Asp Met Gln	Leu Gln Gly Phe Leu Lys Thr Ile Met Leu			
305	310	315		320
Arg Arg Thr Lys Ser Thr	Ile Leu Asn Gly Arg Pro Ile Val Glu Leu			
	325	330		335
Pro Ser Val Thr Ile Glu	Asp Val Tyr Val Ala Leu Thr Glu Glu Glu			
	340	345		350
Arg Cys Thr Tyr Ala Val	Leu Glu Ser Phe Thr Gln Arg His Val Gln			
	355	360		365
Arg Tyr Leu Asn Asn Gly	Gly Glu Gln Arg Lys Ile Pro Asn Val Leu			
	370	375		380
Ser Leu Leu Gln Tyr Leu	Arg Gln Ala Cys Cys His Ile Leu Leu Leu			
385	390	395		400
Ser Gly Ala Ala Leu Thr	Ala Leu Gln Ser Ser Arg Ser Glu Glu His			
	405	410		415
Leu Ala Val Asn Ala Leu	Cys Leu Pro Glu Glu Val Val Thr Arg Leu			
	420	425		430
Arg Asp Asn Glu Thr Ile	Ser Gln Cys Pro Val Cys Leu Glu Arg Ala			
	435	440		445
Tyr Ser Pro Ile Ile Phe	Ser Pro Cys Gly His Ser Val Cys Leu Ala			
	450	455		460
Cys Phe Gly Lys Met Cys	Ser Thr Thr Ala Pro Glu Gly Ala Ser Thr			
465	470	475		480
Glu Val Pro Val Gly Phe	Arg Cys His Ser Cys Arg Val Thr Val Asp			
	485	490		495
Leu Gln Lys Val Thr Asp	Tyr Ser Ser Phe Val Arg Ser His Asn Phe			
	500	505		510
Ser Ser Ser Asn Gln Gly	Ser Ser Thr Leu Phe Pro Ser Ser Leu Lys			
	515	520		525
Ala Leu Leu Gly Leu Asn	Asp Glu Gly Asp Glu Asp Asp Glu Asp Ser			
	530	535		540
Gly Ser Gly Met Asp Ile	Gly Leu Glu Ala Cys Arg Thr Asp His Val			
545	550	555		560
Ile Pro Pro Leu Arg Tyr	Gly Val Ala Pro Ser Glu Met Ser Cys Ala			
	565	570		575
Gly Lys Gln Ser Ser Ala	Ala Met Arg Lys Gln Val Trp Glu Asn His			
	580	585		590
Glu Ala Arg Val Ala Tyr	Gly His Ala Leu Pro Arg Lys Trp Val Asn			
	595	600		605
Ser Ser Lys Ile Glu Lys	Ala Ala Glu Ile Ile Lys Ala Ile Arg Asp			
	610	615		620
Gln Gly Thr Gly Asp Lys	Val Ile Val Phe Ser His Phe Thr Ala Leu			
625	630	635		640
Leu Asp Leu Ile Glu Val	Pro Ile Ala Arg Ser Gly Trp Lys Tyr Arg			
	645	650		655
Arg Tyr Asp Gly Arg Met	Thr Pro Ala Glu Arg Gly Ser Ala Ile Ser			

Variable	Mean	Standard deviation	Minimum	Maximum
Age	34.5	10.2	20	55
Gender	0.5	0.5	0	1
Marital status	0.6	0.5	0	1
Education	12.5	2.5	9	16
Income	15.2	5.8	10	25
Health status	0.7	0.4	0	1
Employment status	0.8	0.4	0	1
Home ownership	0.9	0.3	0	1
Vehicle ownership	0.7	0.4	0	1
Life satisfaction	4.2	1.5	1	7
Financial satisfaction	3.8	1.2	1	6
Health satisfaction	4.5	1.3	1	7
Relationship satisfaction	4.1	1.4	1	7
Community satisfaction	3.9	1.1	1	6
Environment satisfaction	3.7	1.0	1	6
Security satisfaction	4.0	1.2	1	6
Quality of life	4.3	1.6	1	7
Overall satisfaction	4.1	1.5	1	7

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<210> 42388
<211> 100
<212> PRT
<213> A.fumigatus
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<210> 42389
<211> 66
<212> PRT
<213> A.fumigatus
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<210> 42390  
<211> 789



## 18958

Lys Lys Ala Glu Ala Cys Ile Phe Ile Leu Gln Ile Ile Asn Gln Val  
 420 425 430  
 Gly Pro Ser Thr Ala Arg Leu Val Thr Arg Thr Ala His Asp Ile Leu  
 435 440 445  
 Asn Asp Thr Ala Phe Thr Thr Ala Leu Leu Gly Arg Ile Gln Asp Ile  
 450 455 460  
 Ala Ala Arg Leu Glu Glu Asn Trp Glu Met Ala Gln Gly Leu Ser Ala  
 465 470 475 480  
 Leu Ser Ser Leu Val Leu Arg Val Leu Thr Leu Ser Pro Ser Ala Asp  
 485 490 495  
 Ile Gln Glu Ile Cys Leu Asn Thr Val Lys His Leu Arg Lys Ile Ser  
 500 505 510  
 Leu Ala Trp Val Lys Ile Val Thr Glu Lys Ala Ser Ser Thr Thr Asp  
 515 520 525  
 Asp Arg His Arg Ser Asp Leu Leu Arg Ser Gly His Leu Ala Leu  
 530 535 540  
 Ile Cys Ala Thr Thr Phe Asp Ala Glu Asp Leu Ala Leu Val Arg Met  
 545 550 555 560  
 Leu Glu Asn Thr Tyr Asp Thr Ala Val Leu Leu Gln Cys Cys Met Val  
 565 570 575  
 Ile Asn Asp Thr Arg Arg Leu Leu Cys Glu Gly Ser Gly Ser Pro Leu  
 580 585 590  
 Ile Pro Ile Leu Tyr Arg Arg Trp Gln Ile Leu Ser Tyr Arg Ser Leu  
 595 600 605  
 Pro Val Leu Lys Arg Asn Ile Ile Gln Arg Ala Asn Ser Pro Leu Asp  
 610 615 620  
 Arg Ala Ile Gly Asn Ile Trp Ala Thr Tyr Arg Ala Gly Ser Tyr Trp  
 625 630 635 640  
 Glu Ala Ser Pro Glu Ala Pro Ile Cys Trp Leu Val Thr Gly Ile Pro  
 645 650 655  
 Cys Gln Ser Gly His Gly Ile Asp Leu Pro Val His Tyr Asn Leu Leu  
 660 665 670  
 Thr Gly Glu Leu Leu Val Asn Gly Leu Pro Leu Ala Arg Leu Pro Ser  
 675 680 685  
 Glu Tyr Glu Arg His Asp Thr Tyr Arg Thr Leu Phe Gly Gln Ser Ser  
 690 695 700  
 Leu Glu Val Met Pro Ser Val Ile Pro Gly Met His Phe Ala Cys Arg  
 705 710 715 720  
 Lys Lys Tyr Met Gly His Thr Val Asn Leu Ala Arg Lys Arg Leu Thr  
 725 730 735  
 Gly Ser Glu Glu Ile Asp Leu Cys Ile Gln Ala Thr Glu Glu Gly His  
 740 745 750  
 Thr Trp Glu Phe Ile Pro Pro Arg Leu Leu Met Asp Ser Phe Pro Asp  
 755 760 765  
 Ala Phe Leu Ala Gly Tyr Val His Trp Tyr Asp Val His Asn Gly Tyr  
 770 775 780  
 Val Glu Phe Arg Pro  
 785

&lt;210&gt; 42391

&lt;211&gt; 1412

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE



&lt;222&gt; (1408), (1409)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42391

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Phe Val Tyr Ser Ser Asp Gly Arg Gly Pro His Leu Gly Val Tyr Thr
1          5          10          15
Ser Gln Thr Ser Asp Gly Leu Leu Pro Arg Arg Phe Ser Ser Gly Leu
          20          25          30
Arg Ala Leu Val Arg Cys Pro Gln Trp Leu Cys Gly Ile Ser Ala Leu
          35          40          45
Glu Lys Pro Trp Ile Ser Ser Val Phe Asn Trp Arg Leu Gln Lys Thr
          50          55          60
Ser Ala Arg Asp Pro Trp Arg Leu Ala Lys Asp Asn Leu Phe Leu Val
65          70          75          80
Ser Val Lys Ser Arg Thr Ala Glu Val Ile Ser Ala Thr Leu Gln Ser
          85          90          95
Ile Glu Lys Pro Ser Lys Leu Tyr Cys Thr Phe Asp Ser Thr Thr Ser
          100          105          110
Ser Leu Gly Ile Glu Leu Pro Arg Leu Arg Leu Arg Phe Glu Leu Lys
          115          120          125
Pro Arg Ser Ser Ala Ile Gln Ser Arg Glu Tyr Gln Gly Met Leu Ile
          130          135          140
Asp Pro Asp Gln Ser Leu Asp Thr Leu Val Gly Leu Arg Asn Arg Leu
145          150          155          160
Ile Leu Arg His Glu Ser Gly Gly Asp Arg Val Val Leu Ile Pro Glu
          165          170          175
Gly Gln Val Ser Trp Tyr Lys Asp Asn Gly His Ile Ala Val Glu Ile
          180          185          190
Gly Trp Gln Ala Ala Thr Thr Leu His Pro Tyr Pro Val Asp Asn Leu
          195          200          205
Leu Gly Arg Leu Thr Asp Asn Gly Ser Leu His Ser Arg Ser Met Leu
          210          215          220
Cys Tyr Leu His Ala Leu Thr Ser Ser Cys Leu Pro Asp Pro Leu Thr
225          230          235          240
Gln Arg Thr Gly Thr Glu Gln Ala Leu Thr Ile Leu Arg Ser Ala Ser
          245          250          255
Met Arg Ser Phe Asp Arg Leu His Pro Glu Ala Ser Ile Ile Leu Ala
          260          265          270
Lys Ile Ala Glu Leu Thr Pro Glu Arg His Tyr Tyr Pro Ser Asn Glu
          275          280          285
Arg Val Met Gln Thr Val Arg Trp Asp Lys His Leu Gly Phe Leu Ala
          290          295          300
Gln His Asp Ser Phe Tyr Lys Glu Val Lys Ala Ile Phe Glu His Asp
305          310          315          320
Asn Arg Met Arg Met Phe His Pro Asn Glu Gln Val Lys Gln Pro Thr
          325          330          335
Met Pro Asn Ile Val Ala Asp Leu Leu Arg Arg Asn Glu Ile Arg Ser
          340          345          350
Ser Ser Phe Arg Val Ser Gly Phe Gly Ala Glu Asp His Thr Val Glu
          355          360          365
Tyr Asp Arg Pro Tyr Val Gly Leu Asp Leu Asn Arg Asn Ser Ala Arg
          370          375          380
Phe Phe Arg Val Tyr Ser Leu Cys Arg Ile Leu Tyr Glu Glu Ile Pro
385          390          395          400
Ser Ala Arg Glu Ile Leu His Val Asp Leu Leu Ser Lys Leu Trp Gln
          405          410          415

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Ser Leu Ser Gln Thr His Val Val His Ala Ala Ser Leu Pro Val Asp  
 420 425 430  
 Ser Asn Lys Ile Gln Tyr Asp Ala Ala Leu Ile Leu Glu Pro Met Thr  
 435 440 445  
 Phe Val Ser Ser His Trp Cys Ser Leu His Gln Leu Leu Cys Ser Arg  
 450 455 460  
 Asp Ser Gly Leu Ser Lys Phe Gln Leu Met Val Trp Leu Ala Thr Leu  
 465 470 475 480  
 Ala Phe Ser Asp Ser Ser Asn Met Phe Val Leu Glu Ile Leu Ala Ser  
 485 490 495  
 Leu Tyr Val Ile Pro Glu Met Ala Glu Leu Thr Leu Pro Ser Arg Gly  
 500 505 510  
 Pro Phe Gln Leu Trp His Gly Tyr Glu Val Asp Glu Ala Ile Leu Gly  
 515 520 525  
 Ser Arg Ile Arg Gln Ser Ala Val Leu Ser His Thr Pro Glu Ser Asn  
 530 535 540  
 Leu His Pro Leu Pro Asn Glu Thr Leu Gln Val Phe Gln Ala Arg Lys  
 545 550 555 560  
 Arg Arg Ile Ala Lys Arg Asn Arg Thr Leu Ala Leu Gln Thr Phe Ile  
 565 570 575  
 Arg Gly Leu Lys Asp Gln Trp Pro Ile Arg Ser Leu Thr Ile Pro Pro  
 580 585 590  
 Gln Gln Ala Gly Pro Arg Phe Gly Asp Tyr Tyr Gly Thr His Thr Ala  
 595 600 605  
 Met Thr Gln Val Ala Glu Ser Phe Gln Ile Trp Phe Asp Asn Arg Glu  
 610 615 620  
 Phe Arg Ser Tyr Leu Ser Asp Ile Ser Ser Leu Phe Val Ser Gln Ile  
 625 630 635 640  
 Val His Pro Val Gln Met Pro Pro Val Ser Val Pro Gly Gln Val Lys  
 645 650 655  
 Gln Thr Thr Thr Arg Arg Gly Phe Ile Arg Ile Asp Asp Leu Leu Gly  
 660 665 670  
 Pro Glu Pro Ile Leu Asp Met Glu Arg Pro Arg Leu Val Gly Leu Leu  
 675 680 685  
 Ser Ser His Pro Glu Tyr Glu Glu Pro Ala Pro Arg Leu Met Ala Phe  
 690 695 700  
 Val Asp Ser Leu Glu Leu Gln Ser Lys Ser Gln Tyr Glu Arg Arg Tyr  
 705 710 715 720  
 Val Glu His Leu Arg Gly Ser Ile Ser Ser Leu Gln Gln Lys Lys Arg  
 725 730 735  
 Arg Asp Asn Ile Thr Met Asp Ser Lys Gln Leu Gly Ala Ala Leu Leu  
 740 745 750  
 Asp Tyr Phe His Arg Cys Glu Met Tyr Cys Glu Arg Ile Tyr Asn Ser  
 755 760 765  
 Ile Arg Val Arg Leu Thr Arg Phe Asp Glu Thr Leu Asp Ser Pro Gln  
 770 775 780  
 Asn Ser Leu Leu Leu Glu Thr Val Ala Gly Ile Gly Asn Trp Pro Arg  
 785 790 795 800  
 Ile Ser Pro Tyr Leu Leu Val Gln Gln Leu Thr His Gln Arg Trp Leu  
 805 810 815  
 Phe Leu Pro Glu Arg Trp Lys Ala Ser Ile Val Glu Tyr Gly Cys Ala  
 820 825 830  
 Ile Thr Ala Leu Gln Gln Ala Arg Arg Leu Thr Thr Leu Val Ser Phe  
 835 840 845  
 Arg Asp Asp Leu Ile Arg Glu Leu Gln Asn Pro Gly His Thr Asn Trp  
 850 855 860

## 18961

Asp Pro His Gln Tyr Pro Glu Ser Phe Leu Leu Glu Ile Glu Asn Asn  
 865 870 875 880  
 Ile Leu Ile Arg Asp Val Gln Glu Gln Ile Ala Arg Glu Met Arg Asp  
 885 890 895  
 Ile Ser Ser Gly Arg Asn Ala Val Met Gln Leu Asn Met Gly Glu Gly  
 900 905 910  
 Lys Ser Ser Val Ile Val Pro Met Val Ala Ala His Leu Ala Asp Gly  
 915 920 925  
 Ser Arg Leu Val Arg Val Ile Val Ala Lys Pro Gln Ser Arg Gln Met  
 930 935 940  
 Leu Gln Met Leu Val Ser Lys Leu Gly Gly Leu Leu Gly Arg Pro Val  
 945 950 955 960  
 Tyr Leu Met Pro Val Ser Arg Ser Leu Arg Leu Thr Val Thr Glu Ala  
 965 970 975  
 Asp Ala Ile Phe His Met Cys Gln Asn Cys Met Glu Gly Gly Val  
 980 985 990  
 Leu Leu Val Gln Pro Glu His Ile Leu Ser Leu Lys Leu Met Cys Leu  
 995 1000 1005  
 Glu Cys Phe Val Thr Gly Arg Asp Ala Ile Gly Cys Ser Leu Leu Arg  
 1010 1015 1020  
 Thr Leu Glu Phe Phe Lys Glu Tyr Ala Arg Asp Val Val Asp Glu Ser  
 1025 1030 1035 1040  
 Asp Glu Asn Phe Ser Val Lys Phe Glu Leu Ile Tyr Thr Met Gly Val  
 1045 1050 1055  
 Gln Arg Pro Leu Glu Leu Thr Pro Gln Arg Trp Val Ile Val Gln Glu  
 1060 1065 1070  
 Leu Leu Asn Ile Met Arg Val Ile Ala Pro Ser Val Lys Gln Asp Tyr  
 1075 1080 1085  
 Pro Arg Ser Ile Glu Val Glu Glu Arg Ser Val Gly Ser Phe Pro Arg  
 1090 1095 1100  
 Ile Arg Leu Leu Gln Asn Asp Ala Glu Leu Glu Leu Phe Arg Arg Val  
 1105 1110 1115 1120  
 Ala Thr His Val Cys Asp His Gly Ile Asp Ser Leu Pro Val Phe Arg  
 1125 1130 1135  
 Gln Ser Arg Ala Val Arg Arg Ala Val Leu Ala Tyr Thr Leu Lys Gln  
 1140 1145 1150  
 Glu Leu Ser Leu Glu Glu Ile Thr Ser Val Glu Glu Glu Gly Pro Ala  
 1155 1160 1165  
 Gly Phe Trp Thr Asp Thr Thr Lys Ser Pro Leu Leu Leu Leu Arg Gly  
 1170 1175 1180  
 Leu Phe Ala Gly Gly Ile Leu Ala Phe Cys Phe Ser Gln Lys Arg Trp  
 1185 1190 1195 1200  
 Arg Val Asn Tyr Gly Pro Asp His Ala Arg Asn Pro Pro Thr Arg Leu  
 1205 1210 1215  
 Ser Val Pro Tyr Arg Ala Lys Asp Cys Pro Ser Pro Arg Ser Glu Phe  
 1220 1225 1230  
 Ser His Pro Asp Val Val Ile Leu Leu Thr Cys Leu Asn Tyr Tyr Tyr  
 1235 1240 1245  
 Ala Gly Leu Gly Asp Glu Glu Leu Phe Leu Ala Phe Asp His Leu Val  
 1250 1255 1260  
 Lys Ser Asp Gln Ala Glu Ile Glu Tyr Gln Ala Trp Val Val Asp Cys  
 1265 1270 1275 1280  
 Pro Ser Leu Pro His Thr Tyr Arg Gln Leu Gly Gly Val Asn Leu Glu  
 1285 1290 1295  
 Asp Arg Gln His Cys Val Lys Gln Ile Phe Pro Trp Phe Arg Ser Ala  
 1300 1305 1310

## 18962

Lys Gly Ala Ile Asp Tyr Phe Leu Ala His Val Val Phe Pro Lys Glu  
 1315 1320 1325  
 Leu Arg Glu Phe Pro Asp Lys Leu Ser Ala Ser Gly Trp Asp Ile Gly  
 1330 1335 1340  
 Glu Ile Arg Thr Gln Pro Thr Val Gly Phe Ser Gly Thr Asn Asp Ser  
 1345 1350 1355 1360  
 Arg Gln Thr Leu Pro Leu Ser Val Gln Gln Leu Asp Leu Pro Glu Gln  
 1365 1370 1375  
 Ser His Thr Asn Ala Leu Val Leu Asp Tyr Leu Leu Met Pro Glu Asn  
 1380 1385 1390  
 Ser Val Ala Leu Ser Ser Pro Arg Gly Trp Lys Arg Ala Val Pro Xaa  
 1395 1400 1405  
 Xaa Val Asp Asp  
 1410

&lt;210&gt; 42392

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42392

Met Arg Arg Ser Ser Phe Trp Gln Arg Phe Val His Thr Tyr Pro Pro  
 1 5 10 15  
 Ile Pro His Ile Lys Arg Ala Ser His Ala Ser Lys Ser Thr Tyr Val  
 20 25 30  
 Arg His Pro Glu His Ser Ser Thr Cys Pro Thr Ser Glu Pro Ala Phe  
 35 40 45  
 Ile Arg Met Val Leu Arg Asn Leu Ser Ala Pro Ser Leu Glu Ala Leu  
 50 55 60  
 Cys Ser Lys Glu Gln Ile Glu Leu Leu Asp Ser Ile Asp His Leu Arg  
 65 70 75 80  
 Leu Gln Gly Ile Asn His Tyr Ile Ser Leu Pro Gln Ile Ile Val Cys  
 85 90 95  
 Gly Asp Gln Ser Ser Gly Lys Ser Ser Val Leu Glu Ala Ile Ser Gly  
 100 105 110  
 Val Ser Phe Pro Ile Arg Ser Ser Leu Cys Thr Arg Phe Pro Thr Glu  
 115 120 125  
 Leu Val Leu Arg Lys Ser Ser Gln Val Gly Val Cys Val Ser Ile Val  
 130 135 140  
 Pro His Ser Ser Arg Ser Glu Ser Glu Gln Glu Ala Leu Ala His Ser  
 145 150 155 160  
 Thr Arg Ser Leu Ile Ala Leu Arg Val Phe Pro Asn  
 165 170

&lt;210&gt; 42393

&lt;211&gt; 527

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42393

Arg Ile Arg Thr Gly Ser Ala Arg Pro Phe His Glu Glu Leu Asp Ser  
 1 5 10 15  
 Phe Glu Gly Leu Pro Gln Leu Ile Glu Asn Ala Lys Ser Ala Met Gly  
 20 25 30  
 Ile Tyr Thr Asn Ala Lys Ser Phe Ser Asn Asp Leu Leu Arg Val Glu  
 35 40 45

## 18963

Val Ser Gly Pro Asp Arg Pro His Leu Thr Ile Val Asp Leu Pro Gly  
 50 55 60  
 Leu Ile His Ser Glu Thr Lys Gln Gln Ser Ala Ala Asp Val Glu Leu  
 65 70 75 80  
 Val His Glu Val Val Lys Ser Tyr Met Glu Glu Pro Arg Ser Ile Ile  
 85 90 95  
 Leu Ala Val Val Ser Ala Lys Asn Asp Val Pro Asn Gln Ile Val Leu  
 100 105 110  
 Lys Leu Ala Arg Ala Ala Asp Pro Tyr Gly Thr Arg Thr Leu Gly Val  
 115 120 125  
 Ile Thr Lys Pro Asp Thr Leu Val His Gly Ser Asp Ser Glu Ala Gln  
 130 135 140  
 Phe Val Ser Leu Ala Lys Asn Gln Glu Val Glu Phe Arg Leu Gly Trp  
 145 150 155 160  
 His Ala Leu Lys Asn Met Asp Thr Glu Lys Gly Thr Trp Thr Leu Pro  
 165 170 175  
 Glu Arg Asp Lys Glu Glu Ser Ala Phe Phe Ala Ser Gly Val Trp Glu  
 180 185 190  
 Ala Leu Pro Arg Ser His Val Gly Ile Asp Arg Leu Arg Glu Arg Leu  
 195 200 205  
 Ser Lys Leu Leu Leu Ala Gln Ile Ala Thr Glu Leu Pro Ser Leu Met  
 210 215 220  
 Glu Glu Ile Lys Ala Lys Met Glu Asp Cys Leu Gln Lys Leu Glu Lys  
 225 230 235 240  
 Leu Gly Glu Pro Arg Thr Thr Gln Glu Glu Gln Arg Ser Tyr Leu Phe  
 245 250 255  
 His Cys Ser Gln Ser Phe Gln Asn Leu Val Asn Ser Ala Val Glu Gly  
 260 265 270  
 Thr Tyr Ser Asp Pro Phe Phe Glu Asn Ala Lys Ser Glu Thr Gly Tyr  
 275 280 285  
 Lys Arg Arg Ile Arg Ala Val Val Gln Asn Leu Asn Glu Gln Phe Thr  
 290 295 300  
 Ser Arg Met Lys Arg Arg Gly His Tyr Tyr Glu Ile Asp Asp Asp Val  
 305 310 315 320  
 Asp Asp Glu Asp Glu Asp Ser Leu Gly Gly Gln Leu Phe Ile Ser Arg  
 325 330 335  
 Glu His Tyr Ile Arg His Val Glu Asn Leu Leu Arg Arg Thr Arg Gly  
 340 345 350  
 Lys Glu Leu Pro Gly Thr Phe Asn Pro Met Ile Ile Asn Asp Leu Phe  
 355 360 365  
 Ile Glu Gln Ser Gln Pro Trp Glu Arg Ile Thr Ser Glu His Val Arg  
 370 375 380  
 Glu Val Trp Glu Ala Ala Lys Ala Phe Val Lys Ile Ala Val Thr Glu  
 385 390 395 400  
 Val Thr Asp Met Ser Thr Ser Ser Ala Ile Leu Met Glu Val Phe Asp  
 405 410 415  
 Pro Ser Leu Asp Ser Val Leu Lys Ser Leu Glu Asn Lys Thr Cys Glu  
 420 425 430  
 Ile Leu Arg Ala Tyr Arg Glu Gly His Pro Ile Thr Tyr Asn His Ser  
 435 440 445  
 Phe Thr Asp Ser Leu Gln Gln Thr Arg Gln Asp Thr Leu Met Pro Lys  
 450 455 460  
 Leu Ser Tyr Thr Ile Arg Lys Phe Phe Asn Val Pro Gln Leu Thr Ser  
 465 470 475 480  
 Ser Gln Asn Ile Asp Gly Thr Phe Asp Leu Leu His Leu Arg Asp Ser  
 485 490 495

## 18964

Leu Leu Glu Ser Phe Lys Ala Asp Thr Ala Arg Phe Ala Ala Leu Gln  
                   500                  505                  510  
 Ala Leu Asp Cys Met Arg Ala Tyr Tyr Lys Val Arg Arg Gln Ser  
                   515                  520                  525

<210> 42394

<211> 510

<212> PRT

<213> A.fumigatus

<400> 42394

Phe Gln Gly Gln Val Ala Arg His Gly Ser Ala Leu Glu Pro Arg Gly  
 1                  5                  10                  15  
 His Phe Val Cys Phe Leu Thr Pro Ser Leu Val Leu Leu Ala Asn Gln  
                   20                  25                  30  
 Asn Ser Asp Val Leu Gly Glu Glu Ser Glu Ile Asp Val Ser Val Tyr  
                   35                  40                  45  
 Asp Arg Asn Asn Gln Glu Ala Phe Leu Gly His Val Arg Leu Ser Leu  
                   50                  55                  60  
 Asn Leu Lys Glu Asp His Ser Arg Leu Glu Gly Trp Phe Pro Leu Ser  
 65                  70                  75                  80  
 Ala Arg Gly Ala Gly Asp Ser Gln Ile Ser Gly Glu Ile His Leu Glu  
                   85                  90                  95  
 Met Leu Phe Glu Lys Thr Glu Lys Lys Gln Val Gly Pro Asn Asp Phe  
                   100                  105                  110  
 Gln Ile Leu Lys Leu Ile Gly Lys Gly Thr Phe Gly Gln Val Tyr Gln  
                   115                  120                  125  
 Val Met Lys Lys Asp Thr His Arg Ile Tyr Ala Met Lys Val Leu Ser  
                   130                  135                  140  
 Lys Lys Val Ile Ile Gln Lys Lys Glu Val Ala His Thr Leu Gly Glu  
 145                  150                  155                  160  
 Arg Asn Ile Leu Val Arg Thr Ala Met Ala Ala Ser Pro Phe Ile Val  
                   165                  170                  175  
 Gly Leu Lys Phe Ser Phe Gln Thr Pro Thr Asp Leu Tyr Leu Val Thr  
                   180                  185                  190  
 Asp Tyr Met Ser Gly Gly Glu Leu Phe Trp His Leu Gln Lys Glu Gly  
                   195                  200                  205  
 Arg Phe Gln Glu Ala Arg Ala Lys Phe Tyr Ile Ala Glu Leu Ile Leu  
                   210                  215                  220  
 Ala Leu Gln His Leu His Asp His Asp Ile Val Tyr Arg Asp Leu Lys  
 225                  230                  235                  240  
 Pro Glu Asn Ile Leu Leu Asp Ala Asn Gly His Ile Ala Leu Cys Asp  
                   245                  250                  255  
 Phe Gly Leu Ser Lys Ala Asn Leu Thr Gln Asn Asp Thr Thr Asn Thr  
                   260                  265                  270  
 Phe Cys Gly Thr Thr Glu Tyr Leu Ala Pro Glu Val Leu Leu Asp Glu  
                   275                  280                  285  
 Gln Gly Tyr Thr Lys Met Val Asp Phe Trp Ser Leu Gly Val Leu Val  
                   290                  295                  300  
 Phe Glu Met Cys Cys Gly Trp Ser Pro Phe Tyr Ala Glu Asp Thr Gln  
 305                  310                  315                  320  
 Gln Met Tyr Lys Asn Ile Ala Phe Gly Lys Val Arg Phe Pro Arg Asp  
                   325                  330                  335  
 Ala Leu Ser Thr Glu Gly Arg Asn Phe Val Lys Gly Leu Leu Asn Arg  
                   340                  345                  350  
 Asn Pro Lys His Arg Leu Gly Ala Lys Gly Asp Ala Lys Glu Leu Met

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          355              360              365
Ala His Pro Phe Phe His Asp Ile Asp Trp Glu Ala Leu Ala Arg Lys
 370              375              380
Asp Val Ile Pro Pro Phe Lys Pro Lys Leu Lys Ser Asp Thr Asp Thr
385              390              395              400
Ser Asn Phe Asp Pro Glu Phe Thr Asn Ala Leu Asp Asn Ser Ala Ser
          405              410              415
Leu Asn Asp Arg Ala Ala Ala Leu Ala Asn Gly Phe Met Pro Ala Ser
          420              425              430
Thr Pro Leu Ser Pro Gly Met Gln Ala Asn Phe Lys Gly Phe Thr Phe
          435              440              445
Val Asn Glu Asn Ser Ile Asp His His Met Lys His Asp Pro Ser Asp
          450              455              460
His Met Asp Glu Asp Pro Glu Thr Trp Gln Arg Ala His His Arg Gly
465              470              475              480
Asn Ser Ala Asp Gln Arg Met Ser Gly Ile Asn Lys Asn Asn Asp Gly
          485              490              495
Gly Glu Pro Gly Ile Phe Asn Val Asp Asp Asn Phe Asp Met
          500              505              510

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&lt;210&gt; 42395

&lt;211&gt; 480

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42395

```

Asn Asn Ser Leu Gln Asp Asp Asp Asn Gln Asp Thr Ile Gly Ser Asn
1          5          10          15
Arg Ser Thr Pro Ser Gly Ile Ala Thr Pro Lys Pro Asp Leu Ser Asp
          20          25          30
Lys Arg Gln Pro Ser Ile Met His Ser Tyr Phe Gln Val Gly Leu Ser
          35          40          45
Ser Ser Asp Asp Asn Arg Ser Ser Lys Ser Trp Leu Pro Ser Ser Glu
          50          55          60
Thr Leu Pro Ser Thr Asn Gly Ile Gln Pro Gly Ala His Ala Thr Asp
65          70          75          80
Thr Arg Asp Gly Gln Gly Ser Gly His Asn Ser Ser Ser Ala Gly Ser
          85          90          95
Phe Val Met Met Glu Arg Asp Glu Ala Ser Asp Met Asn Ala Ser Leu
          100          105          110
Asp Cys Pro Asp Lys Lys Phe Asp Thr Gln Glu Ile Ser Gln Gly Ser
          115          120          125
Leu Pro Pro Thr Asn Leu Pro Thr Pro Pro Tyr Ser Ser Ala Cys Ser
          130          135          140
Leu Leu Gln Lys Glu Ser Glu Glu Ala Glu Leu Ala Ser Leu Thr Pro
145          150          155          160
Glu Lys Gly Met Gly Ser Ile Phe Thr Ala Leu Lys Ser Tyr Leu Ala
          165          170          175
Pro Cys Thr Ala Thr Asn Pro Pro Glu Ser Gln Ala Arg Arg His Thr
          180          185          190
Ser His Pro Val Ser Ser Ile Ser Asp Asp Pro Val Leu Ala Ser His
          195          200          205
Phe Ser Asn Pro Ser Leu Pro Ala Ser Ala Asp Ser Phe Ile Pro Pro
210          215          220
Glu Thr Pro Leu Leu Asp His Glu Asn Pro His Val Leu His Leu Ile
225          230          235          240

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## 18966

Leu Lys Thr Leu Ala Lys Leu Thr Gly Asn Leu Ser Asp Leu Ser His  
                   245                  250                  255  
 Gln Lys Asn Thr Pro Pro Leu Thr Pro Arg Ala Met Ser Asn Glu Thr  
                   260                  265                  270  
 Ala Lys Asn Pro Pro Val Thr Ser Pro Ser Ser Ser Ser Ser Ser Gly  
                   275                  280                  285  
 Ala His Pro Ser Ser Glu Gln Pro His Pro Asp Lys Met Ala Thr Ser  
                   290                  295                  300  
 Ala Asp Glu Ile Ala Gly Lys Leu Asn Asp Ala Phe Pro Ser Pro Ser  
 305                  310                  315                  320  
 Glu Thr Pro Lys Ala Glu Gln Gln Ser Gly Pro Ser Val Gly Ser Leu  
                   325                  330                  335  
 Lys Gly Lys Leu Tyr Val Lys Ile Thr Glu Ala Arg Gly Leu Arg Pro  
                   340                  345                  350  
 Gly Phe Asp Pro Tyr Val Val Cys Val Phe Glu Trp Asn Glu Val Ile  
                   355                  360                  365  
 Ser Lys Ser Ala Gln Asp Glu Glu Ala Ser Ile Glu Arg Arg Glu  
                   370                  375                  380  
 Lys Glu Lys Glu Lys Ser Glu Arg Glu Ala Gly Arg Pro Met Ala Ile  
 385                  390                  395                  400  
 Pro Met Lys Ser Arg Gln Ser Ser Asn Asn Ser Ala Met Glu Gly His  
                   405                  410                  415  
 Asp Phe Arg Gly Lys Ser Pro Val Thr Asp Pro His Trp Asn His Glu  
                   420                  425                  430  
 Ala Thr Leu Tyr Val Ser Ser Pro Arg Arg Leu Tyr Tyr Trp Leu Thr  
                   435                  440                  445  
 Arg Thr Val Thr Ser Leu Glu Lys Ser Arg Arg Ser Met Phe Arg Phe  
                   450                  455                  460  
 Met Ile Ala Thr Ile Arg Lys Arg Ser Leu Asp Thr Tyr Gly Cys Pro  
 465                  470                  475                  480

&lt;210&gt; 42396

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42396

Arg Trp Arg Gly Glu Gly Asp Asp His Ala Gly Leu Asp Asp Thr Gly  
 1                  5                  10                  15  
 Leu Asp Thr Ala Asp Arg Asp Arg Ser Asp Thr Arg Asp Leu Val Asp  
                   20                  25                  30  
 Ile Leu Glu Gly Lys Thr Glu Gly Leu Val Gly Gly Thr Asp Arg Gly  
                   35                  40                  45  
 Leu Asn Gly Val Asp Gly Leu Asp Glu Gly Leu Thr Ser Asp Leu Ala  
                   50                  55                  60  
 Gly Leu Gly Leu Leu Leu Pro Ser Leu Val Pro Gly Ala Val Gly Gly  
 65                  70                  75                  80  
 Gly Leu Lys His Val Val Thr Val Glu Ala Arg Asp Gly Asp Glu Gly  
                   85                  90                  95  
 Asn Gly Leu Gly Val Val Ala Asp Leu Leu Asp Glu Val Gly Gly Phe  
                   100                  105                  110  
 Leu Asp Asn Phe Val Val Thr Ile Leu Gly Pro Leu Ala Gly Val His  
                   115                  120                  125  
 Leu Val Glu Gly Asp Asp Glu Leu Leu Asp Thr Glu Gly Glu Ser Glu  
                   130                  135                  140  
 Gln Ser Val Leu Thr Gly Leu Ala Ile Leu Gly Asp Thr Ser Leu Glu



## 18967

145                    150                    155                    160  
 Leu Thr Ser Thr Gly Gly Asn Asp Glu Asp Ser Ala Val Ser Leu Gly  
                          165                    170                    175  
 Gly Thr Ser Asp His Val Leu Asp Glu Val Thr Val Thr Gly Gly Ile  
                          180                    185                    190  
 Phe Arg Ser Cys  
                          195

&lt;210&gt; 42397

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42397

Tyr Phe Ser Ser Pro Thr Phe His Glu Pro Ile Ser Pro Ser Ser Lys  
 1                    5                    10                    15  
 Glu Lys Lys Pro Asn Lys Leu His Ala Pro Thr Val Thr Cys Phe Gly  
                          20                    25                    30  
 Ala Leu Arg Tyr Pro Ile Gly Ser Ile Leu Leu Pro Ala Asn Phe Leu  
                          35                    40                    45  
 Ser Ser Ser Leu Pro Ser Asp Val Val Thr Ala Phe Phe Val Asp Ser  
                          50                    55                    60  
 Ala Thr His Asn Leu Leu His Leu Thr Ile Ser Ala Thr Asn Phe Phe  
                          65                    70                    75                    80  
 Ala Ser Asn Pro Thr Ile Ser Ala Glu Ser Ile Arg Val Ala Ser Ile  
                          85                    90                    95  
 Leu Pro Phe Phe Phe Leu Pro Phe Arg Gln Ile Thr Ser Gly Leu Glu  
                          100                    105                    110  
 Trp Asn Leu His Asn Gly His Cys Ser Glu Arg Asn Arg Phe Val Cys  
                          115                    120                    125  
 Arg Cys Gly Phe Gly Lys Pro Ala Gly Ile Ala Glu Val Ser Asn Ile  
                          130                    135                    140  
 Tyr Phe Ile Tyr Ile Ala Ala Val Ser Ser Pro Arg Ile Tyr Ile Gln  
                          145                    150                    155                    160  
 Pro Gly Gly Lys Glu Ser Ala Ala Leu Lys Tyr Gly Val  
                          165                    170

&lt;210&gt; 42398

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42398

Arg Leu Thr Arg Thr Cys Ser Phe Cys Ile Thr Ala Gln Cys Pro Ala  
 1                    5                    10                    15  
 Glu Asp Cys Asn Gly Asp Arg Ala Tyr Phe Phe Gln Leu Gln Ile Arg  
                          20                    25                    30  
 Ser Ala Asp Glu Pro Met Thr Thr Phe Leu Lys Val Ser Val Tyr Pro  
                          35                    40                    45  
 Pro Gln Ser Cys Trp Gln Leu His Arg Ala Gln Cys  
                          50                    55                    60

&lt;210&gt; 42399

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42399

```

Ser Leu Val Pro Pro Arg Leu Thr Ala Leu Ser Ser Ser Leu Pro Pro
1          5          10          15
Val Leu Val Ser Ser Arg Leu Val Ser Pro Arg Met Ala Arg Pro Val
          20          25          30
Ser Thr Leu Cys Ser Leu Ser Pro Ser Val Ser Ser Ser Ser Ser Ser
          35          40          45
Pro Ser Thr Arg Trp Thr Pro Ala Ser Gly Pro Arg Ile Val Thr Thr
          50          55          60
Lys Leu Ser Arg Lys Pro Pro Thr Ser Ser Arg Arg Ser Ala Thr Thr
65          70          75          80
Pro Arg Pro Phe Pro Ser Ser Pro Ser Leu Ala Ser Thr Val Thr Thr
          85          90          95
Cys Leu Ser Pro Pro Pro Thr Ala Pro Gly Thr Arg Asp Gly Arg Arg
          100          105          110
Arg Pro Arg Pro Ala Arg Ser Leu Val Arg Pro Ser Ser Arg Pro Ser
          115          120          125
Thr Pro Leu Ser Pro Leu Ser Val Pro Pro Thr Ser Pro Ser Val Phe
          130          135          140
Pro Ser Arg Met Ser Thr Arg Ser Leu Val Ser Glu Arg Ser Leu Ser
145          150          155          160
Ala Val Ser Arg Pro Val Ser Ser Ser Pro Ala Trp Ser Ser Pro Ser
          165          170          175
Pro Arg Gln Arg His His
          180

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&lt;210&gt; 42400

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42400

```

Leu Gln Glu Arg Ser Pro Ser Gly Cys Cys Leu Phe Asn Ala Gln Val
1          5          10          15
Ile Val Leu Asn His Thr Gly Gln Val Gly Ala Gly Tyr Ala Pro Val
          20          25          30
Leu Arg Thr Cys His Thr Ala His Ile Ala Cys Lys Phe Ser Glu Leu
          35          40          45
Leu Glu Lys Ile Asp Arg Arg Thr Gly Lys Ser Val Glu Asn Asn Pro
          50          55          60
Lys Phe Ile Lys Ser Gly Asp Ala Ala Ile Val Lys Met Val Pro Ser
65          70          75          80
Lys Pro Met Cys Val Glu Ser Phe Thr Asp Tyr Pro Pro Leu Gly Arg
          85          90          95
Phe Ala Val Arg Asp Met Arg Gln Thr Val Ala Val Arg Ser Gln Asn
          100          105          110
Ser Pro Ser Ile Lys Asp Leu Lys Leu Thr Ser Tyr Arg Leu Val Ser
          115          120          125
Ser Ser Pro Ser Arg Arg Pro Pro Ala Val Pro Val Arg Ser Pro Arg
          130          135          140
Pro Pro Arg Arg Pro Pro Arg Asn Arg Gly Leu Glu Ser Glu Lys Phe
145          150          155          160
Cys Leu Asn Asn Leu Leu
          165

```

<210> 42401  
 <211> 166  
 <212> PRT  
 <213> A.fumigatus

<400> 42401  
 Ala Pro Cys Pro Ser Leu Gln Gln Ala Pro Pro Ser Ser Pro Pro Gly  
 1 5 10 15  
 Cys Leu Gln Asp Leu Trp Tyr Arg Asn Gly Pro Cys Arg Pro Cys Arg  
 20 25 30  
 Asp Arg Tyr His Gln Ala Arg His Gly Arg His Leu Arg Pro Ala Asn  
 35 40 45  
 Val Thr Thr Glu Val Lys Ser Val Glu Met His His Gln Gln Leu Gln  
 50 55 60  
 Glu Gly Val Pro Gly Asp Asn Val Gly Phe Asn Val Lys Asn Val Ser  
 65 70 75 80  
 Val Lys Lys Val Arg Arg Gly Asn Val Cys Gly Asp Ser Lys Asn Asp  
 85 90 95  
 Pro Pro Gln Gly Ala Ala Ser Ser Thr His Arg Ser Ser Ser Ser Thr  
 100 105 110  
 Thr Pro Val Arg Ser Ala Leu Val Thr Pro Pro Ser Phe Gly Leu Ala  
 115 120 125  
 Thr Leu Pro Thr Leu Leu Ala Ser Ser Leu Ser Cys Leu Arg Arg Leu  
 130 135 140  
 Thr Ala Val Pro Ala Ser Leu Leu Arg Thr Thr Pro Ser Ser Ser Ser  
 145 150 155 160  
 Pro Val Met Pro Pro Ser  
 165

<210> 42402  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 42402  
 Ala Ile Pro Ser Tyr Ile Thr Asp Ser Gly Ser Pro Ser Thr Arg Ser  
 1 5 10 15  
 Tyr Ser Glu Thr Thr Asn His Thr Lys Ser Thr Leu Phe Leu Glu Glu  
 20 25 30  
 Val His His Leu Glu Ala Thr Leu Glu Ala Met Tyr Leu Ser Lys Arg  
 35 40 45  
 Lys Lys Lys Lys Gly Asn Asn Tyr Ser Tyr Leu Leu His Leu Leu Val  
 50 55 60  
 Gln Gln Ile Pro Tyr Ser Phe Ile Cys Ile  
 65 70

<210> 42403  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 42403  
 Ser Pro Asn Ser Lys Val Glu Ile Ile Val Pro Tyr Gln Phe Val Lys  
 1 5 10 15  
 Ser Tyr Leu Phe Pro Leu Phe Ile Thr His Ile Asp Thr Tyr Ser Ile  
 20 25 30

## 18970

Gln His Trp Arg Thr Pro Pro Leu Pro Ser Gln Cys Gly Val Tyr Gln  
           35                  40                  45  
 Arg Ser Gly Gly Arg Cys Tyr Cys Asp Lys Gly Gln Phe  
       50                  55                  60

<210> 42404  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 42404  
 Asp Ser Leu Asn Leu Phe Thr Leu Pro Val Cys Pro Asn Cys Gly Asn  
 1                  5                  10                  15  
 Ser Leu Thr Ile Ser Arg Gly Glu Pro Thr Arg Glu Tyr Pro Leu Gly  
           20                  25                  30  
 Val Asn Arg Phe Glu Cys Arg Thr Cys Pro Tyr Gln His Leu Leu Lys  
       35                  40                  45  
 His Gly Arg Gln Glu Lys Thr Thr Met Lys Gln Lys Glu Val Glu Asp  
       50                  55                  60  
 Val Phe Gly Gly Lys Glu Glu Phe Ala Asn Ala Asp Ser Met Ala Ser  
 65                  70                  75                  80  
 Lys Cys Trp Met Ile Ala Arg  
                   85

<210> 42405  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 42405  
 Leu Leu Ile Phe Phe Cys Ser Lys Glu Glu Lys Thr His Ile Asn Ile  
 1                  5                  10                  15  
 Val Val Ile Gly His Val Asp Ser Gly Lys Ser Thr Thr Thr Gly His  
           20                  25                  30  
 Met Ile Tyr Lys Cys Gly Gly Ile Asp Gln Arg Thr Ile Glu Lys Phe  
       35                  40                  45  
 Glu Lys Glu Ala Ala Glu Leu Gly Lys Gly Ser Phe Lys Tyr Ala Trp  
       50                  55                  60  
 Val Leu Asp Lys Leu Lys Ser Glu Arg Glu Arg Gly Ile Thr Ile Asp  
 65                  70                  75                  80  
 Ile Ala Leu Trp Lys Phe Gln Thr Pro Lys Tyr Glu Val Thr Val Ile  
           85                  90                  95  
 Gly Lys Leu Asp Ser Pro Arg Tyr Val Leu Val Leu  
           100                  105

<210> 42406  
 <211> 286  
 <212> PRT  
 <213> A.fumigatus

<400> 42406  
 Leu Thr Arg Ser Glu Asp Ala Pro Gly His Arg Asp Phe Ile Lys Asn  
 1                  5                  10                  15  
 Met Ile Thr Gly Thr Ser Gln Ala Asp Cys Ala Ile Leu Ile Ile Ala  
       20                  25                  30  
 Ser Gly Thr Gly Glu Phe Glu Ala Gly Ile Ser Lys Asp Gly Gln Thr

## 18971

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      35              40              45
Arg Glu His Ala Leu Leu Ala Phe Thr Leu Gly Val Lys Gln Leu Ile
  50              55              60
Val Ala Leu Asn Lys Met Asp Thr Cys Lys Trp Ser Glu Asp Arg Tyr
  65              70              75              80
Asn Glu Ile Val Lys Glu Thr Ser Asn Phe Ile Lys Lys Val Gly Tyr
      85              90              95
Asn Pro Lys Ala Val Pro Phe Val Pro Ile Ser Gly Phe Asn Gly Asp
      100              105              110
Asn Met Leu Glu Pro Ser Ser Asn Cys Pro Trp Tyr Lys Gly Trp Glu
      115              120              125
Lys Glu Thr Lys Ala Gly Lys Val Thr Gly Lys Thr Leu Ile Glu Ala
      130              135              140
Ile Asp Ala Ile Glu Pro Pro Val Arg Pro Ser Asn Lys Pro Leu Arg
      145              150              155              160
Leu Pro Leu Gln Asp Val Tyr Lys Ile Ser Gly Ile Gly Thr Val Pro
      165              170              175
Val Gly Arg Val Glu Thr Gly Ile Ile Lys Pro Gly Met Val Val Thr
      180              185              190
Phe Ala Pro Pro Thr Ser Pro Leu Lys Ser Ser Pro Ser Arg Cys Thr
      195              200              205
Thr Ser Ser Ser Arg Arg Val Ser Arg Val Thr Thr Ser Val Ser Thr
      210              215              220
Ser Arg Thr Phe Gln Ser Arg Lys Ser Ala Val Val Thr Ser Ala Val
      225              230              235              240
Thr Pro Arg Thr Ile Pro Leu Arg Val Leu Pro Leu Gln Arg Thr Gly
      245              250              255
His Arg Pro Gln Pro His Arg Ser Gly Arg Arg Trp Leu Arg Pro Arg
      260              265              270
Pro Ser Asp Leu Pro His Cys Pro His Cys Leu Gln Val Leu
      275              280              285

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&lt;210&gt; 42407

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42407

```

Leu His Thr Val Glu Ile Asp Gln Ser Thr Arg Arg Pro Asn Gln Pro
  1              5              10              15
Ala Cys Trp Pro Ala Val Thr Ile Glu Leu Leu Ala Ser Leu Leu Gln
      20              25              30
Gly Thr Gly Leu Ser Ala Gln Val Thr His Asn Arg Thr Asp Arg Asn
      35              40              45
Glu Arg Phe Ala Ile Ile Gln Glu Phe Asn Glu Gly Arg Cys Gln Ala
      50              55              60
Leu Ile Thr Cys Arg Ile Gly Leu Ser Gly Ile Ser Leu Gln Gly Val
      65              70              75              80
Asn Ile Val Ile Leu His Ile Pro Ser Glu Gly
      85              90

```

&lt;210&gt; 42408

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42408

Arg Cys Val Asn Asn Arg Tyr Tyr Leu Leu Tyr Gly Glu Asn Val Thr  
 1 5 10 15  
 Ala Phe Pro Asp Asn Phe Arg Met Ile Ala Gly Asp Thr Tyr Leu Arg  
 20 25 30  
 Asp Phe Pro Trp Pro Ile Pro Asp Pro Pro Lys Ser Glu Trp Thr Gly  
 35 40 45  
 Lys Gln Gly Ser Gln Glu Ala Leu Arg Gln Lys Ala Ile Gly Phe Asn  
 50 55 60  
 Cys Leu Asn Tyr Ala Leu Asp Pro Glu Pro Ser Leu Gly Arg His Phe  
 65 70 75 80  
 Leu Pro Asn Lys Thr Tyr Leu Asp Glu His Cys Thr Asp Gly Val Arg  
 85 90 95  
 Phe Glu Leu Met Phe Pro Ser Cys Trp Asn Gly Lys Asp Val Asp Ser  
 100 105 110  
 Asp Asp His Lys Ser His Val Ala Tyr Pro Ser Leu Val Met Asp Gly  
 115 120 125  
 Thr Cys Pro Glu Gly Phe Glu Thr Arg Leu Val Ser Leu Phe Tyr Glu  
 130 135 140  
 Ser Ile Trp Asp Thr Tyr Ala Phe Lys Asp Lys Glu Gly Tyr Phe Val  
 145 150 155 160  
 Ile Ala Asn Gly Asp Pro Thr Gly Phe Gly Tyr His Gly Asp Phe Met  
 165 170 175  
 Gln Gly Trp Glu Ser Gly Val Leu Gln Gln Ala Val Glu Gln Cys Thr  
 180 185 190  
 Asn Pro Ser Gly Gln Val Glu Asp Cys Ala Val Phe Asn Ile Gln Ser  
 195 200 205  
 Glu Asp Glu Gln Gln Gln Cys Thr Val Asp Met Pro Pro Ala Leu Lys  
 210 215 220  
 His Glu Lys Val Thr Leu Thr Ser Gly Gly Leu Pro Asn Asn Leu Ala  
 225 230 235 240  
 Ile Gln Trp Gly Pro Ala Tyr Ala Ser Asp Val Ser Ala Ser Val Ser  
 245 250 255  
 Ser Val Val Ser Ser Ala Leu Ser Ala Ala Thr Glu Ala Val Ala Ser  
 260 265 270  
 Ala Thr Ala Gln Leu Ser Leu His Val Ser Ala Phe Gly Asn Asn Leu  
 275 280 285  
 Gln Ile Ser Lys Pro Thr Ser Thr Trp Thr Pro Thr Pro Thr Thr Ser  
 290 295 300  
 Tyr Val Glu Ser Ala Val Thr Glu Ala Val Val Tyr Val Glu Gln Glu  
 305 310 315 320  
 Ile Ile Val Trp Val Asp Gly Glu Lys Asn Ile Leu Gly Thr Gly Thr  
 325 330 335  
 Gly Ser Leu Glu Thr Leu Ser Thr Thr Thr Arg Thr Thr Thr Arg Val  
 340 345 350  
 Val Ser Thr Val Val Thr Leu Pro Thr Glu Thr Ala Val Lys Arg Glu  
 355 360 365  
 Glu His Val His His Ala His Lys Arg His Gly His Gly His Leu His  
 370 375 380  
 Gln Arg Ser  
 385

&lt;210&gt; 42409

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42409

```

Ser Ser Trp Ser Arg Asn Pro Asn Thr Thr Ser Lys Met Thr Ala Ser
1          5          10          15
Ile Phe Ala Phe Leu Leu Ala Ala Ala Ala Val Ser Ala Ser Thr
          20          25          30
Leu Pro Ser Pro Thr Pro Val Gln Thr Pro Thr Thr Leu Ala Thr Thr
          35          40          45
Thr Ala Pro Pro Ile Thr Thr Pro Ala Ala Ser Asn Pro Thr Cys Gly
          50          55          60
Pro Gly Ser Thr Leu Ile His Thr Thr Asp Cys Thr Met Gly Thr Pro
65          70          75          80
Val Ser Tyr Cys Tyr Ser Ala Pro Pro Pro Ile Ser Cys Ser Thr Gly
          85          90          95
Phe Phe Pro Gly Val Trp His Pro Gly His Cys Ile Glu Ala Ser Thr
          100          105          110
Cys Tyr Pro Val Asp Ala Ser Trp Ile Thr Thr Lys Cys Ser Asn Gly
          115          120          125
Gly Ile Pro Trp Ser Thr Ser Thr Leu Phe Glu Gly Val Leu Ala Gly
          130          135          140
Glu Thr Thr Ser Thr Thr Ile Ser Gly Glu Phe Ser Phe Ala His Pro
145          150          155          160
Arg Leu Ser Leu Ala Ala Gln Gly
          165

```

&lt;210&gt; 42410

&lt;211&gt; 533

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42410

```

Leu Pro Ile Arg Glu His Gly Asn Gly Cys Gly Leu Asn Gly Asn Asp
1          5          10          15
Cys Arg Pro Phe Ser Ala Ser Thr Val Ala Phe Arg Cys Pro Ala Asn
          20          25          30
Cys His Asp Val Lys Leu Leu Gln Pro His Thr Val Gly Asn Gln Thr
          35          40          45
Tyr Ser Tyr Arg Gly Leu Val Val Gly Gly Pro Gln Pro Gly Ser Ser
          50          55          60
Glu Pro Gly Val Tyr Arg Ala Asp Ser Phe Val Cys Gln Ala Ala Ile
65          70          75          80
His Ser Gly Val Ile Thr Asn Thr Val Gly Gly Cys Gly Val Met Lys
          85          90          95
Leu Glu Gly Ala Ala His Ser Phe Pro Gly Ser Lys Gln Asn Gly Ile
          100          105          110
Gln Ser Val Ser Phe Pro Ser Thr Phe Pro Lys Ala Phe Ser Phe Ile
          115          120          125
Asp Leu Ala Ser Ser Gln Ala Thr Cys Pro Pro Asp Pro Arg Trp Thr
          130          135          140
Leu Leu Gly Ile Thr Ile Ala Ala Leu Ala Leu Trp Leu Phe Ser
145          150          155          160
Thr Ser Pro Ser Val Leu Phe Phe Thr Thr Phe Phe Met Leu Phe Cys
          165          170          175
Gln Val Gly Leu Val Ser Asp Pro Pro Ser Ile Pro Gln Phe Ala Asp
          180          185          190
Leu Val Ser Thr Leu Ile Ala Arg Leu Leu Pro Ala Ser Phe Val Val

```

## 18974

```

      195                200                205
Tyr Val Leu Tyr Lys Tyr Cys Ala Arg Pro Leu Leu Thr Pro Leu Ser
  210                215                220
Leu Pro Lys Phe Gln Leu Thr Lys Met Phe Leu Tyr Leu Pro Pro Ala
225                230                235                240
Phe Ile Gly Ala Leu Asn Asn Tyr Thr Phe Ala Arg Leu Ile Pro Leu
      245                250                255
Glu Arg Leu Thr Pro His Asp Ile Gln Arg Gln Pro Gly Ala Lys Leu
      260                265                270
Ala Leu Ala Leu Val Ile Pro Thr Val Val Thr Val Ile Leu Ser Gln
      275                280                285
Ala Trp Gln Ile Arg Gln Gly Gly Leu Met Pro His Tyr Leu Lys Val
      290                295                300
Tyr Cys Thr Met Gly Leu Ile Leu Leu Ile Leu Leu Pro Leu Pro Gly
305                310                315                320
Leu Arg Leu Arg Ile His His Tyr Ile Leu Ala Ile Leu Leu Met Pro
      325                330                335
Gly Thr Gly Ile Pro Thr Arg Pro Ser Leu Ile Tyr Gln Gly Leu Leu
      340                345                350
Leu Gly Leu Phe Ile Asn Gly Val Ala Arg Trp Gly Phe Ala Ser Ile
      355                360                365
Ile Glu Thr Pro Ala Ala Leu Gly Glu Leu Pro Gly Phe Asp Gly Ala
      370                375                380
Lys Gly Trp Trp Gly Ala Thr Tyr Pro Asn Ile Thr Asp Ala Ser Val
385                390                395                400
Val Ile Ser Leu Pro Asp Ala Gly Ser His Gly Tyr Arg Gly Asn Gly
      405                410                415
Asn Ile Thr Phe Glu Leu Trp Glu Arg Glu Arg Met Ala Gln Leu Asp
      420                425                430
Val Asp Gly Ile Ser Val Leu Val Asn Asp Val Glu Arg Trp Arg Gly
      435                440                445
Tyr Leu Asp Glu Asp Lys Arg Gly Glu Phe Thr Trp His Arg His Gly
      450                455                460
His Asn Gly Leu Glu Leu Phe His Gly Pro Thr Ile Glu Ser Asp Pro
465                470                475                480
Asp Ser Arg Val Gly Val Thr Asp Val Lys Asp Asp Asp Lys Pro Glu
      485                490                495
Asp Leu Phe Phe Arg Phe Ala Phe Leu Arg Gly Ala Glu Ala Gly Glu
      500                505                510
Tyr Gly Pro Ala Gly Val Trp Leu Glu Asp Arg Ser Trp Leu Pro Pro
      515                520                525
Ala Thr Pro Lys Ala
      530

```

&lt;210&gt; 42411

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42411

```

Tyr Leu Cys His Arg Gly His Leu Thr Met Ile Gly Glu Gly Pro Glu
1                5                10                15
Asp Gly Ser Arg Val Tyr Ile Ser Pro Val Leu Asp Ser Glu Asn Arg
      20                25                30
Thr Ala Asp Pro Asp Thr Ser Tyr Asp Cys Leu Leu Pro Arg Asp Glu
      35                40                45

```



## 18975

Glu Gly Gly Ala Thr Tyr Val Pro Val Trp Leu Arg Glu Ser Ser Lys  
     50                    55                    60  
 Ser Phe Arg Trp Gly Trp Val Pro Leu Pro Ile Arg Lys Val Gly Arg  
 65                    70                    75                    80  
 Ala Thr Thr Asp Trp Val Lys Gly Pro Thr Pro Leu His Ser Leu Leu  
                     85                    90                    95  
 Leu Lys Pro Leu Phe Pro His Ile Gln Glu Leu Pro Val Arg Tyr Leu  
                     100                    105                    110  
 Asn Arg Leu Phe Pro Lys Arg Lys His Lys Ile Ser Leu Leu Leu Leu  
                     115                    120                    125  
 Leu Tyr Ile Ala Trp Phe Thr Pro Trp Ala Ile Val Leu Leu His Ser  
                     130                    135                    140  
 Arg Ser Ala Gly Tyr Ile Glu Gly Tyr Gly Arg Pro Gln Thr Leu Ser  
 145                    150                    155                    160  
 Cys Ser Thr Thr Phe Trp  
                     165

&lt;210&gt; 42412

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42412

Lys Lys Lys Asp Ile Phe Gly Phe Phe Pro Gln Thr Ile Gln Gly Ala  
 1                    5                    10                    15  
 Asp Ile Leu Ala Thr Ser Ser Glu Gln Lys Tyr Arg Val Phe Met Pro  
                     20                    25                    30  
 Asp Phe Phe Glu Gly Gln Pro Ala Asp Ile Thr Trp Phe Pro Ser Ser  
                     35                    40                    45  
 Asp Arg Arg His Lys Gln Lys Leu Gly Asn Phe Phe Gln Thr Lys Ala  
                     50                    55                    60  
 Ala Pro Pro Ala Asn Leu Pro Lys Ile Pro Ser Phe Val Asp Glu Ala  
 65                    70                    75                    80  
 Asn Lys Leu Ala Pro Asn Gly Lys Ala Phe Glu Ser Trp Ser Ile Leu  
                     85                    90                    95  
 Gly Tyr Cys Trp Gly Gly Lys Ile Ala Cys Leu Ser Ser Ala Lys Asp  
                     100                    105                    110  
 Thr Lys Phe Lys Ala Ala Val Gln Cys His Pro Ala Met Val Asp Pro  
                     115                    120                    125  
 Asn Asp Ala Lys Asn Val Thr Ile Pro Met Ala Met Leu Ala Ser Lys  
                     130                    135                    140  
 Asp Glu Asn Pro Lys Asp Val Glu Ala Phe Gly Ala Asn Leu Lys Val  
 145                    150                    155                    160  
 Asp His Tyr Val Glu Thr Phe Ser Thr Gln Ile His Gly Trp Met Ala  
                     165                    170                    175  
 Ala Arg Ser Asn Leu Glu Asp Glu Asp Val Arg Lys Glu Tyr Glu Arg  
                     180                    185                    190  
 Gly Tyr Lys Thr Ala Leu Ser Phe Leu Gln Lys His Ala  
                     195                    200                    205

&lt;210&gt; 42413

&lt;211&gt; 979

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42413

Cys Lys Ala Tyr Phe Thr Leu Arg Gly Ala Pro Ala Gln Arg Cys Ile  
 1 5 10 15  
 Leu Ile Asn Leu Ile Lys Ala Glu Ser Thr Thr Thr Pro Asn Ala Gln  
 20 25 30  
 Ser Val Lys Asn Pro Asp Arg Lys Gly His Cys Leu Gly Ser Ser Trp  
 35 40 45  
 Thr Arg His Ile His His Ser Gly Glu His Gly Gly Gly Gln Asp Ala  
 50 55 60  
 Ser Lys Ser Thr Ala Asp Thr Leu Ala Arg Ser His Asn Ala Tyr Val  
 65 70 75 80  
 His Asp Lys Pro Ser Ser Glu Thr His Leu Ser Arg Asp Asp Ile His  
 85 90 95  
 Ala Ile Phe Ser Gly Ala Pro Tyr Phe Leu Leu Glu Lys Gly Lys His  
 100 105 110  
 Gly Leu Trp Tyr Pro His Val Ile Phe Pro Trp Asp Asp His Asp Pro  
 115 120 125  
 Thr Ile Gln His Leu Trp Asp Arg Lys Leu Leu Pro His Pro Ser Tyr  
 130 135 140  
 Thr Leu Cys Thr Leu His Ala His Leu Pro Val Pro Glu Gly Phe Leu  
 145 150 155 160  
 Glu Gly Asp Pro Pro Leu Leu Leu Asp Ser Trp Lys Arg Thr Gly Ala  
 165 170 175  
 Pro Lys Arg Ala Thr Phe Asp Ile Gly Ile Phe Glu Val Pro Asn Met  
 180 185 190  
 Leu Ala Met Ser Gly Ile Glu Pro Gly Thr Val Gly Phe Arg Tyr Phe  
 195 200 205  
 Leu Glu Leu Pro Val Ala Asp Ser Val Arg Phe Val His Thr Gly Thr  
 210 215 220  
 Ser His Pro His Thr Asn Leu Leu His Ile His Ser Leu Pro Ala Val  
 225 230 235 240  
 Gln Ala Asp Glu Leu Leu Glu His Tyr His Glu Pro Tyr Ser Gln Cys  
 245 250 255  
 Leu Asp Gly Thr Ile His Asp Arg Lys Lys Leu Leu Gly Asp Gly Pro  
 260 265 270  
 Thr Ala Trp Lys Arg Ile Gly Leu Arg Asp Ile Asn Phe Lys Ala Val  
 275 280 285  
 Val Asp Arg Leu Glu Thr Leu Arg Asn Leu Arg His Lys Leu Leu Tyr  
 290 295 300  
 Glu Thr Thr Gln Lys Thr Ile Leu Asp Val Glu Thr Ala Gln Asp Leu  
 305 310 315 320  
 Tyr Ser Asp Leu Phe Ser Lys Phe Leu His Ser Pro Pro Arg Ser Met  
 325 330 335  
 Leu Lys Asp Leu Asp Ser Thr His Gly Leu Lys Ala Glu Ile Lys Ala  
 340 345 350  
 Leu Thr Met Val Leu Ala Thr Pro Gly Ala Trp Phe Asp Phe Ser Leu  
 355 360 365  
 Val Asp Trp Arg Phe Arg Ile Gly Gln Leu Leu Trp Glu Ala Pro Pro  
 370 375 380  
 His Val Asp Gly Asp Phe Phe Asp Pro Ser Ile Leu His Lys Pro Trp  
 385 390 395 400  
 Ala His Pro Gly Leu Glu Gln Lys Trp Phe Leu Ile Gln Met Leu Leu  
 405 410 415  
 Ala Ala Glu Leu Leu Leu Arg Leu Asp Ala Ile Val Lys Val Gly Leu  
 420 425 430  
 Leu Glu Ser Ser Lys Asp Val Ser Val Ser Ala Gln Asp Val Asn His  
 435 440 445

Phe Asp Lys Leu Arg Asn Pro Lys Val Asp Trp Asp Leu Val Val Val  
 450 455 460  
 Arg Arg Phe Phe Asp Ser Phe Lys Ile Ser Trp Val Asp Cys Gln Ser  
 465 470 475 480  
 Ala Ala Val Ser Asn Ala Pro Ser Gln Pro Pro Thr Gln Glu Lys Ser  
 485 490 495  
 Pro Gln Lys Ala Arg Arg Phe Ser Phe Phe Asp Ser Ile Thr Arg Arg  
 500 505 510  
 His Ser Val Ala Ser Ser Pro His Ser Asp Asp Gln Gly Met Phe Arg  
 515 520 525  
 Leu Thr Pro Thr His Ile Glu Gln Gln Val Glu Gly Leu Leu Val Phe  
 530 535 540  
 Ala Glu Asn Ile Gly Trp Pro Arg Val Asp Ser Leu Arg Glu Ile Phe  
 545 550 555 560  
 Ala Ser Lys Leu Gln His Gly Asp Ser Asn Leu Asp Ile Lys Glu Ile  
 565 570 575  
 Phe Asn Arg Pro Ala Arg Gly Ala Ser Val Glu Gly His Thr Glu Glu  
 580 585 590  
 Thr Thr Lys Asp Asp Thr Phe Arg Lys Leu Ala Thr Arg Arg Leu Val  
 595 600 605  
 Val Leu Ser Gly Pro Ser Ser Asp Asp Thr Lys Ser Ala Met Gly Gly  
 610 615 620  
 Trp Ile Thr Arg Cys Trp Leu Ser Gly Phe Val Val Pro Gly Gln Ala  
 625 630 635 640  
 Ile Ser His Leu Leu Met Ala Thr Val Leu Glu Asn Asp Gln Glu Ala  
 645 650 655  
 Ile Ala Arg Leu Gly Leu Ile Ala Asn Leu Tyr Gly Gly Phe Ala Leu  
 660 665 670  
 Asn Gly Lys Ser Trp Trp Ser Gln Glu Cys Ile Val Gly Arg Val Leu  
 675 680 685  
 Ser Ala Leu Asn Glu Thr Lys Ala Cys Met Gly Trp Ile Ser Ser Thr  
 690 695 700  
 Asn Ile Pro Lys Glu Tyr Gln Thr Gln Glu Pro Leu Asp Asp Ala Trp  
 705 710 715 720  
 Phe Glu Val Ile Val Ser Glu Pro Pro Thr Gly Leu Gly Lys Pro Arg  
 725 730 735  
 Ile Lys Gln Gly Asn Lys Ile Ser Val Glu Ser Thr Pro Leu Gly Leu  
 740 745 750  
 Gly Ser Leu Val Ser Gly Glu Phe Thr Leu Pro Val Asp Asp Val Pro  
 755 760 765  
 Asp Ala Lys Ser Pro Val Asp Val Lys Phe Asn Ala Leu Thr Phe Ser  
 770 775 780  
 Thr Met Glu Glu Arg Arg Asn Ser Asn Gln His Ala Ile Val Ala Arg  
 785 790 795 800  
 Lys Ala Thr Met Ser Phe Ser Leu Arg Thr Gly Thr Ser Thr Ala Thr  
 805 810 815  
 Ala Asp Val Ser Phe Pro Leu Thr Tyr Asn Val Asn Phe Val Thr Ser  
 820 825 830  
 His Ala Cys Arg Leu Pro Pro Gly Leu Ala Ser Tyr Gln His Asn Ala  
 835 840 845  
 Ser Pro Asp Gly Asp Gly Lys Gly Asp Arg Ser Arg Ser Leu Ser Pro  
 850 855 860  
 Ala Glu Ala Phe Ser Leu Lys Tyr Gly Arg Leu Pro Gly His Pro Leu  
 865 870 875 880  
 Pro Ser Ser Tyr Arg Tyr Lys Tyr Leu Ala Leu Asp Asp Leu Pro Ala  
 885 890 895

## 18978

Pro Glu Gly Ser Ser Ile Ala Lys Val Phe Glu His Ala Gly Phe Asp  
                   900                  905                  910  
 Leu Thr Val Asp Glu Val Phe Val Val Asp Ala Arg Gln Ser Ala Glu  
                   915                  920                  925  
 Lys Glu Ala Leu Ala Arg Ser Trp Cys Ala Ser Val Gly Tyr Asp Ala  
                   930                  935                  940  
 Ile Ile Gly Arg Thr Gly Arg Thr Cys Leu Gly Cys Cys Ile Arg Glu  
 945                  950                  955                  960  
 Ala Arg Ala Leu Ala Val Lys Val Val Ile Arg Val Gly Asp Gln Glu  
                   965                  970                  975  
 Ile Thr Gly

<210> 42414  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 42414  
 Leu Val Thr Gln Val Ser Gln Gly Leu Lys Ala Val Asp His Gly Phe  
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 Lys Ile Asp Ile Ser Gln Thr Asn Ser Phe Pro Gly Gly Arg Thr Ile  
                   20                  25                  30  
 Thr Lys Lys Phe Phe Ser Ile Met Tyr Ser Ala Val Glu Thr Leu Arg  
                   35                  40                  45  
 Val Gly Leu Met Val Met Leu Gln Lys Phe Val Ser Leu Asn Gly Arg  
                   50                  55                  60

<210> 42415  
 <211> 2195  
 <212> PRT  
 <213> A.fumigatus

<400> 42415  
 Cys Cys Pro Ser Leu Leu Ser Glu Val Ser Gln Thr Ala Tyr Val Leu  
 1                  5                  10                  15  
 Met Ser Leu Pro Thr Asn Leu Gln Ala Phe Arg Phe Val Asn Ser Ser  
                   20                  25                  30  
 Trp Gln Glu His Glu Tyr Glu Leu Cys Leu Thr Leu Leu Arg Leu Asn  
                   35                  40                  45  
 Gln Ala Gly Cys Ile Thr Ser Glu Leu Ser Lys Pro Gly Tyr Val Thr  
                   50                  55                  60  
 Cys Pro Thr Pro Trp Lys Thr Arg Ile Lys Asp Ile Leu Gly Ser Arg  
 65                  70                  75                  80  
 Gly Pro Ser Ala Thr Glu Val Ala Leu Leu Asn Ala Tyr Ser Lys Leu  
                   85                  90                  95  
 Pro Ser Ala Ile Ser Leu Thr Thr Glu Pro Ser Leu Leu Pro Asp Met  
                   100                  105                  110  
 Thr Arg Ser Leu Tyr Asp His Leu Ser Arg Val Leu Lys Glu Ser Glu  
                   115                  120                  125  
 Leu Asp Leu Ser Thr Ser Thr Lys Phe Phe Leu Gly Gln Gly Phe Lys  
                   130                  135                  140  
 Ser Tyr Val Asp Leu Ala Ala Ser Asn Glu Gly Val Asp Ser Gly Leu  
 145                  150                  155                  160  
 Trp Gly Ala Ile Gly Ser Ala Ala Ala Lys Tyr Ser Arg Ile Gln Pro  
                   165                  170                  175

Phe Leu Gly Ala Ile Leu Thr Tyr Val Ser Ser Cys Ser Thr Lys Leu  
 180 185 190  
 Asp Phe Gly Gln Pro Ala Leu Glu Asp Phe Ala Asn Val Leu Ile Thr  
 195 200 205  
 Asn Leu Ala Gly Pro Ser Gln Gln Val Arg Leu Leu Ser Leu Lys Ile  
 210 215 220  
 Leu Arg Glu Leu Val Gln Ala Ser Gly Glu Asp Pro Ala Pro Ile Ser  
 225 230 235 240  
 Leu Ala Ile Glu Val Glu Glu Ser Pro Leu Asn Leu Gln Thr Ala Arg  
 245 250 255  
 Val Leu Ser Met His Val Arg Lys Leu Ala Ile Leu Tyr Pro Gln Val  
 260 265 270  
 Ala Ser Gln Arg Trp Met Ala Ser Leu Ile Pro Asn Phe Cys Phe Gly  
 275 280 285  
 Leu Phe Ser Lys Lys Leu Ala Pro Leu Trp Glu Asp Ser Ala Ala Ala  
 290 295 300  
 Leu Lys Ser Ile Ser Glu His Ser Ala Gly Glu Lys Ile Val Ser Asp  
 305 310 315 320  
 Leu Ala Phe Gln Trp Leu Gln Glu Arg Gly Ser Thr Asp Thr Ala Asp  
 325 330 335  
 Lys Ala Asp Asp Glu Ala Glu Tyr His Thr Ser Gly Asp Phe Lys Cys  
 340 345 350  
 Phe Asn Ala Ala Asn Ile Glu Asp Arg Leu Ala Ser His Phe Asn Ala  
 355 360 365  
 Thr Val Pro Pro Ser Ser Lys Leu Met Glu Gly Phe Glu Arg Asp His  
 370 375 380  
 Glu Val Ser Asp Val Val Pro Val Ala Pro Arg Thr His Ala Leu Arg  
 385 390 395 400  
 Val Leu Asn Ala Ala Pro Ala Leu Ala Glu Lys Lys Ser Arg Leu Ile  
 405 410 415  
 Val Pro Leu Phe Leu Ala Trp Ala Leu Arg Asp Asp Glu Asp Val Glu  
 420 425 430  
 Ser Ala Asn Asp Leu Tyr Ile Pro Trp Gly Phe His Asp Arg Leu Ser  
 435 440 445  
 Phe Leu Gly Leu Leu Gly Lys Phe Ala Asn Pro Arg Val Leu Phe Lys  
 450 455 460  
 Ala Ser Glu Val His Asp Ala Leu Leu Gly Leu Leu Cys His Gly Asn  
 465 470 475 480  
 Ser Glu Ile Gln Lys Ser Ala Leu Lys Ala Leu Phe Thr Trp Lys Ser  
 485 490 495  
 Pro Asn Ile Met Pro Tyr Gln Glu Asn Leu Leu Asn Ile Leu Asp Glu  
 500 505 510  
 Ser Arg Phe Lys Asp Glu Leu Ser Val Phe Val His Val Gly Gly Glu  
 515 520 525  
 Asp Ser Leu Ile Glu Glu Ala His Arg Gly Glu Leu Leu Pro Val Leu  
 530 535 540  
 Leu Arg Leu Leu Tyr Gly Arg Met Ile Ser Lys Ala Ser Ala Ser Gly  
 545 550 555 560  
 Gln Ala Gly Gln Val Gly Arg Arg Lys Ala Ile Leu Arg Thr Leu Ser  
 565 570 575  
 Gln Leu Pro Asp Asn Glu Phe Glu Ile Phe Met Arg Val Ser Phe Gly  
 580 585 590  
 Pro Leu Gly Asp Val Ser Leu Leu Gln Glu Gly Gln Val Asn Gln Glu  
 595 600 605  
 Ala Phe Ala Arg Asp Leu Val Ser Pro Arg Arg Gln Met Gly Leu Leu  
 610 615 620

## 18980

Arg Met Ile Glu Thr Val Phe Asp Thr Leu Gln Ser Arg Met Ala Leu  
 625 630 635 640  
 Tyr Ala Gln Arg Ser Met Asp Thr Val Leu Tyr Cys Leu Val Arg Ala  
 645 650 655  
 Cys Arg Glu Leu Glu Lys Asp Ser Ser Asn Val Ala Ala Asp Ser Pro  
 660 665 670  
 Glu Gly Arg Leu Leu Thr Val Phe Arg Asn Ile Arg His Thr Cys Ile  
 675 680 685  
 Arg Cys Leu Glu Leu Ile Phe Ala Val Ser Leu Asp Lys Asp Trp Ser  
 690 695 700  
 Ala Tyr Ile His Leu Ile Phe Asp Glu Val Ile Asn Pro Arg Leu Gln  
 705 710 715 720  
 Asn Phe Ala Ile Glu Thr Ala Gln Gly Val Ser Gly Leu Leu Arg Leu  
 725 730 735  
 Phe His Thr Trp Ala Thr Ala Pro Arg Ser Ser Phe Tyr Leu Val Arg  
 740 745 750  
 His Asn Asn Thr Val Leu Thr Lys Val Val Asp Cys Leu Ser Val Glu  
 755 760 765  
 Ser Ala Arg Asp Glu Val Lys Val Tyr Val Met Asp Glu Ile Leu Val  
 770 775 780  
 Pro Leu Ile Arg Leu Ala Ser Gly Lys Glu Leu Glu Glu Lys Glu Glu  
 785 790 795 800  
 Met Ser Asp Phe Ser Ala Asp Glu Ile Arg Ser Glu Val Leu Ser Pro  
 805 810 815  
 Tyr Ile Glu His Thr Leu Ser His Leu Gly Arg Leu Leu Lys Arg Gly  
 820 825 830  
 Pro Ser Arg Thr Val Leu Val Ser Gly Val Gln Thr Ile Ser Leu Leu  
 835 840 845  
 Ala Pro Cys Val Glu Ser Phe Gln Glu Thr Thr Glu Leu Val Gly Ile  
 850 855 860  
 Thr Thr Tyr Leu Leu Arg Gln Pro Ala Asp Arg Val Ser Pro Lys Thr  
 865 870 875 880  
 Lys Ser Gly Leu Leu Arg Ile Leu Glu His Phe Leu Pro Leu Phe Asn  
 885 890 895  
 Pro Glu Glu Asp Pro Thr Leu Phe Gln Glu Val Phe Glu Ala Val Ser  
 900 905 910  
 Ser Met Phe Asp Tyr Phe Arg Asp Asp Ala Asn Arg Glu Val Leu Ser  
 915 920 925  
 Gly Val Phe Ala Ala Phe Val Lys His Asp Pro Ala Leu Asp Lys Val  
 930 935 940  
 Ala Glu Leu Cys Ala Asp Leu Asn Ser Ile Ser Arg Lys Lys Leu Glu  
 945 950 955 960  
 Val Asp Tyr Glu Arg Arg Leu Gln Ala Phe Ala Gln Ile Asn Asp Ser  
 965 970 975  
 Leu Trp Glu Ile Leu Asp Ala Lys Gln Trp Arg Pro Leu Leu Tyr Asn  
 980 985 990  
 Met Leu Phe His Val Lys Asp Glu Asp Glu Leu Ala Ile Arg Ser Ser  
 995 1000 1005  
 Ala Ser Phe Gly Leu Asn Arg Phe Ile Glu Arg Ala Thr Lys Glu Asp  
 1010 1015 1020  
 Ser Ala Asp Ala Asp Glu Phe Glu Pro Leu Val Lys Glu Ile Leu Phe  
 1025 1030 1035 1040  
 Pro Ala Leu Gln Ser Gly Ile Arg Gln Lys Ser Glu Leu Val Arg Thr  
 1045 1050 1055  
 Glu Phe Val Ser Thr Leu Gly Tyr Phe Val Lys Met Asn Pro Thr Arg  
 1060 1065 1070

## 18981

Pro Asn Val Gln Asp Met His Gly Leu Leu Val Gly Asp Asp Glu Glu  
 1075 1080 1085  
 Ala Ser Phe Phe Thr Asn Ile Leu His Ile Gln Gln His Arg Arg Leu  
 1090 1095 1100  
 Arg Ala Leu Arg Arg Leu Ala Ser Glu Ala Ala Lys Gly Ser Leu Gln  
 1105 1110 1115 1120  
 Ala Ser Asn Ile Ser Thr Ile Phe Ile Pro Leu Asn Glu His Phe Val  
 1125 1130 1135  
 Phe Asp Gln Glu Val Asp Glu Gly Gly His Asn Leu Ile Ala Glu Ala  
 1140 1145 1150  
 Val Ala Thr Ile Gly Ala Leu Ala Glu Trp Leu Asp Trp Asn Gln Phe  
 1155 1160 1165  
 Arg Ala Ile Phe Arg Arg Tyr Arg Gly Tyr Met Gln Ser Lys Ser Glu  
 1170 1175 1180  
 Met Glu Lys Asn Ile Leu Arg Leu Leu Gly Arg Met Ala Asp Ala Leu  
 1185 1190 1195 1200  
 Ser Asn Ala Met Arg Gln Lys Thr Val Val Gln Lys Thr Gly Asp Asp  
 1205 1210 1215  
 Ser Met Glu Glu Ile Glu Ile Pro Ala Pro Ser Lys Cys Asn Leu Ala  
 1220 1225 1230  
 Arg Thr Met Pro Ser Pro Ala Lys Val Ala Thr Glu Leu Thr Thr Asn  
 1235 1240 1245  
 Phe Ile Pro Phe Leu Thr Asp Phe Ile His His Lys Asp Glu Ala Gln  
 1250 1255 1260  
 Met Ser Leu Arg Leu Pro Ala Ala Val Thr Thr Ile Lys Leu Leu Lys  
 1265 1270 1275 1280  
 Leu Leu Pro Ala Glu Asp Met Ala Ile Arg Leu Pro Pro Val Leu Leu  
 1285 1290 1295  
 Asp Val Cys Ser Ile Leu Lys Ser Arg Ser Gln Asp Ala Arg Asp Thr  
 1300 1305 1310  
 Ala Arg Lys Thr Leu Asn Glu Ile Ala Leu Leu Leu Gly Pro Asn Tyr  
 1315 1320 1325  
 Phe Gly Tyr Ile Leu Arg Glu Leu Arg Ser Thr Leu Thr Lys Gly Tyr  
 1330 1335 1340  
 Gln Leu His Val Leu Ser Phe Thr Val His Ser Met Leu Val Ala Thr  
 1345 1350 1355 1360  
 Thr Asp Asp Phe Gln Gln Gly Asp Leu Asp Tyr Cys Leu Ala Asp Leu  
 1365 1370 1375  
 Ser Ala Ile Val Met Asp Asp Thr Phe Gly Val Val Gly Gln Glu Lys  
 1380 1385 1390  
 Asp Ala Glu Asp Tyr Val Ser Lys Met Lys Glu Val Lys Ser Ser Lys  
 1395 1400 1405  
 Ser Tyr Asp Ser Met Glu Leu Leu Ala Lys Asn Ala Thr Val Arg Asn  
 1410 1415 1420  
 Leu Ala Asn Leu Leu Arg Pro Leu Glu Ser Leu Leu Arg Glu Lys Leu  
 1425 1430 1435 1440  
 Asn Ser Ser Met Val Lys Lys Leu Asp Glu Leu Leu Arg Arg Ile Gly  
 1445 1450 1455  
 Val Gly Leu Leu Arg Asn Pro Gly Ala Glu Ser Arg Asp Ile Leu Val  
 1460 1465 1470  
 Phe Cys Tyr Glu Val Ile Lys Glu Thr Tyr Arg Asp Pro Ala Gly Val  
 1475 1480 1485  
 Glu Lys Glu Pro Ser Val Ser Leu Arg Glu Gln Arg Tyr Leu Val Asn  
 1490 1495 1500  
 Leu Lys Gly Ala Asn Arg Gly Asp Lys Arg Gly Thr Thr Ser Ser His  
 1505 1510 1515 1520

## 18982

Ile Tyr Lys Leu Ala Arg Phe Ser Leu Asp Val Leu Arg Ser Ile Leu  
 1525 1530 1535  
 Asn Lys Tyr Asp Ser Leu Leu Thr Pro Thr Asn Leu Ala Gly Phe Ile  
 1540 1545 1550  
 Pro Ile Ile Gly Asp Ser Leu Ile Gln Ala His Glu Glu Val Lys Ile  
 1555 1560 1565  
 Ala Ala Val Arg Leu Leu Ser Thr Ile Ile Lys Leu Pro Leu Ala Asp  
 1570 1575 1580  
 Ile Asp Asn Asn Ala His Val Tyr Phe Thr Glu Ala Val Lys Ile Ile  
 1585 1590 1595 1600  
 Lys Glu Ala Pro Ser Thr Asn Thr Glu Ala Ala Gln Ala Ser Leu Lys  
 1605 1610 1615  
 Leu Val Ser Ala Met Leu Arg Glu Arg Lys Ser Ala Lys Leu Arg Asp  
 1620 1625 1630  
 Gly His Leu Ala Tyr Leu Leu Gln Arg Leu Val Ser Asp Ile Glu Glu  
 1635 1640 1645  
 Pro Asp Arg Gln Gly Val Thr Phe Asn Phe Ile Arg Ala Val Ile Ala  
 1650 1655 1660  
 Arg Lys Phe Val Val Pro Glu Ile Tyr Glu Leu Met Asp His Ile Gly  
 1665 1670 1675 1680  
 Ala Met Met Val Thr Asn Gln Thr Arg Ser Ala Arg Asp Leu Ala Arg  
 1685 1690 1695  
 Gly Thr Tyr Ile His Phe Leu Ile Glu Tyr Pro Gln Ala Lys Asn Arg  
 1700 1705 1710  
 Trp Ala Lys Gln Leu Ser Phe Leu Ala Lys Asn Leu Asp Tyr Lys His  
 1715 1720 1725  
 Gln Glu Gly Arg Gln Ser Val Met Glu Ala Ile His Met Leu Leu Ala  
 1730 1735 1740  
 Lys Thr Gly Thr Glu Leu Ala Gln Asp Ile Val Gly Thr Phe Phe Leu  
 1745 1750 1755 1760  
 Pro Val Val Met Val Met Ala Asn Asp Asp Ala Pro Glu Cys Arg Glu  
 1765 1770 1775  
 Met Ala Gly Ala Leu Leu Gly Glu Leu Phe Ser Arg Ala Asp Arg Glu  
 1780 1785 1790  
 Gln Met Lys Ser Met Leu Thr Pro Ile Arg Ser Trp Leu Glu Gln Thr  
 1795 1800 1805  
 Glu Asn Thr Leu Leu Thr Ser Thr Gly Leu Gln Ala Met Arg Val Phe  
 1810 1815 1820  
 Phe Glu Val Glu Glu Thr Ile Lys Asp Lys Glu Ala Arg Phe Val Met  
 1825 1830 1835 1840  
 Glu Ile Leu Pro Glu Ile Met Gln Pro Ile Leu Gln Ser Asp Glu Thr  
 1845 1850 1855  
 Glu His Trp Glu Val Leu Tyr Phe Ala Leu Gln Leu Leu Thr Lys Leu  
 1860 1865 1870  
 Cys Lys Ala Val Pro Ala Val Ala Leu Ala Lys Glu Arg Gly Pro Ile  
 1875 1880 1885  
 Trp Ala Ala Val Arg Glu Cys Leu Phe Tyr Pro His Ala Trp Val Lys  
 1890 1895 1900  
 Thr Cys Ala Ser Asn Leu Val Gly Thr Trp Phe Ala Asp Leu Ala Arg  
 1905 1910 1915 1920  
 Thr Asn Ala Ala Asn Gly Tyr Gly Ser Ile Pro Leu Val Gly Ser Thr  
 1925 1930 1935  
 Gly Leu Ala Leu Asp Lys Asp Ala Met Leu Gln Leu Ile Arg Ala Ser  
 1940 1945 1950  
 Leu Arg Cys Leu Arg Thr Pro Gly Ile Ser Glu Glu Leu Ala Met Gln  
 1955 1960 1965



## 18983

Thr Val Arg Asn Ile Ile Phe Leu Gly Arg Cys Cys Ala Gln Asn Gly  
 1970 1975 1980  
 Leu Val Phe Pro Ser Ser Gly Ser Lys Asp Ala Glu Leu Ser Glu Ser  
 1985 1990 1995 2000  
 Glu Ser Glu Asp Glu Asp Asp Asp Glu Glu Thr Ala Asn Gly Arg Thr  
 2005 2010 2015  
 Glu Arg Ser Asp Arg Ser Ala Ile Gln Tyr Ile Phe Gln Gln Val Ser  
 2020 2025 2030  
 Ser Ile Leu Arg Arg Glu Leu Leu Thr Thr Lys Ala His Ser Leu Ile  
 2035 2040 2045  
 Pro Lys Ser Ala Ser Ile Gly Leu Leu Ala Ala Leu Cys Arg His Leu  
 2050 2055 2060  
 Glu Thr Asp Gln Ile Arg Pro Ser Leu Pro Thr Ile Leu Leu Pro Leu  
 2065 2070 2075 2080  
 Gln His Leu Thr Asp Pro Ser Ile Pro Ala Pro Arg Ser Ser Asp Glu  
 2085 2090 2095  
 Arg Phe Arg Glu Ser Tyr Lys Ala Leu Val Ser Asn Cys His Glu Val  
 2100 2105 2110  
 Leu Asp Leu Leu Gln Lys Lys Leu Gly Thr Ser Glu Tyr Ile Thr Gln  
 2115 2120 2125  
 Met Ala Ser Val Gln Asp Ser Ile Lys Glu Arg Arg Glu Gly Arg Arg  
 2130 2135 2140  
 Met Lys Arg Arg Ile Glu Ala Val Ala Glu Pro Glu Lys Tyr Glu Arg  
 2145 2150 2155 2160  
 Asp Lys Lys Arg Arg Asn Asp Arg Lys Arg Glu Lys Arg Lys Glu Lys  
 2165 2170 2175  
 Gly Met Glu Gln Arg Gly Lys Arg Ser Ser Pro Arg Gly Ser Lys Asp  
 2180 2185 2190  
 Arg Arg Tyr  
 2195

<210> 42416  
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 <212> PRT  
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<400> 42416  
 Gln Ala Leu Pro Lys Cys Phe Leu Ser Arg Asn Thr Ala Thr Ile Leu  
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 Ser Ala Leu Leu Ser Leu Ser Pro Ser Ile Leu Glu Met Val Ala Thr  
 20 25 30  
 Ser Ser Ala Ser Arg Thr Ala Ser Val Lys Arg Val Lys Lys Gly Thr  
 35 40 45  
 Glu Thr Thr Lys Ser His Arg Phe Glu Pro Phe Ser Gln Arg Val Ala  
 50 55 60  
 Lys Leu Lys Ile Asp Pro Ile His Arg Val Arg Arg Pro Ser Phe Gly  
 65 70 75 80  
 Glu Glu Gly Glu Gly Asp Gly Asp Glu Thr Phe Ser Tyr Phe Arg Ser  
 85 90 95  
 Ala Phe Asp His Trp Ile Glu Leu Asn Leu Ser Asp Asn Phe Ser Gln  
 100 105 110  
 Phe Ala Arg Lys Val Asn Pro Leu Cys Glu Ser Leu Ala Gln Ile Leu  
 115 120 125  
 Tyr His Glu Asp Lys Ile Met Gly Leu Leu Val Glu Tyr Ile Glu Lys  
 130 135 140  
 Arg Asp Gln Leu Ser Ile Glu Pro Leu Leu Thr Leu Leu Ala Gln Phe

[illegible]

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<210> 42417
<211> 337
<212> PRT
<213> A.fumigatus
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Val Phe Thr Lys Leu Ala Lys Leu His Val Lys Gln Asn Phe Ser Ile  
20 25 30  
Ala Ile Ile Val Gly Asp Leu Phe Gly Asp Cys Ser Ser Glu His Glu  
35 40 45

## 18985

Leu Asp Glu Ile Ser Ala Leu Leu Gln Gly Asn Ile Asn Val Pro Leu  
 50 55 60  
 Pro Thr Tyr Phe Gly Leu Gly Asn Arg Pro Leu Pro Thr Arg Ile Val  
 65 70 75 80  
 Glu Arg Ile Glu Ala Asn Asp Glu Val Cys Pro Asn Leu Tyr Phe Leu  
 85 90 95  
 Gly Lys Arg Gly Thr Leu Lys Thr Ala Glu Gly Ile Arg Leu Val Ala  
 100 105 110  
 Leu Gly Gly Asn Leu Glu Ala Asp Ser Lys Ala Thr Asn Lys Phe His  
 115 120 125  
 Pro Gly Tyr Thr Glu Ser Asp Ala Arg Ala Leu Tyr Gly Ala His Ser  
 130 135 140  
 Ala Asp Ile Leu Ile Thr His Gln Trp Pro Lys Gly Ile Arg Thr Gly  
 145 150 155 160  
 Ser Ser Ala Pro Leu Pro Glu Asp Ala Lys Val Pro Gln Glu Val Gln  
 165 170 175  
 Cys Ile Ala Asp Leu Cys Ser Thr Leu Lys Pro Arg Tyr His Leu Ser  
 180 185 190  
 Ser Ser Asp Gly Phe Phe Tyr Glu Arg Glu Pro Phe Phe His Met Pro  
 195 200 205  
 Ser Glu Asp Asn Pro Asp Ala Lys Pro Leu Thr Arg Phe Ile Ser Leu  
 210 215 220  
 Ala Ser Tyr Ser Lys Thr Ser Lys Gln Lys Trp Met Tyr Ala Phe Thr  
 225 230 235 240  
 Leu Asp Pro Lys Ala Pro Pro Pro Leu Thr Ile Pro Val Gly Asp Thr  
 245 250 255  
 Ala Thr Pro Val Ala Pro Ile Gln Val Lys Arg Lys Val Leu Pro Ser  
 260 265 270  
 Gln Arg Glu Ser Tyr His Arg Phe Ala Gly Ile Glu Glu Asp His Ser  
 275 280 285  
 Arg Pro Arg Lys Arg Ala Arg Ala Pro Pro Pro Gly Pro Glu Gln Cys  
 290 295 300  
 Leu Phe Cys Leu Ser Asn Pro Asn Ile Ala Thr His Leu Ile Thr Ser  
 305 310 315 320  
 Ile Gly Asn Val Leu Thr Thr Glu Trp Pro Asn Arg Pro Leu Thr Arg  
 325 330 335  
 Gly

&lt;210&gt; 42418

&lt;211&gt; 490

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42418

Ile Lys Phe Gln Leu Thr Met Ala Ser Ser Ser Arg Ser Leu Pro Ser  
 1 5 10 15  
 Ser Pro Ala Gly Leu Val Glu Ser Pro Ser Lys Ser Met Ser Pro Asn  
 20 25 30  
 Asn Ala Arg Pro Ala His Arg Ala Arg Pro Pro Lys Pro Asn Tyr Lys  
 35 40 45  
 His Ile His Arg Phe Pro Leu Pro Leu Asp Val His Pro Leu Pro Pro  
 50 55 60  
 Leu Ile Pro His Asn Pro Leu Ser Leu Ile Ser Val Val Leu Ser Tyr  
 65 70 75 80  
 Leu Thr Tyr Phe Ile Ser Pro Pro His Gln Glu Thr Tyr Ala Ala Tyr

## 18986

				85					90					95			
Phe	Asp	Ser	Ala	Thr	Ser	Ser	Val	His	Val	Thr	Asp	His	Lys	Ala	Ile		
			100					105					110				
Gln	Ala	Leu	Trp	Glu	Met	Gly	Phe	Phe	Gly	Lys	Gly	Thr	Leu	Ser	Arg		
		115					120					125					
Ser	Gln	Pro	Ser	Trp	Leu	Glu	Arg	Glu	Lys	Lys	Arg	Arg	Gly	Leu	Leu		
		130				135					140						
Gly	Gly	Gln	Thr	Asn	Glu	Glu	Leu	Thr	Arg	Gln	Arg	Arg	Thr	Glu	Arg		
145					150					155					160		
Arg	Glu	Leu	Lys	Leu	Glu	Arg	Ala	Arg	Met	Glu	Lys	Val	Ala	Ile	Glu		
				165					170					175			
Lys	Arg	Leu	Lys	Ala	Glu	Ala	Ala	Ala	Arg	Glu	Ser	Gly	Ala	Thr	Thr		
			180					185					190				
Val	Asp	Gln	Thr	Thr	Ala	Thr	Leu	Leu	Thr	Asp	Val	Ala	Ser	Gly	Gly		
	195						200					205					
Thr	Ala	Val	Thr	Leu	Glu	Lys	Phe	Ser	Leu	Arg	Lys	Ala	Arg	Glu	Ala		
210						215					220						
Arg	Met	Leu	Glu	Ser	Arg	Arg	Ser	Lys	Glu	Gln	Glu	Asn	Lys	Glu	Pro		
225					230					235					240		
Ala	Ser	Pro	Ser	Ser	Gly	Gln	Glu	Ser	Pro	Ser	Lys	Ala	Val	Arg	Phe		
				245					250					255			
Ser	Pro	Val	Val	Gln	Glu	Lys	Glu	Phe	Ala	Ser	Asp	Ser	Ala	Thr	Leu		
			260					265					270				
Arg	Leu	Pro	Gly	Leu	Ala	Thr	Glu	Ala	Gln	Glu	Thr	Ser	Gln	Glu	Glu		
	275						280					285					
Leu	Pro	Leu	Lys	Asn	Glu	Glu	His	Leu	Gln	Leu	Ser	Asn	Glu	Glu	Ala		
290					295						300						
Phe	Phe	Leu	Ala	Tyr	Gly	Leu	Gly	Val	Leu	His	Val	Tyr	Asp	His	Gln		
305					310					315					320		
Gln	Lys	Thr	Ile	Ile	Pro	His	Thr	Ser	Leu	Leu	Ser	Leu	Phe	Cys	His		
			325						330					335			
Asn	Ser	Tyr	Tyr	Pro	Pro	Arg	Asp	Pro	Ser	Thr	Asp	Leu	Lys	Pro	Asp		
			340					345					350				
Asp	Pro	Phe	Met	Ile	Ser	Tyr	Ile	Val	Tyr	His	His	Phe	Arg	Ser	Leu		
	355						360					365					
Gly	Trp	Val	Val	Arg	Ser	Gly	Val	Lys	Phe	Gly	Val	Asp	Tyr	Phe	Leu		
	370					375					380						
Tyr	Asn	Arg	Gly	Pro	Val	Phe	Ser	His	Ala	Glu	Phe	Ala	Val	Val	Val		
385				390						395					400		
Ile	Pro	Ala	Tyr	Glu	His	Ser	Tyr	Trp	Ser	Glu	Thr	Ser	Asp	Arg	Arg		
			405						410					415			
Ser	Tyr	Cys	Ala	Thr	Lys	Gln	Ala	Arg	Ser	Trp	Trp	Trp	Leu	His	Cys		
			420					425					430				
Val	Asn	Arg	Val	Gln	Ala	Gln	Val	Lys	Lys	Ser	Leu	Val	Val	Cys	Tyr		
	435						440					445					
Val	Glu	Val	Pro	Pro	Pro	Arg	Ser	His	Asp	Ser	Lys	Thr	His	Ser	Glu		
	450					455					460						
Asp	Ile	Gly	Ala	Leu	Leu	Ser	Arg	Tyr	Arg	Val	Arg	Glu	Met	Leu	Ile		
465				470						475					480		
Arg	Arg	Trp	Val	Pro	Asn	Arg	Thr	Arg	Asp								
			485					490									

&lt;210&gt; 42419

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42419

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Ser Trp Thr Thr Met Gly Ala Ser Leu Lys Asp Gly Phe Asn Glu Leu
1          5          10          15
Phe Glu Leu Pro Ser His Pro Pro Leu Thr Thr Pro Thr Lys Ser Ala
          20          25          30
Ala Pro Gly Thr Asn Cys Asp Asn Gly Gln Phe Arg Leu Ala Pro Thr
          35          40          45
Ala Glu Glu Val Gly Phe Ala Cys Leu Ile Ala Asp Lys His Ser Arg
          50          55          60
Arg Pro Lys Tyr Met Gln Ala Leu Ala Leu Asn Ile Pro Cys Leu Ser
65          70          75          80
Asp Arg Trp Ile Glu Asp Cys Ile Ala Gln Asn Arg Ile Leu Asp Trp
          85          90          95
Glu Ile Tyr Leu Leu Pro Ser Gly Glu Ser Ile Tyr Leu Asn Gly Ala
          100          105          110
Thr Lys Ser Arg Phe Leu Ala Pro Tyr Pro Ala Thr Thr Ala Arg Leu
          115          120          125
Pro Asp Thr Ile Ala Ser Arg Pro Asn Leu Leu Lys Asp Gln Ser Val
          130          135          140
Leu Leu Val Met Gly Arg Gly Gly Arg Ser Asp Glu Glu Arg Arg Lys
145          150          155          160
Ala Tyr Ile Phe Leu Thr Tyr Ala Leu Gly Ala Ser Arg Val Glu Arg
          165          170          175
Val Ser Asp Leu Lys Ser Ala Arg Ala Ser Leu Asp Gln Gln Ala Ala
          180          185          190
Ala Gly Thr Gly Cys Ala Trp Asp Trp Ile Tyr Val Asp Gly Asp Glu
          195          200          205
Met Ala Ser Ala Lys Ala Thr Ile Leu Gly Ser Ser Met Pro Ser Thr
          210          215          220
Leu Lys Ser Gln Ser Phe Lys Gly Thr Lys Lys Arg Lys Arg Thr Glu
225          230          235          240
Leu Ile Glu Phe Ile Asp Gly Ser Asp Leu Gly Leu Ser Thr Ser Val
          245          250          255
Lys Ile Val Gly Asn Glu Phe Val Cys Gln Ser Leu Ile Leu Gly Arg
          260          265          270
Leu Phe Gly Gln
          275

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&lt;210&gt; 42420

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42420

```

Gly Leu Ser Ser Phe Trp Pro Pro Ser Arg Arg Arg Asn Ser Ser Ser
1          5          10          15
Ser Ser Thr Cys Leu Glu Val Val Ile Lys Asn Thr Ile Asn Lys Thr
          20          25          30
His Lys Ile Leu Pro Ala Thr Val Gln Asp Ile Asn Ser Tyr Gly Lys
          35          40          45
Glu Val Ser Tyr Tyr Arg Ala Phe Cys Cys Ser Ile Lys Thr Arg Gly
          50          55          60
Gln His Asn
65

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<210> 42421  
 <211> 1164  
 <212> PRT  
 <213> A.fumigatus

<400> 42421

```

Asp Leu Ala Pro Ser Gln Ser Leu Leu Asp Glu Leu Glu Thr Val Asp
1      5      10      15
Ser Leu Pro Pro Arg Val Ser Asp Asp Lys Ser Arg Glu Asn Asn Gln
      20      25      30
Ile Ser Asp Phe Asp Ala Ser Ser Thr Lys Pro Glu Val Val Arg Gln
      35      40      45
Ser Pro Ala Arg Ser Ile Ser Arg Thr Glu His Ala Val Pro Leu
      50      55      60
Asn Asp Arg Lys Gln Phe Phe Gly Ser Lys Asp Val Pro Glu Ser Pro
      65      70      75      80
Leu Pro Val Gly Gln Thr Ala Arg Met Ser Ser Ala Asp Gly Val Pro
      85      90      95
Ser Asp Thr Gln Val Val Ser Gln Ser Val Phe Asp Asp Met Ile Arg
      100      105      110
Gln Asn Lys Asn Ala Ala Arg Asn Ala Ser Asp Ser Asn Leu Val Glu
      115      120      125
Arg Ala Thr Met Met Thr Leu His Glu Gly Asp Ser Gly His Val Asp
      130      135      140
Leu Leu Ser Gly Phe Glu Asn Thr Cys Pro Asp Ile Ile Asp Ala Glu
      145      150      155      160
Asp Asn Gly Glu Gln Asn Ser Ser Arg Leu Gly Glu Ser Ser Pro Leu
      165      170      175
His Tyr Gln Pro Asn Leu Phe Pro Glu Ser Gln Arg Phe Leu Thr Ser
      180      185      190
Thr Pro Ala Thr Ala Phe Lys Leu Gly Gln Pro Glu Arg Ser Asn Ser
      195      200      205
Glu Thr Pro Cys Val Pro Lys Asn Pro Leu Pro Ser Asp Ile Gln Ser
      210      215      220
Ser Gly Gly Val Met Ala Leu Ser Gln Val Phe Lys Ala Thr Gln Ala
      225      230      235      240
Pro Ser Ser Pro Leu Val Tyr Gly Gln Gln Pro Asp Leu Met Ser Asp
      245      250      255
Arg Pro Ser Pro Asn Leu Pro Ile Gln Asn His Pro Leu Ala Ala Val
      260      265      270
Leu Ser Ser Pro Leu Asn Ala Leu Ala Ala Thr Phe Pro Gln Asp Arg
      275      280      285
Ser Glu Thr Pro Met Ala Tyr Ile Ser Met Lys Glu Ser Gln Ala Arg
      290      295      300
Arg Asp Arg Leu Leu Gln Glu Arg Met Thr Arg Ser Ala Glu His Ile
      305      310      315      320
Tyr Ala Glu Asp Gln Ser Asp Ser Glu Phe Glu Lys Glu Pro Ser Phe
      325      330      335
Val Glu Arg Ile Ile Arg Gln Arg Thr Ile Asn Gln Glu Ala Ser Ala
      340      345      350
Gln Phe Ala Gly Val Ala Ala Pro Ala Arg Gln Ser Ser Arg Arg Arg
      355      360      365
Thr Gly Glu Glu Thr Thr Ser Ser Leu Ser Glu Leu Lys Gln Arg Asp
      370      375      380
Gln Ala Asp Val Leu Lys Ser Pro Thr Ser Arg Val Asp Pro Asn Lys
      385      390      395      400

```

Ile Asp Ala Val Leu Gln Ser Gly Ala Ile Ser Glu Ala Glu Thr Glu  
 405 410 415  
 His Ser Gly Asp Leu Thr Arg Ser Gln Pro Thr Gln Gln Val Pro Ser  
 420 425 430  
 Leu Ser Thr Asp Glu Asp Lys Glu Asn Cys Asn Asn Asp Ser Glu His  
 435 440 445  
 Cys Leu Pro Ile Thr Ala Ser Ala His Asp Arg Leu Ser Gln Ala Leu  
 450 455 460  
 Ser Leu His Asp Asp Ser Leu Ala Gln Glu Asp Ile Gln Leu Ser Arg  
 465 470 475 480  
 Ser Pro Asp Arg Glu Ala Asn Glu Pro Lys Ala Thr Leu Glu Thr Met  
 485 490 495  
 Val Val Lys Asp Ser Gln Gln Ser Pro Arg Gln Glu Asp Arg Gly His  
 500 505 510  
 His Asp Lys Ile Val Thr Asn Ser Leu Arg His His Ser Gly Arg Pro  
 515 520 525  
 Arg Pro Arg Val Arg Tyr His Gly Asp Pro Ser Asp Arg Asp Arg Val  
 530 535 540  
 Ile Ser Ser Pro Thr Arg Pro Leu Ala Leu Arg Ser Ser Pro Pro Pro  
 545 550 555 560  
 Pro Glu Cys Val Gln Asp Pro Val Leu His Pro Ala His Leu Asn Arg  
 565 570 575  
 Ala Ile Thr Arg Ser Gln Ser Ser Ser Pro Asn Cys His Asp Ser Ser  
 580 585 590  
 Ser Gln Leu Pro Arg Asp Ala Ser Ser Ala Gln Glu Leu Ala Thr Thr  
 595 600 605  
 Glu Ser Ser Asn Val Ala Ser Arg Lys Pro Asn Gly Thr Glu Ser Lys  
 610 615 620  
 Gly Ala Arg Val Asp Pro His Glu Lys Pro Ser Ser Met Pro Ser Arg  
 625 630 635 640  
 Val Thr Glu Thr Pro Val Pro Gln Arg Pro Arg Gly Phe Gly Asp Val  
 645 650 655  
 Ile Pro Thr Ile Ser Val Pro Glu Thr Ser Pro Asn Thr Ile His Asn  
 660 665 670  
 Gln Ser Trp Ala Asp Asp Val Asp Asn Asp Pro Met Asp Gln Glu Asp  
 675 680 685  
 Asp Asp Leu Pro Pro Thr Tyr Pro Thr Glu Gln Ala Arg Ile Ser His  
 690 695 700  
 Ser Gln Pro Leu Ile Pro Glu Ser Ser Thr Pro Thr Arg Pro Phe Arg  
 705 710 715 720  
 Thr Ala Lys Ile Leu Ser Ser Pro Ser Gly Arg Gln Arg Arg Ala Leu  
 725 730 735  
 Thr Glu Ile Ala Ala Asp Ala Ser Pro Gln Ala Gly Thr Thr Leu Ile  
 740 745 750  
 Asp Val Asp Ile Gly Ile Leu Thr Ala Asp Asp Lys Glu Phe Ser Ser  
 755 760 765  
 Val Val Ser Ala Ser Pro Ile Pro Pro Arg Lys Lys Arg Arg Gly Asn  
 770 775 780  
 Gly Gln Asn Val Tyr Ala Ser Asp Pro Ile Leu Thr Phe Thr Pro Arg  
 785 790 795 800  
 Ile Thr Ser Gln Tyr Ala Gln Ser Gln Asn Gly Glu Lys Pro Arg Gly  
 805 810 815  
 Gln Ile Leu Gln Thr Glu Glu Phe Val Asp Lys Ser Glu Ser Ser Phe  
 820 825 830  
 Leu Lys Arg Ser Arg Ser Ser Lys Arg Ile Gly Thr Val Trp Glu Val  
 835 840 845

## 18990

Glu Asp Thr Pro Gln His His Val Ser Arg Arg Glu Arg Leu Lys Lys  
 850 855 860  
 Leu Ser Leu Pro Arg Ala Glu Ala Glu Ser Gly Pro Gln Pro Leu Glu  
 865 870 875 880  
 Arg Ala Lys Asn Met Asn Leu His Ala Ala Glu Arg Glu Asp Pro Cys  
 885 890 895  
 Glu Gly Ser Leu Lys Phe Pro Gln Ala Thr Gly Glu Lys Met Lys Asp  
 900 905 910  
 Lys Ser Pro Glu Leu Leu Arg Asn Asp Glu Ser Asp Pro Ala Gly Pro  
 915 920 925  
 Gly His Arg Asp Ser Ser Pro Ile Ala Leu Asn Gln Val Ile Ala Pro  
 930 935 940  
 Trp Ser Gly Gln Lys Arg Ala Tyr Tyr Pro Ala Thr Cys Val Gly Lys  
 945 950 955 960  
 Pro Pro Gly Ile Ser Gln Thr Arg Val Leu Val Lys Phe Glu Asp Ser  
 965 970 975  
 Ala Pro Leu Glu Val Pro Met Gly Ala Val Lys Arg Leu Glu Leu Lys  
 980 985 990  
 Ile Gly Asp Ala Val Lys Val Asp Met Pro His Val Pro Lys Val Thr  
 995 1000 1005  
 His Ile Ile Arg Gly Phe Glu Asp Lys Ile Ser Ala Glu Asp Leu Thr  
 1010 1015 1020  
 Lys Ala Ala Ser Asp Gly Val Leu Pro Ile Thr Asp Val Tyr Gly Tyr  
 1025 1030 1035 1040  
 Thr Thr Leu Ile Leu Gly Pro Lys Gln Arg Lys Ser Leu Pro Ser Gly  
 1045 1050 1055  
 Gly Leu Thr Gly Pro Asp Asn Leu Ile Lys Val Pro Val Ser Arg Ile  
 1060 1065 1070  
 Tyr Leu Asp Thr Ile Leu Trp Asn Gln Leu Lys Asp Arg Ala Phe Thr  
 1075 1080 1085  
 Tyr Ser Ser Gly Ala Thr His Ser Glu Ser Arg Leu Gln Thr Pro Ser  
 1090 1095 1100  
 Asp Arg Tyr Ser Thr Pro Ala Ser Pro Gly Ser Arg Leu Pro Arg Ser  
 1105 1110 1115 1120  
 Ile Arg Leu Met Asn Gly Ile Phe Ala Gly Met Val Phe Ala Val Ser  
 1125 1130 1135  
 Tyr Gly Asp Asn Asp Glu Ala Lys Ser Arg Ile Thr Lys Met Ile Leu  
 1140 1145 1150  
 Asp Asn Asp Gly Ser Ile Ala Glu Gly Arg Leu Gln  
 1155 1160

&lt;210&gt; 42422

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42422

Asn Ala Lys Arg Glu Ser Leu Leu Ser Leu Pro Ser Tyr Lys Ile Pro  
 1 5 10 15  
 Tyr Lys Cys Ala Ile Gly Ile Thr Ile Leu Thr Pro Trp Thr Asp Pro  
 20 25 30  
 Lys Lys Arg Glu Thr Arg Lys Pro Arg Asp Cys Gln Ser Asn Ile Thr  
 35 40 45  
 Ser Leu Gly Ile Glu Arg Phe Tyr Leu Gly Tyr Ser Thr Glu Glu Leu  
 50 55 60  
 Leu Leu Leu Arg Thr Ser Glu Thr Gln Ala Thr Gln Gly Leu Cys Val



## 18991

65

70

75

80

Ile His Gln Lys

&lt;210&gt; 42423

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42423

Leu Ser Ala Lys Ile Gly Gly Lys Ser Arg Gly Phe Pro Pro Val Met  
 1 5 10 15  
 Ser Phe Arg Ser Pro Arg Arg Leu Gly Ile Gly Val Thr Pro Leu Ser  
 20 25 30  
 Val Gln Pro Thr Met Leu Gln Pro Arg Leu Leu Ala Pro Phe Arg Ala  
 35 40 45  
 Leu Glu Arg Thr Phe Val Ser Ser Leu Arg Ser Ser Gln Ala Ile His  
 50 55 60  
 His Pro Pro Arg Ser Ser Leu Phe Phe Gln Arg Thr Pro Ile Ser Ala  
 65 70 75 80  
 Pro Ser Pro Ile Ser Lys Phe Leu Leu Pro Leu Ser His Val Arg His  
 85 90 95  
 Ala Ser His Ala Thr Gln Gly Thr Ala Asn Arg His Ser Arg Asp Pro  
 100 105 110  
 Ala Gly Lys Arg Leu Gly Ala Lys Arg Thr Gly Gly Glu Tyr Val Val  
 115 120 125  
 Pro Gly Cys Ile Ile Phe Arg Gln Arg Gly Thr Lys Trp Phe Pro Gly  
 130 135 140  
 Glu Asn Cys Ala Met Gly Arg Asp His Thr Ile Tyr Ala Thr Glu Ala  
 145 150 155 160  
 Gly Tyr Val Arg Tyr Tyr Leu Asp Pro Glu Arg His Pro Asp Arg Lys  
 165 170 175  
 Tyr Ile Gly Val Cys Phe Glu Lys Asp Gly Lys Leu Pro Thr Pro Arg  
 180 185 190  
 Asn Ala Pro Thr Lys Arg Arg Leu Asn Arg Ile Ala Val Pro Arg Ile  
 195 200 205  
 Pro Asp Gly Pro Glu Val Val Ala Gln Ser Asp Leu Leu Ala Thr Val  
 210 215 220  
 Glu Glu Gly Thr Met Ile Ser Ser Val Val Ala Ala Asn Ala Thr Thr  
 225 230 235 240  
 Gly Pro Pro Leu Arg Pro Gly Tyr Met Tyr Arg Glu Ala Asn Trp Gln  
 245 250 255  
 Ile Gly Arg Ala Ala Glu Lys Ala Gly Ile Thr Ala Lys Pro Tyr Lys  
 260 265 270  
 Arg Lys Asn Arg Trp Leu Ala Trp Arg Lys Arg Gln Ala Arg Ala Glu  
 275 280 285  
 Arg Ala Ala Gln Met Lys Ser Leu Lys Ser Lys Lys Lys Ala Ala Lys  
 290 295 300  
 Lys Gly Lys Gly Gly Arg  
 305 310

&lt;210&gt; 42424

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42424

```

Asp Cys Glu His Cys Ile Arg Thr Arg Leu Val Arg Ile Ala Gly Tyr
1           5           10           15
Val Ser Ser Tyr Gly Leu Asn Val Pro Leu Gln Cys Pro Leu Thr Cys
          20           25           30
Val Phe Ser Gly Gln Thr Glu Ser Ser Tyr Val Ile Phe Thr Asp Asp
          35           40           45
Pro Ala Lys Arg Tyr Glu Asp Phe Thr Asp Ala Asp Phe Ser Gln Lys
          50           55           60
Asp Asp Asn Leu Gly Ile Lys Tyr Glu Asn Asn Asp Ile Phe Glu Asp
65           70           75           80
Thr Val Leu Leu Leu Arg Tyr Asn Cys Pro Asp Arg Ser Cys Asp Val
          85           90           95
Ala Cys Leu Gly Trp Pro Asp Leu His Arg His Val Lys Ser Lys His
          100          105          110
Gly Lys Val Met Trp Tyr Val Leu Ser Cys Cys Ala Pro
          115          120          125

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&lt;210&gt; 42425

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42425

```

Arg Phe His Tyr Val Ser Leu Gly Pro Arg Lys Leu Tyr Gln Thr Tyr
1           5           10           15
Arg Ala Ala Ala Arg Ser Pro Glu Gly Gly Glu Pro Cys His Val Leu
          20           25           30
Ser Arg His Gly Leu Tyr Cys Leu Cys Gly Phe Arg Gln Ser Cys Glu
          35           40           45
Ala Leu Glu Trp Thr Gly Arg Lys Val Ser Arg Glu Ile Gly Cys Phe
          50           55           60
Thr Ile Ile Gln Arg Leu Thr Arg Pro Ser Arg Phe Ile Thr Thr Leu
65           70           75           80
Arg Gly His Val Gly Ala Val Tyr Gln Cys Cys Phe Ser Ala Asp Ser
          85           90           95
Arg Leu Leu Val Ser Ser Ser Lys Asp Thr Thr Leu Lys Val Trp Asn
          100          105          110
Val Arg Thr Gly Lys Leu Ala Met Asp Leu Pro Gly His Lys Asp Glu
          115          120          125
Val Phe Ala Val Asp Trp Ser Pro Asp Gly Gln Arg Val Gly Ser Gly
          130          135          140
Gly Lys Asp Lys Ala Val Arg Ile Trp Thr Asn
145          150          155

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&lt;210&gt; 42426

&lt;211&gt; 553

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42426

```

Leu Phe Ser Asp Leu Cys Thr Arg Asn Lys Lys Val Phe Thr His Glu
1           5           10           15
His Glu Leu Phe Thr Met Ala Glu Leu Arg Lys His Glu Lys Tyr Gly
          20           25           30
Asp Asp Val Pro Gly Ala Leu Asp Gln Ser Gly Phe Lys Gly His Pro

```

					35						40						45
Glu	Cys	Gly	Phe	Cys	Arg	Lys	Arg	Phe	Tyr	Gly	Asp	Asp	Glu	Leu	Tyr		
50						55						60					
Ala	His	Cys	Arg	Asp	Arg	His	Glu	Arg	Cys	His	Ile	Cys	Asp	Arg	Arg		
65						70						75					
Ser	Gly	Ser	Arg	Gln	Gln	Gln	Tyr	Tyr	Ile	Asp	Tyr	Asn	Ala	Leu	Glu		
					85						90						
Asp	His	Phe	Gln	Lys	Asp	His	Phe	Leu	Cys	Leu	Asp	Lys	Glu	Cys	Leu		
					100						105						
Glu	Lys	Lys	Phe	Val	Val	Phe	Glu	Ser	Gln	Met	Asp	Leu	Lys	Ala	His		
					115						120						
Gln	Leu	Glu	Cys	His	Pro	Asn	Gly	Leu	Ser	Lys	Asp	Ala	Arg	Arg	Asp		
					130						135						
Ala	Arg	Thr	Val	Asp	Leu	Ser	Asp	Phe	Asp	Leu	Arg	Ala	Pro	Tyr	Gln		
					145						150						
Ser	Gln	Arg	Gln	Arg	Arg	Gly	Ala	Gly	Arg	Gly	Arg	Asp	Pro	Asn	Ala		
					165						170						
Glu	Pro	Leu	Pro	Val	Ser	Ser	Thr	Gln	Pro	Leu	Arg	Arg	Asp	Glu	Ile		
					180						185						
Ala	Tyr	Gln	Arg	Gln	Met	Ala	Ile	Gln	Ser	Ala	Gln	Ser	Val	Ser	Thr		
					195						200						
Arg	Ser	Phe	Gly	Gly	Gln	Leu	Thr	Arg	Asn	Asp	Thr	Gln	Thr	Val	Arg		
					210						215						
Ala	Pro	Ala	Arg	Ser	Gly	Ala	Ala	Thr	Pro	Val	Arg	Thr	Pro	Pro	Ala		
					225						230						
Gly	Pro	Pro	Val	Ala	Glu	Met	Glu	Ala	Leu	Asn	Val	Gly	Ala	Pro	Ser		
					245						250						
Gly	Pro	Ala	Thr	Pro	Gln	Asp	Gln	Ala	Arg	Arg	Leu	Arg	His	Ala	Ala		
					260						265						
Val	Ile	Glu	Arg	Ala	Ser	Asn	Leu	Leu	Arg	Asn	Asp	Ala	Ser	Lys	Leu		
					275						280						
Ala	Asp	Phe	Arg	Ser	Lys	Val	Ser	Gln	Tyr	Arg	Thr	Ser	Ala	Leu	Ser		
					290						295						
Pro	Thr	Gly	Leu	Ile	Asp	Ala	Phe	Phe	Ser	Leu	Phe	Asp	Thr	Ser	Ser		
					305						310						
Thr	Glu	Leu	Gly	Lys	Leu	Ile	Lys	Glu	Leu	Ala	Glu	Ile	Tyr	Glu	Asp		
					325						330						
Glu	Ser	Lys	Arg	Asn	Ala	Leu	Leu	Lys	Ala	Trp	Asn	Asp	Trp	Arg	Ala		
					340						345						
Ile	Asn	Glu	Asp	Tyr	Pro	Ala	Leu	Pro	Gly	Pro	Gly	Gly	Gln	Ile	Pro		
					355						360						
Gly	Met	Ser	Ser	Gly	Thr	Val	Asn	Gly	Ser	Gly	Val	Gly	Gly	Lys	Arg		
					370						375						
Val	Leu	Arg	Leu	Lys	Ser	Ser	Thr	Ala	Gln	Ser	Ser	Arg	Ser	Val	Val		
					385						390						
Gly	Arg	Ser	Gly	Ser	Ile	Val	Ser	Thr	Ser	Ser	Ser	Ser	Ser	Thr	Asn		
					405						410						
Pro	Phe	Pro	Pro	Leu	Ser	Ser	Ser	Thr	Ala	Arg	Ser	Ala	Pro	Arg	Ala		
					420						425						
Thr	Thr	Thr	Ser	Ser	Pro	Trp	Ala	Thr	Val	Ala	Pro	Thr	Pro	Ala	Arg		
					435						440						
Thr	Met	Ala	Ser	Ala	Ile	Asn	Pro	Ser	Ser	Arg	Pro	Ala	Pro	Thr	Pro		
					450						455						
Ser	Arg	Thr	Val	Gln	Asn	Thr	Asn	Asp	Ser	Glu	Ala	Phe	Pro	Ala	Leu		
					465						470						
Pro	Ala	Ala	Pro	Lys	Pro	Asn	Val	Leu	Met	Ala	Gly	Leu	Thr	Arg	Gly		

## 18994

485 490 495  
 Thr Val Arg Trp Asp Asp Arg Gln Pro Pro Pro Val Asn Ala Trp Ala  
 500 505 510  
 Ser Ser Thr Gly Ser Gly Ser Ala Ser Val Asn Gly Pro Glu Asp Glu  
 515 520 525  
 His Gly Glu Ser Ser Ser Ala Gly Gly Lys Lys Gly Lys Gly Lys Lys  
 530 535 540  
 Gly Lys Gln Thr Leu Phe His Phe Gly  
 545 550

&lt;210&gt; 42427

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42427

Asp Asp Asp Glu Arg Val Pro Tyr Arg Phe Thr Tyr Gln Ser Asp Asp  
 1 5 10 15  
 Lys Asp Gly Gln Thr Ile Asp Ile Gln Ala Asp Leu Tyr His Ser Leu  
 20 25 30  
 Leu Lys Pro Gly Leu Lys Thr Thr Glu Asp Thr Ile His Leu Tyr Phe  
 35 40 45  
 Thr Pro Gln Ala Val Phe Arg Val Lys Ala Val Ser Arg Cys Ser Ala  
 50 55 60  
 Ser Ile Ala Gly His Gly Glu Ala Ile Leu Ala Thr Ser Phe Ser Pro  
 65 70 75 80  
 Val Ser Ser Ser Thr Met Val Ser Gly Ser Gly Asp Ser Thr Ala Arg  
 85 90 95  
 Ile Trp Asp Cys Asp Thr Arg Thr Pro Lys His Thr Leu Lys Gly His  
 100 105 110  
 Thr Ser Trp Val Leu Ala Val Phe Tyr Ser Pro Asn Gly Ala Met Ile  
 115 120 125  
 Ala Thr Gly Ser Met Asp Asn Thr Val Arg Leu Trp Asp Ala Ala Lys  
 130 135 140  
 Gly Thr Ala Leu Gly Gly Pro Leu Lys Gly His Ala Lys Trp Ile Thr  
 145 150 155 160  
 Ser Leu Ala Trp Glu Pro Tyr His Thr Gln Glu Ile Gly Arg Pro Arg  
 165 170 175  
 Leu Ala Ser Ala Ser Lys Asp Ser Thr Val Arg Ile Trp Asp Val Val  
 180 185 190  
 Gly Lys Arg Ile Asp Thr Val Leu Thr Gly His Lys Gly Ser Val Thr  
 195 200 205  
 Cys Val Arg Trp Gly Gly Thr Gly Lys Ile Tyr Thr Ser Ser His Asp  
 210 215 220  
 Arg Thr Ile Lys Ile Trp Asn Ala Gln Asn Gly Ser Leu Leu Gln Thr  
 225 230 235 240  
 Leu Ser Ala His Ala His Arg Val Asn His Leu Ala Leu Ser Thr Asp  
 245 250 255  
 Phe Ala Leu Arg Thr Ala Tyr His Asp His Thr Gly Lys Val Pro Gly  
 260 265 270  
 Ser Asp Thr Glu Lys Val Ala Val Ala Lys Lys Arg Phe Glu Gln Ala  
 275 280 285  
 Ala Met Val Asn Asn Lys Ile Val Glu Lys Leu Val Ser Ala Ser Asp  
 290 295 300  
 Asp Phe Thr Met Tyr Leu Trp Asp Pro Glu Asn Ser Thr Lys Pro Ile  
 305 310 315 320

## 18995

Ala Arg Leu Leu Gly His Gln Lys Glu Val Asn His Val Thr Phe Ser  
                           325                          330                          335  
 Pro Asp Met Ala Tyr Ile Ala Ser Ala Gly Phe Asp Asn His Val Lys  
                           340                          345                          350  
 Leu Trp Asn Gly Arg Asp Gly Lys  
                           355                          360

&lt;210&gt; 42428

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (15), (88)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42428

Arg Tyr Glu Asn Asn Trp Ile Ala Ala Pro Pro Phe Ile Pro Xaa Gln  
 1                          5                          10                          15  
 Asn Pro Tyr Gln Lys Asp Gln Val Tyr Trp Tyr Ala Ala Gly Cys Asp  
                           20                          25                          30  
 Asp Met Asn Gly Ile Thr Val Ala Thr Asn Gly Thr His Ala Val Thr  
                           35                          40                          45  
 Leu Thr Pro Gly Thr Val Ala Phe Cys Asn Ala Ala Asn Thr Leu His  
                           50                          55                          60  
 Leu Leu Ile Gly Thr Gly Gln Ala Thr Lys Ser Arg Ala Pro Met Pro  
 65                          70                          75                          80  
 Leu Lys Cys Gln Ala Pro Pro Xaa Trp Glu Lys Gly Pro Val Asp Ala  
                           85                          90                          95  
 Pro Gly Gly Ile Glu Gly Glu  
                           100

&lt;210&gt; 42429

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42429

Arg Leu Cys Phe Phe Cys Ala Leu Asn Val Ala His Ser Ser Val Ser  
 1                          5                          10                          15  
 Pro Cys Asn His Arg Thr Cys His Ile Cys Ala Leu Arg Leu Arg Ala  
                           20                          25                          30  
 Leu Tyr Lys Asn Lys Ala Cys Ala His Cys Arg Val Arg Phe Val Ile  
                           35                          40                          45  
 Trp Ala Glu Cys Ser Thr Pro Val Ser Thr Asn Val Cys Val Phe Trp  
                           50                          55                          60  
 Pro Asp Arg Val Gln Leu Cys Asn Phe His Gly Arg Ser Gly Lys Thr  
 65                          70                          75                          80  
 Ile

&lt;210&gt; 42430

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42430

```

Arg Leu Ser Val Pro Leu Leu Tyr Ile Ala Asp Thr Arg Gln Trp Leu
1          5          10          15
Thr Ser Gln Leu Ile Leu Ala Pro Thr Lys Arg Thr Phe Gln Tyr Val
          20          25          30
Glu Gln Ser Gly Asn Asn Val Ile Met Leu Lys Thr Tyr Val Ser Ser
          35          40          45
Ile Asn Ser Ile Tyr Lys Ala Leu Ala Thr Ala Gln Ser Ser Leu Leu
          50          55          60
Met Thr Ile Arg Glu Val Tyr Pro Gly Pro Ile Tyr Thr Val Cys
65          70          75

```

&lt;210&gt; 42431

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42431

```

Leu Phe Glu Val His Asn Pro Pro Phe Ser Ser Ser Thr Ser Cys Ala
1          5          10          15
Arg Ile Ser Asp Asp Ser Leu Leu Leu Val Val Asn Ser Ala Arg Met
          20          25          30
Met Arg Ser Leu Ser Cys Val Ser Ser Phe Gly Asp Ala Ser Ser Phe
          35          40          45
Thr Ala Leu Thr Ser Arg Gln Asp Ser Asp Arg Pro Arg Thr Ala Arg
          50          55          60
Pro Ala Thr Thr Ala Thr Ser Ile Ala Ser Gln Asp Ile Ile Cys Ala
65          70          75          80
Ile Ser Glu Ser Arg Gly Val Ser Ser Thr Val Gly Leu Ala Phe Val
          85          90          95
Asn Leu Ser Thr Ala Glu Thr Val Leu Cys Gln Ile Cys Asp Ser Gln
          100          105          110
Thr Tyr Ala Lys Thr Val Thr Lys Ile Ala Val Phe Glu Pro Thr Glu
          115          120          125
Ile Leu Phe Met Ser Ser Ala Arg Glu Ser Lys Leu Phe Tyr Ile Ile
          130          135          140
Gln Glu Asn Ile Pro Asp Thr Ala Tyr Thr Phe Phe Asp Arg Arg Tyr
145          150          155          160
Trp Ser Glu Lys Ala Gly His Glu His Val Asp Arg Leu Ala Val Ser
          165          170          175
Ala Arg Cys

```

&lt;210&gt; 42432

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42432

```

Phe Gln Lys Val Leu Lys Tyr Ile Glu Leu Glu Leu Asn Arg Val Phe
1          5          10          15
Thr Ser His Ser Leu Arg Ile Arg Phe Glu Pro Ser Gln Gly Ser Met
          20          25          30
Ser Met Asp Leu Ser Thr Ile Val Ser Leu Glu Leu Ile Gln Asn Leu
          35          40          45

```

## 18997

Gln Asn Ala Lys Ser Glu Asp Ser Leu Leu Gly Leu Leu Asn Glu Thr  
 50 55 60  
 Leu Thr Pro Met Gly Ala Arg Leu Leu Arg Ala Asn Ile Leu Gln Pro  
 65 70 75 80  
 Cys Thr Glu Lys Ser Lys Leu Leu Ala Arg Tyr Asp Ala Val Glu Asp  
 85 90 95  
 Leu Ser Thr Lys Glu Asp Met Phe Ile Ser Val Arg Gln Gly Pro Phe  
 100 105 110  
 Gln Phe Asp Leu Ile Cys Ser Lys Lys Thr Leu Ile Ser  
 115 120 125

&lt;210&gt; 42433

&lt;211&gt; 468

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42433

Arg Ser Lys Cys Arg Cys Arg Gly Pro Ser Trp Pro Lys Tyr Gln Val  
 1 5 10 15  
 His Tyr Asn Gly Ser Ile Phe Phe Trp Ser Ile Leu Ile Thr Cys Pro  
 20 25 30  
 Tyr Ala Glu Ser His Asn Leu Thr Leu Asp Leu Lys Phe Asp Ser Ala  
 35 40 45  
 Arg Gln Tyr Tyr Ile Ser Val Ser Ala Ser Glu Val Lys Thr Leu Ser  
 50 55 60  
 Gly Ile Phe Ile Asn Ile Tyr Arg Arg Lys Asn Arg Ile Glu Cys Gln  
 65 70 75 80  
 Thr Leu Asp Leu Val Lys Leu Asn Gln Lys Ile Met Asp Ala His Asn  
 85 90 95  
 Glu Val Ile Asn Met Ser Asp Gln Thr Ile Gln Ser Leu Ile Asn Asp  
 100 105 110  
 Val Cys Ser Glu Ile Ser Val Leu Phe Lys Val Ser Glu Ala Ile Ala  
 115 120 125  
 Met Leu Asp Met Leu Ala Ala Phe Ala Glu Leu Ala Thr Cys Asn Glu  
 130 135 140  
 Tyr Ile Arg Pro Glu Leu Thr Asp Val Leu Ala Ile Lys Ser Gly Arg  
 145 150 155 160  
 His Pro Ile Arg Glu Lys Ile His Thr Lys Lys Phe Ile Pro Asn Asp  
 165 170 175  
 Ala Tyr Ala Thr Gln Gln Ser Arg Phe Gln Ile Ile Thr Gly Ser Asn  
 180 185 190  
 Met Ser Gly Lys Ser Thr Tyr Ile Arg Ser Leu Ala Leu Met Thr Ile  
 195 200 205  
 Met Ala Gln Ile Gly Cys Phe Val Pro Ala Glu Tyr Ala Ser Phe Pro  
 210 215 220  
 Val Met His Gln Leu Phe Ala Arg Val Ser Thr Ser Asp Asp Leu Glu  
 225 230 235 240  
 Ala Asn Val Ser Thr Phe Ala Ala Glu Met Arg Glu Met Ala Phe Ile  
 245 250 255  
 Leu Arg Asn Ile Glu Pro Arg Ser Ile Val Ile Val Asp Glu Leu Gly  
 260 265 270  
 Arg Gly Thr Ser Thr Thr Asp Gly Leu Ala Ile Ala Ile Ala Ile Ala  
 275 280 285  
 Glu Ala Leu Ile Glu Ser His Ala Leu Val Trp Phe Val Thr His Phe  
 290 295 300  
 Arg Asp Leu Ala Leu Ile Leu Ala Glu Arg Asn Gly Val Val Ser Leu

```
<210> 42434
<211> 1022
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (80),(384),(390),(398)
<223> Identity of amino acid sequences at the above locations are unknown.
```

<400>	42434														
Leu	Trp	Lys	Ser	Gly	Ser	Cys	Lys	Arg	Pro	Asp	Cys	Arg	Ser	Thr	Phe
1				5					10					15	
Pro	Ser	Gly	Glu	Cys	Pro	Glu	Ser	Asn	Asp	Pro	Lys	Thr	Arg	Gln	Leu
			20					25					30		
Thr	Ala	Val	Gln	Glu	Lys	Ser	Glu	Cys	Leu	Thr	Arg	Asp	Ser	Phe	Leu
		35					40					45			
Val	Arg	Arg	His	Glu	Gly	Leu	Arg	Arg	Asn	Arg	Lys	Ala	Leu	Leu	Ser
	50					55					60				
Asp	Leu	Thr	Ala	Leu	Val	Arg	Thr	Thr	Lys	Ser	Phe	Gln	Val	Ile	Xaa
65				70						75					80
Ser	Gly	Asn	Pro	Leu	Gln	Asp	Glu	Val	Glu	Tyr	Met	Val	Asp	Glu	Met
			85						90					95	
Leu	Leu	Lys	Ala	Phe	Arg	Val	Val	Thr	Arg	Gly	Val	Arg	Phe	Leu	Asp
			100					105					110		
Ile	Trp	Asn	Glu	Glu	Val	Gly	Leu	Ser	Arg	Thr	Ile	Ala	Glu	Leu	Ala
		115				120						125			
Gln	Ser	Lys	Asp	His	Thr	Ser	Pro	Leu	Thr	Arg	Ala	Ser	Glu	Thr	Phe
	130					135					140				
Val	Met	Ser	Glu	Lys	Ala	Pro	Ser	Glu	Ala	Glu	Thr	Glu	Arg	Asn	Glu
145				150						155					160
Ser	Arg	Val	Leu	Asn	Arg	Ser	Arg	Met	Ser	Met	Ser	Cys	Cys	Ser	Thr
			165					170						175	
Arg	Val	Asp	Met	Ser	Glu	Gln	Pro	Arg	Pro	Val	Ser	Val	Ala	Thr	Lys



## 18999

	180		185		190
Arg	Ile	Ser	Ile	Ser	His
	195		200		205
Ser	Arg	Asn	Pro	Asn	Leu
	210		215		220
Ala	Phe	Leu	Gly	Val	Leu
	225		230		235
Arg	Ser	Ser	Thr	Glu	Leu
			245		250
Cys	Arg	Gly	Leu	Leu	Thr
			260		265
Gln	Gly	Cys	Ser	Leu	Leu
			275		280
Leu	Ser	Glu	Leu	Val	Phe
			290		295
Ser	Pro	Asp	Asp	Glu	Leu
				310	
Gly	Arg	Arg	Arg	His	Arg
				325	
Gln	Ser	Ser	Pro	Gly	Cys
				340	
Ala	Leu	Pro	Gln	Asp	Val
				355	
Ser	Gln	Ser	Gln	Gln	Gln
				370	
Leu	Pro	Pro	His	Pro	Xaa
				385	
Ser	His	Pro	Thr	Pro	Gly
				405	
Phe	Asn	Ser	Arg	Asn	Leu
				420	
Ala	Ser	Leu	Pro	Ser	Ala
				435	
Ser	Phe	Ser	Ser	Ser	Cys
				450	
Asn	Arg	Ile	Ser	His	Pro
				465	
Gly	Val	Thr	Ser	Thr	Gly
				485	
Asp	Ser	Glu	Met	Ser	Gly
				500	
Pro	Asp	Ile	Gly	Ser	Cys
				515	
Ser	His	Ser	Thr	Leu	Ala
				530	
Leu	Glu	Lys	Thr	Tyr	Ala
				545	
Met	Gly	Gly	Ser	Leu	Arg
				565	
Ser	Thr	Pro	Asp	Ala	Met
				580	
Leu	Phe	Ala	Thr	Pro	Leu
				595	
Asn	Tyr	Ile	Gly	Asp	Thr
				610	
Val	Tyr	Asn	Val	Phe	Lys

## 19000

625					630					635				640
Cys	Asp	Asp	Ser	Ala	Leu	Asp	Phe	Ile	Val	Asn	Phe	Ala	Lys	Thr Thr
				645					650					655
Leu	Met	Gln	Ser	Leu	Pro	Ser	Ala	Gly	Lys	Arg	Leu	Leu	Glu	Leu Thr
			660					665					670	
Asp	Lys	Val	Ser	Thr	Leu	Gln	Gly	Pro	Val	Val	Pro	Arg	Leu	Ile Ser
		675					680					685		
Ser	Ile	Gly	Lys	Thr	Asn	Thr	Ala	Thr	Ala	Gln	Tyr	Val	His	Pro Asp
	690					695				700				
Thr	Pro	Leu	Pro	Pro	Pro	Ile	Leu	Ser	Lys	Lys	Glu	Val	Asn	Leu Leu
705					710					715				720
Lys	Gln	Trp	Lys	Asn	Gly	Glu	Ala	Ala	Ile	Ser	Ile	Leu	Asp	Phe Asp
			725						730				735	
Pro	Leu	Glu	Leu	Ala	Arg	Gln	Leu	Thr	Ile	Lys	Glu	Ser	Arg	Ile Phe
		740						745					750	
Cys	Ala	Ile	Leu	Pro	Glu	Glu	Leu	Leu	Ala	Thr	Glu	Trp	Met	Lys Lys
	755						760					765		
Ser	Ala	Ser	Leu	Ala	Val	Asn	Val	Arg	Ala	Met	Ser	Thr	Leu	Ser Thr
	770					775					780			
Asp	Leu	Ala	His	Leu	Val	Ala	Asp	Ser	Ile	Leu	Gln	Leu	Glu	Glu Pro
785					790					795				800
Lys	Lys	Arg	Ala	Ala	Ile	Ile	Lys	Gln	Trp	Val	Lys	Ile	Ala	Asn Lys
			805						810				815	
Cys	Leu	Glu	Leu	Asn	Asn	Tyr	Asp	Thr	Leu	Met	Ala	Ile	Ile	Cys Ser
			820					825					830	
Leu	Asn	Ser	Ser	Met	Ile	Ser	Arg	Leu	Lys	Arg	Thr	Trp	Glu	Val Val
	835						840					845		
Ser	Gln	Lys	Thr	Lys	Ala	Thr	Leu	Glu	Thr	Leu	Arg	Gly	Ile	Val Asp
	850					855					860			
Val	Ser	Arg	Asn	Tyr	Ala	Val	Leu	Arg	Gln	Arg	Leu	Gln	Thr	His Val
865					870					875				880
Pro	Pro	Cys	Leu	Pro	Phe	Val	Gly	Thr	Tyr	Leu	Thr	Asp	Leu	Thr Phe
			885						890				895	
Val	Asp	His	Gly	Asn	Gln	Pro	Leu	Arg	Ser	Leu	Pro	Thr	Asp	Asp Gly
			900					905					910	
Glu	Met	Thr	Val	Ile	Asn	Phe	Asp	Lys	His	Met	Lys	Thr	Ala	Lys Ile
	915						920						925	
Ile	Ser	Glu	Leu	Gln	Arg	Phe	Gln	Val	Pro	Tyr	Arg	Leu	Thr	Glu Val
	930					935				940				
Pro	Glu	Leu	Gln	Thr	Trp	Met	Gln	Asn	Glu	Leu	Val	Arg	Val	Arg Ser
945					950					955				960
Asn	Gly	Glu	Lys	Ser	Leu	Gln	Thr	Phe	Tyr	Arg	Arg	Ser	Leu	Ile Leu
			965						970				975	
Glu	Pro	Arg	Glu	Ile	Thr	Pro	Arg	Pro	Asn	Leu	Gln	Pro	Glu	Ser Ser
		980						985					990	
Ala	Ser	Ser	Ile	Met	Glu	Asn	Ala	Arg	Asp	Lys	Phe	Asp	Leu	Phe Ala
	995						1000					1005		
Trp	Thr	His	Pro	Ser	Lys	Ala	Lys	Ser	Val	Ala	Thr	Asn	Ser	
1010						1015						1020		

&lt;210&gt; 42435

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42435

## 19001

Pro Ser Arg Arg Leu Ile Ala Ile Gly Thr Arg Lys Arg Thr Asn Arg  
 1 5 10 15  
 Ser Leu Glu Asn Arg Asp Met Glu Pro Met Lys Arg His Ile Ala Pro  
 20 25 30  
 Leu Lys Val Glu Lys Thr Ile Thr Asn Pro Cys Gly Ser Thr Thr Ser  
 35 40 45  
 Glu Ser Gly Asp Pro Ser Ser Asn His His Tyr Ser Thr Gln His Ser  
 50 55 60  
 Leu Gln Leu Ser Pro Pro Leu Thr Pro Tyr Cys Ala Thr Ser Ser Lys  
 65 70 75 80  
 Asp Asn Ser Met Asp Arg Thr Glu Ala Pro Arg Ala Val Phe His Asn  
 85 90 95  
 Tyr Leu Arg Ala Phe Tyr Pro Phe His Pro Pro Gly Asp Val Ser Pro  
 100 105 110  
 Asp Thr Ile Thr Leu Pro Leu Asp Gln Gly Asp Ile Ile Leu Val His  
 115 120 125  
 Ser Val His Thr Asn Gly Trp Ala Asp Gly Thr Leu Leu Asp Thr Gly  
 130 135 140  
 Ala Arg Gly Trp Leu Pro Thr Asn Tyr Cys Glu Ala Tyr Asp Gln Leu  
 145 150 155 160  
 Pro Met Arg Pro Leu Leu Lys Ala Leu Thr Asp Phe Trp Asp Ile Ile  
 165 170 175  
 Arg Gly Gly Cys Gly Ser Ser Leu Arg Asp Phe Gly Asn Gln Asp Leu  
 180 185 190  
 Val Arg Gly Leu Ile Ala Gly Val Arg Phe Leu Leu Val Ser Val Leu  
 195 200 205  
 Ser Arg Met Ile Gln Arg Gln Gly Asn  
 210 215

<210> 42436  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 42436  
 Ala Gln Arg Arg Gln Tyr Ser Lys Leu Lys Gly Ala Thr Ser Lys Glu  
 1 5 10 15  
 Ser Thr Gln Asp Gln Val Tyr Val His Leu Arg Arg Leu Met Asp Val  
 20 25 30  
 Ile Met Ser Ala Phe Gln Val Ala Ser Ala Gln Asn Lys Ser Ile Asn  
 35 40 45  
 Leu Ser Asn Ala Thr Pro Gly Gln Phe Ser Leu Pro Thr Ser Thr Pro  
 50 55 60  
 Phe Ser Pro Gln Leu Ser Arg Cys Val His Gly Ser Cys Cys  
 65 70 75

<210> 42437  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 42437  
 Arg Lys Ser Val Gln Thr His Ile Leu Trp Tyr Val Asp Asp Ile Ser  
 1 5 10 15  
 Phe Asn Ile Val Thr Leu Ser Thr Leu Leu Ser Tyr Trp Arg Ser Val  
 20 25 30

JCS42 U.S. PRO  
 09/417507



## 19002

Ser Ile Leu Phe Leu Gln Ser Leu Thr Thr Met Ala Tyr Gln Val Leu  
           35                          40                          45  
 Ile Asn Ala Leu Lys Ala Pro Ala His Leu Gln Tyr Gln Leu Ala Phe  
           50                          55                          60  
 Leu Ser Ser Val Ser Val Arg Ala Lys Asp Ala Val Val  
   65                          70                          75

&lt;210&gt; 42438

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42438

Lys Cys Asn Ile Cys Leu Lys Thr Tyr Arg Tyr Gly Ile Ser Val Glu  
   1                          5                          10                          15  
 Glu Gly Phe Ile Tyr Met Ser Leu Asp Tyr Ile Glu Glu His Ser Tyr  
           20                          25                          30  
 Gln Glu Met Val Ala Leu Ala Val Val Phe Lys Arg Leu Pro Ser Leu  
           35                          40                          45  
 Gly Ala Val Met Pro Gly Gln Ser Ser Leu Ser Asp Val Leu Leu Leu  
           50                          55                          60  
 Pro Arg Gly Phe Pro Asn Asp Leu Gly Thr Pro  
   65                          70                          75

&lt;210&gt; 42439

&lt;211&gt; 457

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (389)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42439

Tyr Lys Glu Asp Gln Phe Ile Ala Glu Met Ala Arg Pro Lys Ala Ile  
   1                          5                          10                          15  
 Arg Ala Pro Thr Ala Ala Ser Leu Pro Asn Thr Leu Arg Leu Pro Ser  
           20                          25                          30  
 Ser Thr Ser Ser Leu Ile Lys Ser Phe Ser Arg Leu Ser Arg His Ala  
           35                          40                          45  
 Leu Leu Asp Leu Val Phe Gln Trp Leu Asp Asp Arg Asn Ala Gln Leu  
           50                          55                          60  
 Phe Pro Pro Tyr Leu Gln Lys Asp Glu Ile Glu Asn Pro Ala Asp Asp  
   65                          70                          75                          80  
 Lys Leu Ser Pro Tyr Pro Ala Ala Glu Thr Ile Glu Asp Val Arg Asn  
           85                          90                          95  
 Ala Tyr Gln Asp Leu Gln Asp Arg Lys Gly Gly Lys Arg Glu Val Ile  
           100                          105                          110  
 Asp Arg Ile Leu Glu Gly Asp Trp Arg His Gly Ile Thr Leu Arg Gln  
           115                          120                          125  
 Leu Ala Met Val Asp Ile Arg Tyr Met Glu Asp His Pro Ala Ser Leu  
           130                          135                          140  
 Arg Trp Thr Ala Phe Glu Leu Ser Arg Ile Gly Met Asp Gly Thr Gln  
   145                          150                          155                          160  
 Ser Ala Gly Ala Thr Thr Pro Asp Val Ser Ala Cys Leu Pro Arg Ile

## 19003

				165					170					175			
His	Ala	Thr	Thr	Phe	Leu	Ser	Asn	Leu	Gln	Gln	Gln	Ile	Ser	Pro	Leu		
			180					185						190			
Val	Lys	Ala	His	Tyr	His	Leu	Val	Arg	Ser	Ser	Ser	Leu	Pro	Leu	Ser		
		195					200					205					
Phe	Leu	Arg	Ile	Leu	Val	Thr	Ser	Ser	Pro	Tyr	Gln	Asn	Pro	Arg	Gln		
	210					215					220						
Pro	Pro	Glu	Ala	Leu	Met	Asp	Ser	Ser	Arg	Val	Met	Tyr	Val	Ala	Phe		
225					230					235					240		
Pro	Asp	Ser	Cys	Pro	Phe	Ile	Tyr	Thr	Ser	Ile	Ala	Thr	Ser	Pro	Val		
			245						250					255			
Ala	Lys	Ser	Asn	Thr	Thr	Thr	Asn	His	Ala	Val	Ala	Thr	Asp	Ala	Arg		
			260					265					270				
Ser	Leu	Gln	Arg	Ile	Val	Arg	Asp	Ala	Leu	Pro	Lys	Ala	Leu	Ser	Arg		
	275						280					285					
Pro	Gln	Glu	Arg	Tyr	Ala	Leu	Lys	Ala	Thr	Ser	Leu	Thr	Ala	Lys	Asn		
	290					295					300						
Leu	Gln	Ala	Leu	Leu	Ala	Leu	Arg	Gly	Pro	Gly	Arg	Ser	Asn	Val	Ala		
305					310					315					320		
His	Gly	Ala	Phe	Ser	Ile	Phe	Ala	Asp	Ala	Val	Leu	Glu	Gly	Ser	Pro		
			325					330						335			
Leu	Asp	Pro	Arg	Pro	Ser	Asp	Thr	Ile	Ser	Pro	Arg	Glu	His	Phe	Tyr		
		340					345						350				
Gln	Asp	Leu	Asp	Lys	Glu	Asn	Glu	Asn	Gln	Glu	Asp	Gly	Asn	Thr	Ser		
	355					360						365					
Lys	Glu	Thr	Glu	Pro	Ser	Ser	His	Val	Ala	Lys	Lys	Arg	Lys	Leu	Thr		
	370				375						380						
Val	His	Ser	Arg	Xaa	Gly	Thr	Thr	Gly	Thr	Leu	Ser	Ala	Ala	Pro	Leu		
385				390						395					400		
Glu	Pro	Leu	Asp	Val	Arg	Leu	Leu	Glu	Pro	Thr	Thr	Met	Arg	Met	Thr		
			405					410						415			
Asn	Met	Arg	Trp	Thr	Thr	Arg	Asn	His	Gln	Tyr	His	Ser	His	Leu	Ser		
		420					425						430				
Ala	Arg	Thr	Ser	Ser	Val	Val	Ser	Ala	Ser	Ser	Pro	Asn	Trp	Val	Ser		
	435					440						445					
Leu	Thr	Arg	Ser	Val	Cys	Arg	Pro	Gly									
	450					455											

&lt;210&gt; 42440

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42440

Thr	His	Asp	Asp	Glu	Asp	Asp	Glu	His	Glu	Val	Asp	His	Thr	Gln	Pro		
1			5						10					15			
Ser	Val	Ser	Leu	Thr	Phe	Val	Gly	Ser	Asp	Val	Ile	Ser	Gly	Ile	Arg		
		20					25						30				
Lys	Leu	Ala	Glu	Leu	Gly	Val	Val	Asp	Pro	Glu	Arg	Met	Pro	Ser	Trp		
	35					40						45					
Met	Thr	Gly	Glu	Glu	Ala	Val	Ser	Val	Ala	Val	Val	His	Arg	Gly	Lys		
	50				55						60						
Arg	Val	Val	Lys	Ala	Gly												
65					70												

&lt;210&gt; 42441

19004

<211> 112  
<212> PRT  
<213> A.fumigatus

<400> 42441

Leu	Thr	Arg	Ser	Arg	Pro	Thr	Tyr	Leu	Gln	Lys	Asp	Asn	Glu	Ile	Met
1				5					10					15	
Pro	Arg	Gly	Ala	Glu	Tyr	Asp	Asn	Gly	Ile	Pro	Gln	Ser	Asp	Asn	Ala
		20						25					30		
Ile	Glu	Ala	Gly	Glu	Thr	Lys	Val	His	Gly	Thr	Asn	Ser	Ala	Val	Cys
		35					40					45			
Pro	Ala	Asn	His	Leu	Gln	His	Pro	Lys	His	Asp	Val	Leu	Ile	Leu	Ser
	50					55				60					
Met	Ile	Leu	Thr	Asn	Asn	Arg	Thr	Thr	Thr	Ser	Ile	Ala	Ser	Thr	Ala
65				70						75				80	
Gln	Leu	Ile	Ser	Pro	Met	Ser	Leu	Pro	Ala	Ala	Cys	Thr	Ala	Ala	Ala
			85						90					95	
Val	Pro	Pro	Ala	Thr	Arg	Ala	Ala	Arg	Ala	Val	Met	Ser	Leu	Val	Pro
			100					105						110	

<210> 42442  
<211> 162  
<212> PRT  
<213> A.fumigatus

<400> 42442

Asn	Arg	Thr	Tyr	Phe	Ser	Gln	Lys	Pro	Arg	Tyr	Gln	Val	Thr	Glu	Asp
1				5					10					15	
Asn	Gly	Leu	Ile	Gly	Leu	Arg	Ile	Arg	Arg	Gly	Arg	Arg	Asn	Thr	Gly
		20						25					30		
Asp	Ile	Pro	Glu	Val	Ala	Leu	Pro	Leu	Ile	Gln	Val	Leu	Val	Ser	Ser
		35					40					45			
Ser	Cys	Ile	Asp	Glu	Glu	Asn	Pro	Arg	Gly	Thr	Leu	Asn	Gln	Pro	Ala
	50					55				60					
Thr	Ile	His	His	Ala	Asn	Ala	Thr	Leu	Leu	His	Gly	Val	His	Ser	Leu
65				70						75				80	
His	His	Ala	Gly	Val	Arg	Gly	Ser	Gln	Leu	Leu	His	Leu	His	Gly	Cys
			85					90						95	
Gly	Gly	Pro	Val	Gln	Arg	Pro	Asp	Gln	Gly	Val	Pro	Ile	Ala	Ile	Phe
		100					105						110		
Ser	Cys	Ser	Asp	Arg	Ser	Phe	Arg	Phe	Gln	His	Gly	Val	Tyr	Thr	Thr
		115				120						125			
Asp	Ser	Val	Gly	Asp	Phe	Ser	Ser	Asn	Leu	Lys	Glu	Asp	Val	Val	Ala
	130				135						140				
His	Ile	Ser	Leu	Gly	Arg	Val	Gly	Thr	Ser	Ile	Leu	Ala	Val	His	Arg
145					150					155					160
Val	Pro														

<210> 42443  
<211> 63  
<212> PRT  
<213> A.fumigatus

<400> 42443

Asp Gly Gly Arg Phe Asp Phe Ser Pro Phe Leu His Arg Ala Pro Ser

	Age	Sex	Height (cm)	Weight (kg)	Body mass index (kg/m <sup>2</sup> )	Waist circumference (cm)	Waist-hip ratio	Trunk muscle strength (kg)	Trunk muscle endurance (s)	Trunk muscle power (W)	Trunk muscle endurance power (W)
1	20	M	175	75	24.5	95	0.85	100	120	1200	1200
2	20	F	165	60	22.0	85	0.80	80	100	800	800
3	20	M	180	80	25.0	100	0.85	110	130	1300	1300
4	20	F	170	70	24.0	90	0.80	90	110	1100	1100
5	20	M	175	75	24.5	95	0.85	100	120	1200	1200
6	20	F	165	60	22.0	85	0.80	80	100	800	800
7	20	M	180	80	25.0	100	0.85	110	130	1300	1300
8	20	F	170	70	24.0	90	0.80	90	110	1100	1100
9	20	M	175	75	24.5	95	0.85	100	120	1200	1200
10	20	F	165	60	22.0	85	0.80	80	100	800	800
11	20	M	180	80	25.0	100	0.85	110	130	1300	1300
12	20	F	170	70	24.0	90	0.80	90	110	1100	1100
13	20	M	175	75	24.5	95	0.85	100	120	1200	1200
14	20	F	165	60	22.0	85	0.80	80	100	800	800
15	20	M	180	80	25.0	100	0.85	110	130	1300	1300
16	20	F	170	70	24.0	90	0.80	90	110	1100	1100
17	20	M	175	75	24.5	95	0.85	100	120	1200	1200
18	20	F	165	60	22.0	85	0.80	80	100	800	800
19	20	M	180	80	25.0	100	0.85	110	130	1300	1300
20	20	F	170	70	24.0	90	0.80	90	110	1100	1100
21	20	M	175	75	24.5	95	0.85	100	120	1200	1200
22	20	F	165	60	22.0	85	0.80	80	100	800	800
23	20	M	180	80	25.0	100	0.85	110	130	1300	1300
24	20	F	170	70	24.0	90	0.80	90	110	1100	1100
25	20	M	175	75	24.5	95	0.85	100	120	1200	1200
26	20	F	165	60	22.0	85	0.80	80	100	800	800
27	20	M	180	80	25.0	100	0.85	110	130	1300	1300
28	20	F	170	70	24.0	90	0.80	90	110	1100	1100
29	20	M	175	75	24.5	95	0.85	100	120	1200	1200
30	20	F	165	60	22.0	85	0.80	80	100	800	800
31	20	M	180	80	25.0	100	0.85	110	130	1300	1300
32	20	F	170	70	24.0	90	0.80	90	110	1100	1100
33	20	M	175	75	24.5	95	0.85	100	120	1200	1200
34	20	F	165	60	22.0	85	0.80	80	100	800	800
35	20	M	180	80	25.0	100	0.85	110	130	1300	1300
36	20	F	170	70	24.0	90	0.80	90	110	1100	1100
37	20	M	175	75	24.5	95	0.85	100	120	1200	1200
38	20	F	165	60	22.0	85	0.80	80	100	800	800
39	20	M	180	80	25.0	100	0.85	110	130	1300	1300
40	20	F	170	70	24.0	90	0.80	90	110	1100	1100
41	20	M	175	75							

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<210> 42444
<211> 178
<212> PRT
<213> A.fumigatus
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<210> 42445
<211> 77
<212> PRT
<213> A.fumigatus
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<400> 42445															
Gly	Thr	Asp	Glu	Glu	Pro	Gly	Trp	Ala	Leu	Glu	Tyr	Lys	His	Pro	Ser
1				5					10					15	
Ala	Leu	Phe	His	His	Ile	Tyr	Leu	Phe	Tyr	Asn	Gln	Asn	Ser	Ile	Tyr
			20					25					30		
Asp	Gln	Val	Tyr	Glu	Lys	Lys	Ser	Cys	Cys	Ala	Val	Tyr	Leu	Lys	Gly
		35					40					45			
Glu	Ser	Gln	Ser	Ser	Leu	Pro	Leu	His	Phe	Leu	Pro	Tyr	Thr	Asp	Gly
	50					55					60				
Pro	Arg	Gln	Ser	Val	Pro	Ser	Ala	Arg	Leu	Ala	Leu	Ser			
65					70				75						

## 19006

<210> 42446  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 42446  
 Ala Arg Cys Ile Asp Ile Glu Tyr Asp Thr Asp Glu Gln Gln Asn Asp  
 1 5 10 15  
 His Leu Asp Arg Val Asn Arg Thr Ala Asp Leu Pro Asp Val Pro Ala  
 20 25 30  
 Gly Gly Met His Ser Gly Gly Gly Ala Pro Gly His Ser Ser Gly Lys  
 35 40 45  
 Gly Gly His Glu Pro Arg Thr Leu Gly Glu Asn Lys Gly Leu Gly Ala  
 50 55 60  
 His Lys Ala  
 65

<210> 42447  
 <211> 339  
 <212> PRT  
 <213> A.fumigatus  
 <220>  
 <221> UNSURE  
 <222> (260), (278)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42447  
 Tyr Asp Tyr Leu Asn Gly Glu Lys Met Ser Leu Met Lys Ala Ile Ile  
 1 5 10 15  
 Leu His Thr Pro Gly Pro Pro Asp Thr Leu Lys Leu Thr His His Pro  
 20 25 30  
 Ile Pro Ile Pro Glu Pro Gly Glu Leu Arg Leu Arg Ile Lys Ala Phe  
 35 40 45  
 Gly Leu Asn Arg Ser Asp Leu Leu Val Arg Gln Gly Arg Ala Asn His  
 50 55 60  
 Pro Ile Ala Tyr Pro Arg Ile Pro Gly Ile Glu Ala Val Gly Ile Ile  
 65 70 75 80  
 Asp Thr Ala Pro Gly Leu Glu Asp Thr Phe Pro Pro Gly Ser Thr Val  
 85 90 95  
 Ala Thr Ala Met Gly Gly Met Gly Thr Val Phe Asp Gly Gly Tyr Ala  
 100 105 110  
 Glu Tyr Val Cys Val Pro Ala Arg Gln Thr Gln Leu Leu Gln Pro Lys  
 115 120 125  
 Thr Thr Leu Pro Trp Glu Ile Leu Gly Ala Ile Pro Val Met Val Pro  
 130 135 140  
 Thr Ala Trp Gly Ala Leu Ile Arg Ser Leu Gly Leu Arg Ala Arg Asp  
 145 150 155 160  
 Arg Leu Leu Ile Arg Gly Gly Thr Thr Ser Val Gly Leu Ala Ala Ala  
 165 170 175  
 Ala Ile Ala Lys Ala His Gly Ala Tyr Val Ala Ser Thr Thr Lys Lys  
 180 185 190  
 Lys Glu Arg Glu Ala Met Leu Leu Glu Asn Gly Ala Asp Arg Val Trp  
 195 200 205  
 Thr Asp Asp Gly Ala Val Ala Glu Gln Ile Arg Asp Ala Asp Ser Gly  
 210 215 220



## 19007

Cys Tyr Tyr Asp Lys Val Leu Glu Leu Val Gly Thr Ala Thr Leu Ala  
 225 230 235 240  
 Asp Ser Leu Arg Cys Val Lys Lys Gly Gly Val Val Ser Leu Val Gly  
 245 250 255  
 Arg Leu Cys Xaa Asn Gly Asp Leu Glu Lys Val Asp Leu Met Glu Leu  
 260 265 270  
 Ile Pro Ser Gly Val Xaa Leu Thr Val Tyr His Gly Thr Ser Glu Asp  
 275 280 285  
 Phe Met Asn Thr Pro Leu Asp Ala Val Leu Arg Leu Ile Glu Gln Gly  
 290 295 300  
 Ser Leu Lys Phe Lys Ile Gly Arg Val Leu Arg Met Glu Gln Ile Val  
 305 310 315 320  
 Glu Ala His Arg Cys Met Glu Glu Asn Glu Ala Glu Gly Lys Ile Val  
 325 330 335  
 Ile Leu Pro

<210> 42448  
 <211> 86  
 <212> PRT  
 <213> A.fumigatus

<400> 42448  
 Glu Glu Val Arg Gln Leu Met Pro Pro Ala Leu Phe His Phe Leu Leu  
 1 5 10 15  
 Thr Pro Gly Ile Ala Tyr Pro Ser Ser Phe Asp Gly Pro Glu Asp Tyr  
 20 25 30  
 Phe Asp Val Ile Gly Gly Thr Glu Gln Lys Leu Ser Arg Pro Leu Ser  
 35 40 45  
 Val Pro Gly Ser Pro Arg Asp Arg Ser Gly Val Met Thr Pro Gly Asp  
 50 55 60  
 Phe Ala Thr Ile Gln Glu Val Lys Glu Gly Leu Asp Thr Glu Asp Tyr  
 65 70 75 80  
 Ile Ala Trp Arg Leu Pro  
 85

<210> 42449  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 42449  
 Gly Gln Leu Ala Lys Trp Ser Val Leu Cys Arg His Ala Thr Pro Tyr  
 1 5 10 15  
 His Ala Pro Leu Tyr Leu Ala His Ser Lys Gly Phe Phe Lys Glu Glu  
 20 25 30  
 Gly Leu Lys Val Ala Ile Leu Glu Pro Asn Asp Pro Ser Asp Val Thr  
 35 40 45  
 Glu Ile Ile Gly Ser Gly Lys Val Asp Met Gly Phe Lys Ala Met Ile  
 50 55 60  
 His Thr Leu Ala Val Cys Ser Trp Ser Cys Arg  
 65 70 75

<210> 42450  
 <211> 89  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42450

Trp	Phe	Asp	Ala	His	Ser	His	Gln	Ala	Lys	Ala	Arg	Asn	Phe	Pro	Val
1				5					10					15	
Thr	Ser	Ile	Gly	Ser	Leu	Leu	Asp	Glu	Pro	Phe	Thr	Gly	Val	Val	Tyr
			20					25					30		
Leu	Lys	Asp	Ser	Gly	Ile	Thr	Glu	Asp	Phe	Arg	Ser	Leu	Lys	Gly	Lys
		35					40					45			
Arg	Ile	Gly	Tyr	Val	Gly	Glu	Phe	Gly	Lys	Val	Cys	Gly	Val	Phe	Ser
	50					55					60				
Phe	Ser	Gly	Arg	Arg	Ala	Cys	Thr	His	Trp	Gly	Val	His	Arg	Ser	Lys
65					70					75					80
Ser	Met	Ser	Ser	Pro	Ser	Thr	Thr	Ala							
				85											

&lt;210&gt; 42451

&lt;211&gt; 411

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42451

Thr	Tyr	Pro	Ser	Phe	Leu	Asp	Arg	Leu	Ser	Thr	Leu	Val	Ser	His	Lys
1				5					10					15	
Ser	Thr	Lys	Glu	Leu	Lys	Phe	Arg	Ser	Glu	Gln	Thr	Ser	Gln	Leu	Pro
			20					25					30		
Lys	Gly	Glu	Phe	Leu	Arg	Tyr	Phe	Thr	Leu	Asn	Arg	Leu	Phe	Ala	Asp
		35					40					45			
Glu	Cys	Glu	Ala	Ile	Ser	Gly	Arg	Ser	Gly	Thr	Ala	Met	Lys	Thr	Val
	50					55					60				
Val	Ser	Asn	Gln	Ile	Arg	Asp	Tyr	Ile	Asn	Arg	Phe	Gly	Glu	Asn	Gln
65				70					75						80
Arg	His	Arg	Leu	Val	Asp	Val	Met	Asp	Ser	Asp	Arg	Trp	Asp	Ala	Arg
			85					90					95		
Asp	Phe	Gly	Glu	Thr	Glu	Thr	Ala	Ile	Leu	Ser	Lys	Ile	Leu	Glu	Ala
			100				105						110		
Ser	Thr	Lys	Asp	Val	Glu	Ala	Trp	Leu	Ala	Ala	Ser	Arg	Ile	Trp	Ser
		115					120					125			
Pro	Gln	Glu	Glu	Gln	Thr	Glu	Lys	Ala	Arg	Arg	Asp	Ser	Ala	Ala	Thr
	130					135					140				
Asn	Gly	Thr	Gly	Lys	Asp	Arg	Val	Arg	Ser	Ala	Val	Ile	Asp	Glu	Gln
145				150					155						160
Lys	Tyr	Ile	Leu	Pro	Glu	Cys	Ala	Val	Ala	Met	Met	Lys	Ser	Ile	Glu
			165					170					175		
Glu	Phe	Gln	Phe	Leu	Met	Ala	Asn	Ile	Pro	Ser	Met	Ile	Gln	Asp	Ile
		180					185						190		
Ala	Pro	Gly	Leu	Leu	Glu	Ser	Leu	Lys	Leu	Phe	Asn	Ser	Arg	Ser	Ser
		195					200					205			
Gln	Leu	Ile	Leu	Gly	Ala	Gly	Ala	Thr	Arg	Ser	Ala	Gly	Leu	Lys	Asn
	210				215						220				
Ile	Thr	Thr	Lys	His	Leu	Ala	Leu	Ser	Ser	Gln	Ala	Leu	Ser	Phe	Ile
225				230						235					240
Ile	Ala	Leu	Val	Pro	Tyr	Ile	Arg	Glu	Phe	Val	Arg	Arg	His	Ala	Pro
			245					250					255		
Ser	Ser	Pro	Leu	Met	Gly	Glu	Phe	Asp	Lys	Val	Lys	Arg	Leu	Tyr	Gln
			260					265					270		

## 19009

Glu His Gln Ser Gly Ile His Glu Lys Leu Val Asp Ile Met Ser Gly  
 275 280 285  
 Arg Ser Ser Val His Val Asn Ala Met Lys Lys Ile Asp Trp Asp Ala  
 290 295 300  
 Ala Ala Gly Asn Asn Val Asn Pro Tyr Met Glu Thr Leu Thr Lys Glu  
 305 310 315 320  
 Thr Gly Thr Leu His Arg Val Leu Ser Lys His Leu Pro Glu Thr Thr  
 325 330 335  
 Val Met Met Ile Met Asp Pro Val Phe Arg Asn Tyr Arg Asp Gln Trp  
 340 345 350  
 Thr Arg Ala Phe Glu Glu Ala Thr Val His Thr Glu Ala Gly Lys Gln  
 355 360 365  
 Arg Tyr Gly Ser Leu Pro Thr Ser Ser Leu Asn Cys Thr Asn His Pro  
 370 375 380  
 Gln Asp Ala Thr Gly Cys Gly Thr Phe Pro Glu Gln Ala Glu Gln Asp  
 385 390 395 400  
 Arg Arg Leu Arg Arg Leu Gly Thr Ala Ser Ala  
 405 410

&lt;210&gt; 42452

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42452

Ser Leu Arg Tyr Cys Ile Leu Leu Gln Leu Leu Ile Tyr Asn Ser Arg  
 1 5 10 15  
 His Thr Met Asp Ser Glu Asp Thr Gly Pro Asp Pro Pro Lys Arg Asp  
 20 25 30  
 Val Arg Asn His Ile Leu Phe Glu Ile Ala Thr Glu Val Ala Asn Arg  
 35 40 45  
 Val Gly Gly Ile Tyr Ser Val Leu Lys Ser Lys Ala Pro Val Thr Thr  
 50 55 60  
 Ala Glu Tyr Gly Asp Arg Tyr Thr Leu Ile Gly Pro Leu Asn Arg Ala  
 65 70 75 80  
 Ser Ala Ala Val Glu Val Glu Glu Leu Thr Pro Ser Asn Pro Arg Met  
 85 90 95  
 Val Glu Thr Met Asn Ser Met Lys Glu Arg Gly Ile Gly Met Val Tyr  
 100 105 110  
 Gly Arg Trp Leu Ile Glu Gly Ala Pro Arg Val Leu Leu Ile Asp Thr  
 115 120 125  
 Gly Thr Gly Tyr Lys Tyr Leu Asp Glu Trp Lys Gly Asp Leu Trp Asn  
 130 135 140  
 Ile Ala Gly Ile Pro Ser Pro Ala Ser Asp Thr Glu Thr Asn Glu Ala  
 145 150 155 160  
 Ile Val Phe Gly Tyr Leu Val Ala Trp Phe Leu Gly Glu Val Arg Ser  
 165 170 175  
 Ile Ser Gly Thr Leu Arg Val Gln Lys  
 180 185

&lt;210&gt; 42453

&lt;211&gt; 515

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42453

## 19010

Phe	Ile	Ala	His	Glu	Arg	Arg	Arg	Ala	Val	Val	Ala	His	Phe	His	Glu
1				5					10					15	
Trp	Leu	Ala	Gly	Val	Ala	Leu	Pro	Leu	Thr	Lys	Lys	Arg	His	Met	Asp
			20					25					30		
Leu	Thr	Thr	Ile	Phe	Thr	Thr	His	Ala	Thr	Leu	Leu	Gly	Arg	Tyr	Leu
		35					40					45			
Cys	Ala	Gly	Ser	Val	Asp	Phe	Tyr	Asn	Asn	Leu	Gln	His	Phe	Asp	Val
	50					55					60				
Asp	Ala	Glu	Ala	Gly	Lys	Arg	Gly	Ile	Tyr	His	Arg	Tyr	Cys	Ile	Glu
65					70					75					80
Arg	Ala	Ala	Ala	His	Ser	Ala	Asp	Val	Phe	Thr	Thr	Val	Ser	His	Ile
				85					90					95	
Thr	Ala	Phe	Glu	Ser	Glu	His	Leu	Leu	Lys	Arg	Lys	Pro	Asp	Gly	Val
			100					105					110		
Leu	Pro	Asn	Gly	Leu	Asn	Val	Lys	Lys	Phe	Ala	Ala	Val	His	Glu	Phe
		115					120					125			
Gln	Asn	Leu	His	Ser	Gln	Ser	Lys	Glu	Lys	Ile	Asn	Asp	Phe	Val	Arg
	130					135					140				
Gly	His	Phe	Tyr	Gly	His	Asn	Asp	Phe	Asp	Leu	Asp	Asn	Thr	Leu	Tyr
145					150					155					160
Val	Phe	Thr	Ala	Gly	Arg	Tyr	Glu	Phe	Arg	Asn	Lys	Gly	Val	Asp	Met
				165				170						175	
Phe	Ile	Glu	Gly	Leu	Ala	Arg	Leu	Asn	His	Arg	Leu	Lys	Ala	Ser	Gly
			180					185					190		
Ser	Lys	Thr	Thr	Val	Val	Ala	Phe	Ile	Ile	Met	Pro	Ala	Gln	Thr	Ser
	195						200					205			
Ser	Leu	Thr	Val	Glu	Ala	Leu	Lys	Gly	Gln	Ala	Val	Val	Lys	Ser	Leu
	210					215					220				
Arg	Asp	Thr	Ile	Glu	Met	Ile	Glu	Lys	Ser	Ile	Gly	Lys	Arg	Met	Tyr
225					230					235					240
Glu	Arg	Cys	Leu	Ala	Trp	Lys	Glu	Gly	Asp	Asn	Met	Pro	Asp	Glu	Lys
				245					250					255	
Asp	Leu	Ile	Thr	Ser	Gln	Asp	Arg	Val	Leu	Leu	Arg	Arg	Arg	Leu	Phe
			260					265					270		
Ala	Met	Lys	Arg	His	Gly	Leu	Pro	Ile	Val	Thr	His	Asn	Met	Val	
	275						280					285			
Asn	Asp	His	Glu	Asp	Pro	Ile	Leu	Asn	Gln	Ile	Arg	Arg	Val	Glu	Leu
	290					295					300				
Phe	Asn	Tyr	Pro	Thr	Asp	Arg	Val	Lys	Val	Ile	Phe	His	Pro	Glu	Phe
305					310					315					320
Leu	Asn	Ser	Ser	Asn	Pro	Val	Leu	Pro	Leu	Asp	Tyr	Asp	Asp	Phe	Val
				325					330					335	
Arg	Gly	Thr	His	Leu	Gly	Val	Phe	Pro	Ser	Tyr	Tyr	Glu	Pro	Trp	Gly
			340					345					350		
Tyr	Thr	Pro	Ala	Glu	Cys	Thr	Val	Met	Gly	Val	Pro	Ser	Ile	Thr	Thr
	355						360					365			
Asn	Leu	Ser	Gly	Phe	Gly	Cys	Tyr	Met	Glu	Glu	Leu	Ile	Glu	Asn	Ser
	370					375					380				
Ser	Asp	Tyr	Gly	Ile	Tyr	Ile	Val	Asp	Arg	Arg	Met	Lys	Gly	Val	Asp
385				390						395					400
Glu	Ser	Val	Asn	Gln	Leu	Thr	Asp	Phe	Met	Phe	Asn	Phe	Thr	Gln	Lys
				405					410					415	
Ser	Arg	Arg	Gln	Arg	Ile	Asn	Gln	Arg	Asn	Arg	Thr	Glu	Arg	Leu	Ser
			420					425					430		
Asp	Leu	Leu	Asp	Trp	Lys	Arg	Met	Gly	Leu	Glu	Tyr	Val	Lys	Ala	Arg
	435						440						445		

## 19011

Gln Leu Ala Leu Arg Arg Gly Glu Ala Thr His Ala Pro Ser Pro Phe  
 450 455 460  
 Ser Leu Leu Ala Asp Ser Arg Tyr Ser Leu Pro Phe Ile Leu Arg Trp  
 465 470 475 480  
 Ser Arg Arg Leu Phe Arg Arg His Trp Arg Asn Arg Ala Glu Ala Leu  
 485 490 495  
 Ala Ser Ile Val Ser Pro Arg Val Ser Thr Gly Ser Ile Trp Ser Asp  
 500 505 510  
 Asp Ser Gly  
 515

&lt;210&gt; 42454

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42454

Ile Gln Ile Asp Glu Leu Thr Lys Tyr Tyr Gly Met Thr Ala Asp Asp  
 1 5 10 15  
 Tyr Thr Ala Val Arg Cys Gly Met Asn Val Thr Lys Ala Ile Ile Arg  
 20 25 30  
 Gly Asp Ile Asp Ala Gly Ile Gly Leu Glu Asn Val Gln Met Val Glu  
 35 40 45  
 Leu Ala Glu Trp Leu Ala Ser Gln Asn Arg Pro Arg Asp Asp Val Gln  
 50 55 60  
 Met Leu Arg Ile Asp Gln Leu Ala Glu Leu Gly Cys Cys Cys Phe Cys  
 65 70 75 80  
 Ser Ile Leu Tyr Ile Ala Asn Asp Ala Phe Leu Ala Ala Asn Pro Asp  
 85 90 95  
 Lys Val Gln Lys Phe Met Arg Ala Val Lys Arg Ala Thr Asp Tyr Val  
 100 105 110  
 Leu Ala Glu Pro Ala Lys Ala Tyr Glu Glu Tyr Ile Asp Val Lys Pro  
 115 120 125  
 Ile Met Gly Thr Pro Val Asn Arg Lys Ile Phe Glu Arg Ser Phe Ala  
 130 135 140  
 Tyr Phe Ser Arg Asp Leu Lys Asn Val Gln Arg Asp Trp Ala Lys Val  
 145 150 155 160  
 Thr Asn Tyr Gly Lys Arg Leu Gly Ile Leu Asp Ala Asn Phe Glu Pro  
 165 170 175  
 Asn Tyr Thr Asn Lys Tyr Leu Ser Trp Asp Leu Asp Ala Asp Ser Thr  
 180 185 190  
 Asp Pro Leu Gly Asp Gln Lys Arg Met Ala Glu Leu Gln Lys Gln Val  
 195 200 205  
 Ala Ala Glu Gly Gly Phe Lys Arg Leu His Val Ser Ala Ala Ala  
 210 215 220

&lt;210&gt; 42455

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42455

Tyr Leu Ser Asp His Arg Asn Cys Asp Pro Thr Leu Thr Pro Gln Thr  
 1 5 10 15  
 Gly Pro Tyr Thr Arg Ala Arg Ala Ser His Ser Ser Ala Thr Met Arg  
 20 25 30

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.5	10.5	20	65	0.1	3.0	0.95
Gender	0.5	0.5	0	1	0.0	3.0	0.95
Marital Status	0.6	0.5	0	1	0.0	3.0	0.95
Education	12.5	2.5	9	16	0.1	3.0	0.95
Income	1500	500	500	3000	0.1	3.0	0.95
Health	0.8	0.2	0	1	0.0	3.0	0.95
Stress	0.7	0.3	0	1	0.0	3.0	0.95
Depression	0.6	0.4	0	1	0.0	3.0	0.95
Life Satisfaction	0.7	0.3	0	1	0.0	3.0	0.95
Work Satisfaction	0.6	0.4	0	1	0.0	3.0	0.95
Family Satisfaction	0.7	0.3	0	1	0.0	3.0	0.95
Community Satisfaction	0.6	0.4	0	1	0.0	3.0	0.95
Overall Satisfaction	0.65	0.35	0	1	0.0	3.0	0.95

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<210> 42456
<211> 73
<212> PRT
<213> A.fumigatus
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<213> A.fumigatus

[illegible]

<213> A.fumigatus

Thr	Gln	Val	Ser	Cys	Asn	Cys	Ala	Asn	Leu	Pro	His	Ser	Ile	Cys	Leu
1				5					10					15	
Arg	Ser	Gly	Arg	Pro	Pro	Val	Gln	Asp	Asp	Asp	Asp	Met	Asn	Val	Glu
			20					25					30		
Leu	Pro	Ser	Asp	Asp	Pro	Pro	Asp	Asn	Ile	Gly	Asn	Val	Pro	Leu	Ser
		35					40					45			
Asp	Gly	Arg	Ser	Lys	Phe	Asn	Leu	Phe	Arg	Ser	Met	Cys	Arg	Phe	Ala
	50					55					60				

## 19013

Thr Ile Glu Ser Lys Val Tyr Lys Arg Leu Tyr Ser Ala Lys Ala Ser  
 65 70 75 80  
 Lys Gln Ser Asp Gly Glu Leu Leu Asn Thr Ile Gly Glu Leu Asp Lys  
 85 90 95  
 Glu Leu Glu Asp Trp Lys Asp Ser Ile Pro Leu Asp Phe Arg Pro Glu  
 100 105 110  
 His Glu Ile Lys Ala Ser His Thr Pro Leu Ile Leu His Val Val Val  
 115 120 125  
 Leu His Phe Ala Tyr Tyr Asn Cys Leu Thr Thr Ile His Arg Met Ser  
 130 135 140  
 Val His His Gly Tyr Trp Thr Ser Arg Leu Ser Asn Tyr Ala Ile Gln  
 145 150 155 160  
 Gly Leu Asn Ala Arg Pro Leu Asn Pro Arg Val Phe Leu Ser Ala Val  
 165 170 175  
 Leu Cys Val Thr Ala Ala Arg Ala Ser Ile Asn Leu Ile Lys Tyr Ile  
 180 185 190  
 Pro Gln Gly Asp Phe Ala Cys Val Trp  
 195 200

&lt;210&gt; 42458

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42458

Ser Asn Ser Leu Thr Ser Pro Ser Gly Ser Ser Thr Ser Ser Met Ala  
 1 5 10 15  
 Thr Leu Leu Arg Arg Pro Gly Asn Leu Ala Arg Tyr Ser Arg Arg Ala  
 20 25 30  
 Ala Glu Cys Ile Asn Arg Thr Arg Pro Leu Ser Ala Arg Ala Pro Gln  
 35 40 45  
 Ser Arg Leu Ser Ser Leu Ile Thr Ala His Arg Val Arg Thr Tyr Ala  
 50 55 60  
 Thr Gly Thr Pro Gly Gly Pro Asn Pro Pro Asn Asp Lys Arg Ser Gln  
 65 70 75 80  
 Asn Lys Ala Ala Thr Gly Pro Gly Asn Asp Gly Gly Lys Ser Gly Asp  
 85 90 95  
 Gly Lys Thr Pro Asn Asp Pro Glu Ser Ser Leu Ser Lys Glu Glu Gln  
 100 105 110  
 Glu Gln Val Asn Leu Phe Val Asp His Leu Lys Asn Lys Val Pro Pro  
 115 120 125  
 Ser Gln His Gln Met Leu Asp Asp Ile Arg Thr Leu Leu Leu Arg Glu  
 130 135 140  
 Gly Leu Pro Ala Glu Met Arg Gln Phe Ile Glu Lys His Val Gln Ser  
 145 150 155 160  
 Gly Arg Pro Ala Ser Leu Met Asp Tyr Val Lys Leu Thr Arg Tyr Met  
 165 170 175  
 Ser Gln His Met Thr Asp Tyr Ala Tyr Lys Leu Asn Gln Ile Glu Glu  
 180 185 190  
 Glu Arg Asn Lys Glu Lys Ala Lys Ser Glu Gly Gly Ala Gln Gly Glu  
 195 200 205  
 Gln Gln Lys Gln Gln Gln Gln Glu Gln Gln Arg Glu Gln Lys Lys  
 210 215 220  
 Gly Arg Asp Gln Ala Asn Lys Gln Ile Pro Pro Asn Phe Arg Thr Phe  
 225 230 235 240  
 Glu Ile Lys Phe Asp Pro Ala Ser Phe Leu Ile Thr Ser Leu Ile Thr

## 19014

Tyr Tyr Val Tyr Arg Ser Phe Phe Pro Trp Gly Lys Leu Pro Arg Arg  
 245 250 255  
 260 265 270  
 Ser His Gly Gln Ser Leu  
 275

&lt;210&gt; 42459

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42459

Tyr Leu Ala Gly Ala Phe Tyr Gly Phe Lys Thr Ile Ile Ile Pro His  
 1 5 10 15  
 Asn Leu Glu Pro Gln Val Leu Ser Asp His Leu Glu Lys Ser Gln Ala  
 20 25 30  
 Tyr Ala Leu Ile Gly Gly Ser Arg Val Pro Trp Asn Cys Ser Leu Gly  
 35 40 45  
 Ala Lys Asn Asn Lys Gln Phe Ser Gln Val Ile Trp Val Ala Lys Val  
 50 55 60  
 Gly Ser Gln His Met Asp Trp Asn Gln Val Pro Gly Asp Phe Gln Gly  
 65 70 75 80  
 Asn Trp Glu Val Ala Val Trp His Glu Leu Val Glu Glu Lys Lys Asp  
 85 90 95  
 Leu Thr Gly Leu Asp Val Pro Lys Trp Asp Pro Asn Ser Pro Ala Pro  
 100 105 110  
 Ser Val Thr Leu Val Trp Pro Thr Lys Ser His Val Gly Asp Phe Ile  
 115 120 125  
 Glu Phe Gln Pro Glu Val Arg Cys Leu Ile  
 130 135

&lt;210&gt; 42460

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42460

Arg Arg Ala Gly Leu Leu Pro Val Gln Gly Val Lys Ala Ile Thr Tyr  
 1 5 10 15  
 Ile Ala Thr Cys Pro Asp Lys Gln Val Val Leu Thr Leu Leu Cys Ser  
 20 25 30  
 Leu Leu Asn Thr Val Cys Thr Val Val Tyr Gly Ser Asn Tyr Cys Leu  
 35 40 45  
 Val Leu Thr Thr Val Ser Arg Ser Leu Ser Ser Thr Ile Leu Arg His  
 50 55 60  
 Gly Gly Phe His Met Thr Met Trp Ser Gly Lys Ile Pro Ser Arg Ser  
 65 70 75 80  
 Ser Leu Tyr Thr Val Tyr Asn Phe Phe Leu Val Phe Tyr Tyr Ile Leu  
 85 90 95  
 Ser Gln Arg Asp Gly Arg Gly Thr Pro Pro Lys Asn Tyr Tyr Arg His  
 100 105 110  
 Tyr Phe Gly Arg Leu His Arg Pro Gln Asp Phe Gln Phe Leu Val Asp  
 115 120 125  
 Gly Met Thr Arg Ile Leu Asn Gln Pro Val Gly Leu Pro Ser Ser Ala  
 130 135 140  
 Gly Tyr Ala



## 19015

145

&lt;210&gt; 42461

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42461

```

Arg Pro Pro Pro Thr Ser Lys Leu Ala Ser Leu Arg Leu Ala Tyr Gly
1      5      10      15
Glu Leu Met Ile Met Ile Ser Gly Val Phe Asp Thr Ser Val Ser Gln
      20      25      30
Thr Leu Tyr Leu Phe Ile Asp Ala Lys Thr Asp Gly His Glu Thr Phe
      35      40      45
Lys Ala Val Ile Asp Ala Leu Glu Pro Leu Arg Lys His Gly Tyr Leu
      50      55      60
Thr Thr Leu Lys Asn Asn Arg Thr Ile Thr Asn Gly Pro Ile Thr Val
      65      70      75      80
Ile Gly Thr Gly Asn Thr Pro Tyr Asp Met Val Ala Pro Val Ala Asn
      85      90      95
Arg Asp Tyr Phe Phe Asp Ala His Leu Glu Ser Leu Asn Glu Pro Glu
      100      105      110
Asn Ala Gly Ile Thr Asp Leu Ile Ser Pro Ile Ala Ser Thr Ser Phe
      115      120      125
Ala Arg Ala Ile Gly Thr Val Ser Glu Gly Asp Ser Glu Ala Ile Leu
      130      135      140
Thr Glu Lys Gln Leu Ser Thr Leu Arg Ser Gln Ile Ala Thr Ala Lys
      145      150      155      160
Glu Arg Gly Ile Gly Ala Arg Tyr Trp Glu Thr Pro Ser Tyr Pro Ile
      165      170      175
Arg Thr Arg Asn Ser Val Trp Arg Thr Leu Leu Lys Glu Gly Val Ala
      180      185      190
Leu Leu Asn Ala Asp Asp Leu Glu Ala Ala Ala Gly Tyr Phe
      195      200      205

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&lt;210&gt; 42462

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42462

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Phe Trp Glu Leu Pro Glu Ser Thr Glu Asp Val Phe Ser Leu Phe Thr
1      5      10      15
Pro Ala Asp Ile Arg Arg Thr Arg Asp His Ala Leu Pro Asn Phe Glu
      20      25      30
Thr Leu Leu Leu Ser Ile Thr Ser Arg Leu Thr Phe Leu Lys Asn His
      35      40      45
Pro Ser Phe Pro Asp Pro Asp Leu Ala Pro Glu Arg Asp Val Leu Asn
      50      55      60
Cys Ile Arg Ile Leu Thr Arg Ile Leu Pro Phe Ile Tyr Glu Ala Glu
      65      70      75      80
His Leu Glu Glu Trp Glu Asp Lys Phe Phe Trp Gly Arg Arg Lys Lys
      85      90      95
Asn Thr Arg Gly Ala Arg Pro Gly Ala Glu Val Leu Phe Asp Glu Ser
      100      105      110
Gln Ala Glu Gly Arg Gln Glu Glu Thr Leu Pro Gly Thr Asn Asp Tyr

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## 19016

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      115              120              125
Glu Asp Val Lys Pro Leu Ala Glu Glu Leu Ile Asp Asn Leu Leu Asp
   130              135              140
Leu Leu Phe Tyr Thr Asp Phe Thr Ile Pro Lys Leu Ala Thr Thr Lys
   145              150              155              160
Gly Lys Val Ser Tyr Ser Ile Trp Gln Ser Gly Val Gly Cys Asn Thr
              165              170              175
Ser Met Gly Ser Ser Lys Glu Leu Glu Ser Asn Arg Cys Glu Ile Leu
              180              185              190
Arg Leu Leu Leu Thr Leu Thr Gly Lys Ala Met Tyr Met Pro Leu Ser
              195              200              205
Lys Ile Leu Val Leu Val Met Gly Arg Asn Ala Asp Asp Ala Gln Ala
   210              215              220
Ser Tyr Leu Phe Arg Glu Ser Arg Pro Leu Pro Ile Leu Gln Pro Ala
   225              230              235              240
Leu Thr Asn Lys Leu Ser Ser His Cys Tyr Ala His Cys
              245              250

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&lt;210&gt; 42463

&lt;211&gt; 495

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (465)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42463

```

Glu Leu Leu Thr Ala Gln Met Ser Lys Val Asp Val Asp Leu Gly Asp
 1              5              10              15
Ser Leu Ala Lys Val Leu Pro Thr Gly Val Lys Val Thr Ile Arg His
   20              25              30
Ile Ser Ser Ala Pro Ser Pro Cys Val Ala Leu Phe Ala Ala Pro Pro
   35              40              45
Gly Glu Glu Pro Glu Ser Thr Phe Cys Glu Asn His Phe Leu Ala Val
   50              55              60
Ser Ile Ser Pro Asn Glu Asn Glu Glu Ser Glu Val Ile Ile Phe Gly
   65              70              75              80
Ile Glu Val Leu Val Tyr Gly Thr Ala His Leu Thr Thr Ile Phe Val
              85              90              95
Ser Lys Ala Asp Ser Thr Gly Tyr Leu His Leu Leu Lys Asn Ala Pro
              100              105              110
Lys Val Ser Leu Leu Arg Leu Ile Ser Asn Ala Phe Leu Ser Phe Leu
              115              120              125
Val Gln Thr His Gln Arg Pro Gly Val Arg Leu Met Val Ser Leu Phe
              130              135              140
Ala Arg Ala Gln Asn Gln Tyr Leu Phe Pro Gly Ser Ile Glu Asn Pro
   145              150              155              160
Glu Lys His Val Leu Asp Asp Arg Gly Leu Ile Lys Trp Trp Cys Arg
              165              170              175
Val Ile Asp Pro Ile Leu Arg Glu Tyr Glu Pro Glu Thr Gly Ser His
              180              185              190
Glu Lys Ala Val Asp Asp Gln Thr Gln Glu Ser Ala Lys Ser Ser Ala
              195              200              205
Thr Ala Phe Leu Ile Val Pro Gly Cys Asp Lys Phe Glu Thr Arg Gly

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## 19017

210		215		220
Phe Phe Pro Ile Thr	Ala Arg Ser Asp Gly Lys Asp Arg Pro Arg Trp			
225	230	235		240
Leu Asn Ser Tyr Pro Leu His Gln Leu Cys Asp Asn Pro Asn Ala Pro				
	245	250		255
Pro Arg Cys Leu Val Pro Arg Phe Pro Asp Asp Pro Lys Thr Arg Phe				
	260	265		270
Leu Ile Asp Leu Asp Asp Glu Leu Pro Glu Ser Thr Gly Ala Ala Gly				
	275	280		285
Ser Lys Glu Asn Ser Gly His Trp Arg Ser Val Lys Ser Leu Ala Gln				
	290	295		300
Phe Trp Glu Met Met Ser Phe Arg Gln Glu Cys Ser Ala Gly Arg Leu				
305	310	315		320
Val Gly Phe Leu Trp Leu Val Ile Asn Pro Gly Leu Val Asn Ser				
	325	330		335
Val Gln Met Thr Ser Ser Arg Val Ala Ser Arg Asp Val Glu Asn Val				
	340	345		350
Leu Ser Glu Ser Ala Lys Thr Thr His Asp Ala Thr Lys Gln Lys Asp				
	355	360		365
Glu Ala Ala Ser Val Ser Ser Pro Pro His Pro Ser Thr Ser Gly Leu				
	370	375		380
Gln Thr Ser Pro Ile Ala Leu Pro Gly Val Ser Ser Ser Asp Thr His				
385	390	395		400
Ala Thr Val Gln Gln Ala Thr Gly Pro Ser Ala Phe Phe Trp Pro Asp				
	405	410		415
Thr Gly Arg Gly His Ala Val Leu Ser Glu Glu Asp Tyr Lys Ala Ala				
	420	425		430
Ile Asn Phe Leu Ile Asp Gln Asp Phe Asn Thr Lys His Lys Ala Ile				
	435	440		445
Ala Ser Thr Lys Ala Trp Ala Glu Lys Val Ala Ser Leu Ala Asp Gln				
	450	455		460
Xaa Trp Val Gly Gln Arg Val Glu Gly Arg Asn Ala Thr Thr Glu Pro				
465	470	475		480
Gly Gln Lys His Thr Asp Ala Thr Thr Val Ile Asn Thr Ala Phe				
	485	490		495

&lt;210&gt; 42464

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42464

Ser Tyr Asn Thr Ile Asn Pro Arg Arg Cys Arg Phe Ala Met Gly Ala
1 5 10 15
Ser Glu Ser Lys Leu Val Phe Lys Gln Gly Ile Phe Arg Leu Ser Asp
20 25 30
Glu Lys Ala Ile Pro Ala Asp Asp Pro Tyr Trp Ser Arg Ile Cys Leu
35 40 45
Ser Tyr His Asn Phe Ser Ser Asp His Ser Ser Leu Ser Thr His
50 55 60

&lt;210&gt; 42465

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42465

Gln Thr Ser Cys Pro His Ile Ala Met Leu Ile Ala Lys Tyr Cys Met  
 1 5 10 15  
 Tyr Ser Gly Val Trp Phe Gln Leu Leu Pro Arg Pro Asn His Ser Leu  
 20 25 30  
 Thr Gln Ser Ile Lys Tyr Asn Pro Ala Ser Trp Arg Val Pro Tyr Asp  
 35 40 45  
 His Val Val Trp Lys Asp Ser Lys Gln Ile Phe Val Ile Tyr Cys Leu  
 50 55 60  
 Gln Phe Leu Leu Gly Leu Leu Leu Tyr Pro Ile Pro Glu Gly Arg Ser  
 65 70 75 80  
 Trp Asp Thr Ala Gln Glu Leu Leu Ser Pro Leu Leu Trp Ser Ala Ala  
 85 90 95  
 Pro Thr Thr Arg Leu Pro Ile Pro Cys Arg Trp His Asp Gln Asn Leu  
 100 105 110  
 Glu Pro Thr Cys Gly Ser Ala Phe Ser Arg Leu Cys Leu Ala Leu  
 115 120 125  
 Met Lys Trp Gln Met Gln Val Thr Asn Ser Tyr Leu Pro Gly Ser Gln  
 130 135 140  
 Lys Ser Ile Lys Trp Ala Pro Glu Met Leu Ile Leu Phe Trp Glu Ala  
 145 150 155 160  
 Leu Gln Cys Asn Lys Arg Phe Arg Ser Phe Ile Ile Asp Ser Ser Arg  
 165 170 175  
 Ser His Asp Phe Ala Ile Leu Cys Ile Phe Tyr Ala Ile Glu Tyr Lys  
 180 185 190  
 Thr Asp Ala Ser Lys Gln Gly Val Val Arg Met Cys Ile Phe Ile Leu  
 195 200 205  
 Gln Thr Met Ser Val Glu Pro Asn Phe Gly Lys Ser Leu Asn Met Lys  
 210 215 220  
 Phe Glu Ala Gln Glu Thr Leu Pro Gln Asn Ile Arg Ile Pro Gly Phe  
 225 230 235 240  
 Arg Gly Thr Tyr Gly Asp Tyr Leu Val Met Val Cys Leu Ser Pro Asn  
 245 250 255  
 Ser Thr Cys Glu Thr Val Leu Asn Val Ser  
 260 265

&lt;210&gt; 42466

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42466

Ser Ile His Thr Leu Leu Thr Ala Ser Lys Gly Lys Leu Asn Ala Val  
 1 5 10 15  
 Tyr Pro Ala Leu Leu Ala Ile Ile Asn Asn Val Ala Pro Tyr Leu Glu  
 20 25 30  
 His Leu Ser Pro Ala Thr Cys Ser Arg Leu Leu Gln Leu Phe Ser Ser  
 35 40 45  
 Met Ser Ala Pro Ser Phe Leu Leu Ala Asn Glu Thr Asn His Ala Leu  
 50 55 60  
 Leu Ala Ser Val Leu Glu Ser Ile Asn Ser Ile Leu Glu His Gln Phe  
 65 70 75 80  
 Thr Ser Lys Cys Leu Tyr Ala Phe Thr Phe Val Ala Ala Gln Leu Ala  
 85 90 95  
 Asp Leu Leu Leu Gln Lys Thr Arg Phe  
 100 105

19019

<210> 42467  
 <211> 258  
 <212> PRT  
 <213> A.fumigatus

<400> 42467  
 Met Thr Phe Pro Pro Pro Pro Pro Ser Ser Gln Ser Ser Ile Ala Ser  
 1 5 10 15  
 Gly Thr Asp Lys Leu Ser Ser Asn Arg Ala Ala Arg Ser Gln Gln Ser  
 20 25 30  
 Ala Trp Gly Leu Ser Ala Ser Gln Ser Ser Ile Arg Arg Gly Leu Thr  
 35 40 45  
 Pro Leu Ala Thr Asn Asn Leu Ser Ser Ser Ser Ile Pro Ser Ala Asn  
 50 55 60  
 Ser Arg Gly Pro Val Gln Ser Thr Ser Pro Ala Pro Gly Gly Ser Thr  
 65 70 75 80  
 Ser Ser Pro Leu Thr Ser Ser Phe Ser Ala Val Leu Ser Ser Ala Arg  
 85 90 95  
 Gly Leu Pro Gly Gly Arg Ser Val Pro Ser Pro Ala Ser Thr Pro Ser  
 100 105 110  
 Pro Phe Thr Thr Phe Gln Ser Gly Ser Gln Gln His Gln Gln Ser Gly  
 115 120 125  
 Gln Ser Leu Ser Ser Pro Lys Phe Arg Ala His Thr Pro Ser Ser His  
 130 135 140  
 Leu Ala Ser Ala Ala Gly Ser Ile Ala Gly Gly Gly Gly Ser Gly Gly  
 145 150 155 160  
 Gly Gly Gly Gly Thr Gly Ser Ser Arg Gly Ala Thr Phe Ser Pro Leu  
 165 170 175  
 Leu Ser Gly Asn Thr Val Asn Ser Pro Thr Gly Phe Pro Ser Asp Lys  
 180 185 190  
 Pro Gly Ser Ala Ala Ser Gly Ala Ala Ala His Ala Gly Gln Ser Ser  
 195 200 205  
 Leu Thr Lys Ile Ser Ile Ala Gln Val Phe Leu Leu Asp Ser Ile  
 210 215 220  
 Thr Glu Lys Glu Gly Arg Glu Lys Trp Glu Thr Lys Ala Ala Gln Ile  
 225 230 235 240  
 His Lys Val Gly Gln Ser Ile Ala Phe Met Thr Phe Cys Lys Ser Asp  
 245 250 255  
 Met Glu

<210> 42468  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (26), (45), (52)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42468  
 Cys Arg Leu Ser Ser Leu Thr Ser Glu Glu Gln Leu Lys Pro Ala Asn  
 1 5 10 15  
 Ile Ser Tyr Val Ala Lys Asp Leu Tyr Xaa Gly Val Leu Arg Ile Leu

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.52	0.50	0	1	-0.02	3.0	0.99
Marital Status	0.68	0.47	0	1	0.10	3.1	0.99
Education	12.5	2.1	9	16	-0.10	3.3	0.98
Income	1500	500	500	3000	0.20	3.4	0.97
Occupation	1.2	0.8	0	2	-0.05	3.0	0.99
Health Status	0.75	0.42	0	1	0.08	3.1	0.99
Stress Level	2.5	1.2	1	4	0.12	3.2	0.98
Life Satisfaction	3.8	0.9	1	5	-0.08	3.3	0.98
Resilience	4.2	1.1	1	5	-0.05	3.2	0.99
Optimism	4.5	1.0	1	5	-0.03	3.1	0.99
Emotional Stability	4.0	1.2	1	5	-0.02	3.0	0.99
Self-Esteem	4.3	1.1	1	5	-0.01	3.1	0.99
Life Purpose	3.9	1.0	1	5	-0.04	3.2	0.98
Gratitude	4.1	1.1	1	5	-0.02	3.1	0.99
Forgiveness	4.4	1.0	1	5	-0.01	3.0	0.99
Empathy	4.6	1.1	1	5	-0.03	3.2	0.98
Compassion	4.7	1.0	1	5	-0.02	3.1	0.99
Kindness	4.8	1.1	1	5	-0.01	3.0	0.99
Generosity	4.9	1.0	1	5	-0.02	3.1	0.99
Patience	4.5	1.2	1	5	-0.03	3.2	0.98
Perseverance	4.6	1.1	1	5	-0.02	3.1	0.99
Resilience	4.7	1.0	1	5	-0.01	3.0	0.99
Optimism	4.8	1.1	1	5	-0.02	3.1	0.99
Emotional Stability	4.9	1.0	1	5	-0.01	3.0	0.99
Self-Esteem	5.0	1.1	1	5	-0.02	3.1	0.99
Life Purpose	5.1	1.0	1	5	-0.01	3.0	0.99
Gratitude	5.2	1.1	1	5	-0.02	3.1	0.99
Forgiveness	5.3	1.0	1	5	-0.01	3.0	0.99
Empathy	5.4	1.1	1	5	-0.02	3.1	0.99
Compassion	5.5	1.0	1	5	-0.01	3.0	0.99
Kindness	5.6	1.1	1	5	-0.02	3.1	0.99
Generosity	5.7	1.0	1	5	-0.01	3.0	0.99
Patience	5.8	1.1	1	5	-0.02	3.1	0.99
Perseverance	5.9	1.0	1	5	-0.01	3.0	0.99
Resilience	6.0	1.1	1	5	-0.02	3.1	0.99
Optimism	6.1	1.0	1	5	-0.01	3.0	0.99
Emotional Stability	6.2	1.1	1	5	-0.02	3.1	0.99
Self-Esteem	6.3	1.0	1	5	-0.01	3.0	0.99
Life Purpose	6.4	1.1	1	5	-0.02	3.1	0.99
Gratitude	6.5	1.0	1	5	-0.01	3.0	0.99
Forgiveness	6.6	1.1	1	5	-0.02	3.1	0.99
Empathy	6.7	1.0	1	5	-0.01	3.0	0.99
Compassion	6.8	1.1	1	5	-0.02	3.1	0.99
Kindness	6.9	1.0	1	5	-0.01	3.0	0.99
Generosity	7.0	1.1	1	5	-0.02	3.1	0.99
Patience	7.1	1.0	1	5	-0.01	3.0	0.99
Perseverance	7.2	1.1	1	5	-0.02	3.1	0.99
Resilience	7.3	1.0	1	5	-0.01	3.0	0.99
Optimism	7.4	1.1	1	5	-0.02	3.1	0.99
Emotional Stability	7.5	1.0	1	5	-0.01	3.0	0.99
Self-Esteem	7.6	1.1	1	5	-0.02	3.1	0.99
Life Purpose	7.7						

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<210> 42469
<211> 109
<212> PRT
<213> A.fumigatus
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<210> 42470
<211> 1639
<212> PRT
<213> A.fumigatus
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<400> 42470																
Cys 1	Ser	Pro	Arg	Asn 5	Val	Ile	Asp	Gln	Arg 10	Ser	Leu	Thr	Leu 15	Leu	Pro	
Leu	Leu	Ala	Asp 20	Ala	Ile	Leu	Ser	Asn 25	Ser	Val	Thr	Pro 30	Phe	Leu	Gln	
Ser	Leu	Ala 35	Thr	Pro	Ser	Glu	Ala 40	Ser	Lys	Asp	Tyr	Lys 45	Asn	Ser	Phe	
Ile	Gly 50	Met	Thr	Ile	Glu	Arg 55	Phe	Ile	Leu	Tyr 60	Pro	Pro	Arg	Asn	Phe	
Thr 65	Asp	Asp	Val	Lys 70	Ala	Lys	Leu	Val	Tyr 75	Ala	Ala	Asn	Leu	Arg	Tyr 80	
Gln	Lys	Leu	Gly 85	Val	Glu	Met	Pro	Phe	Glu 90	Val	Ala	Ser	Ala 95	Leu	Gln	
Met	Phe	Asn	Phe 100	Leu	Asn	Pro	Arg	Tyr 105	Thr	Leu	Val	Arg	Gln 110	Leu	His	
Ser	Arg	Gly 115	Pro	Arg	Ala	Thr	Ser	Asn 120	Val	Asp	Ala	Val 125	Asn	Glu	Ala	
Val	Asn 130	Ser	Ala	Gly	Pro	Asp 135	Ala	Trp	Asn	Glu	Glu 140	His	Ile	Ala	Ser	
Ala 145	Leu	Leu	Phe	Leu	Val 150	Leu	Ser	Gln	Tyr 155	Trp	Gln	Asp	Phe	Ser	Leu 160	
Glu	Thr	Phe	Leu	Arg	Ala	Val	Lys	Ser	His	Tyr	Val	Asp	Arg	Gln	Ile	

[illegible]

													165						170						175		
Asn	Trp	Ser	Phe	Ile	Phe	Arg	Asn	Phe	Asp	Arg	Glu	Gly	Leu	Arg	Leu												
													180				185				190						
Asp	Pro	Lys	Gln	Phe	Ala	Lys	Leu	Tyr	Ser	Val	Leu	Leu	Ser	Ala	Ala												
													195				200				205						
Ala	Asp	Asp	Ser	Thr	Leu	Asp	Ile	Gln	Lys	Leu	Trp	Gly	Gly	Asp	Trp												
													210				215				220						
Glu	His	Arg	Asp	Thr	Gln	Met	Ser	Phe	Leu	Thr	Ala	Leu	Ile	Val	Ser												
225														230				235				240					
Arg	Thr	Asp	Val	Ser	Gln	Ile	Pro	Asn	Leu	Arg	Ala	Thr	Phe	Pro	Ala												
													245				250				255						
Asp	Phe	Phe	Ala	Asp	Gly	Pro	Glu	Leu	Val	Arg	Leu	Gln	Gly	Glu	Arg												
													260				265				270						
Ala	Thr	Lys	Ser	Pro	Leu	Arg	Ser	Leu	Asp	Ala	Met	Lys	Ala	Ile	Phe												
													275				280				285						
Asp	Ile	Ala	Leu	Phe	Ser	Gln	Ala	Ala	Trp	Ala	Ala	Ala	Glu	Ser	Gln												
													290				295				300						
Leu	Leu	Ile	Lys	Ala	Val	Val	Gln	Tyr	Asp	Leu	Pro	Val	Phe	Leu	Cys												
305														310				315				320					
Ser	Ala	Leu	Ala	Leu	Pro	Gln	Pro	Trp	Thr	Ser	Val	Gln	Gln	Ser	Phe												
													325				330				335						
Val	Leu	Arg	Thr	Leu	Val	Val	Phe	Ile	Leu	Lys	Gln	Glu	Glu	Gly	Tyr												
													340				345				350						
Gln	Leu	Ala	Leu	His	Gly	Ala	Trp	Arg	Gln	Asp	Arg	Gln	Trp	Val	Ala												
													355				360				365						
Glu	Gln	Leu	Phe	Thr	Thr	Phe	Thr	Gln	Asp	Pro	Thr	Ser	Thr	Ala	Ala												
													370				375				380						
Ile	Tyr	Glu	His	Ala	Val	Glu	Phe	Asp	Trp	Leu	Asp	Tyr	Leu	Leu	Gly												
385														390				395				400					
Tyr	Thr	Asn	Gly	Leu	Ala	Met	Asp	Leu	Ala	Cys	Tyr	Ala	His	Arg	Lys												
													405				410				415						
Gly	Pro	Phe	Asp	Leu	Glu	Gln	Trp	Val	Arg	Asn	Ala	Ala	Gln	Lys	Gly												
													420				425				430						
Pro	Met	Asp	Met	Gly	Asn	Leu	Leu	Ser	Lys	Tyr	Leu	Arg	Ile	Lys	Ala												
													435				440				445						
Glu	Asp	Glu	Leu	His	Val	Gln	Arg	Lys	Glu	Gln	Pro	Ala	Pro	Gln	Met												
													450				455				460						
Val	Ser	Leu	Ser	Val	Lys	Thr	Val	Tyr	Thr	Leu	Leu	Ser	Val	Leu	Glu												
465														470				475				480					
Glu	Tyr	Val	Gly	Asp	Arg	Glu	Asn	Leu	Thr	Pro	Val	Gln	Arg	Ile	Cys												
													485				490				495						
Ile	Gln	Thr	Tyr	Pro	Arg	Leu	Ile	Asn	Tyr	Gly	Glu	Gly	Phe	Asp	Asp												
													500				505				510						
Ile	Ile	Asp	Ala	Asn	Gly	Glu	Asn	Gly	Asn	Ala	Leu	Pro	Glu	Thr	Ile												
													515				520				525						
Asp	Lys	Gln	Met	Gln	Glu	Leu	Phe	Gly	Lys	Met	Tyr	His	Glu	Glu	Leu												
													530				535				540						
Ser	Leu	Arg	Glu	Ile	Leu	Glu	Leu	Met	Arg	Arg	Tyr	Lys	Thr	Ser	Arg												

610	615	620
His Asp Ile His Asp	Pro Met Tyr Lys Phe Gly	Val Glu Ala Ile Glu
625	630	635
Gln Leu Ile Ser Arg	Leu Pro Glu Trp Ala Gly	Phe Cys His Leu Leu
	645	650
Leu Gln Ile Pro Thr	Leu Gln Gly Thr Pro Ile	Phe Gln Lys Ala Glu
	660	665
Glu Val Leu Arg Glu	Gln Gly Ser Gln Val Arg	Asp Ser Asp Pro Gly
	675	680
Arg Leu Glu Asn Ala	Thr Gly Ala Ser Ile Thr	Asn Gly Thr Leu Asn
	690	695
Glu Ser Ala Pro Asp	Gly Pro Thr Arg Lys Phe	Leu Ser Ile His Val
705	710	715
Asp Pro Pro Leu Arg	Pro Glu Ile Tyr His Asp	Pro Asp Glu Glu Val
	725	730
Gln Asp Lys Ile Leu	Phe Val Leu Asn Asn	Val Ser Glu Gln Asn Ile
	740	745
Glu Glu Lys Leu His	Asp Leu Thr Asp Val	Leu Arg Asp Gln His His
	755	760
Gln Trp Phe Ala Ser	Tyr Leu Val Glu Glu Arg	Ala Lys Leu Gln Pro
	770	775
Asn Phe Gln Gln Leu	Tyr Leu Asp Leu Leu Asp	Arg Ile Asn Asp Lys
785	790	795
Ile Leu Trp Ala Glu	Val Leu Arg Glu Thr Tyr	Ser Ser Val Cys Lys
	805	810
Leu Leu Asn Ala Glu	Gly Thr Ile Asn Ser	Ser Thr Asp Arg Gly His
	820	825
Leu Lys Asn Leu Gly	Ser Trp Leu Gly Ser	Leu Thr Ile Ala Lys Asp
	835	840
Lys Pro Ile Lys His	Lys Asp Ile Tyr Phe	Lys Gly Leu Leu Leu Glu
	850	855
Gly Tyr Asp Ser Gln	Arg Leu Thr Ile Val	Ile Pro Phe Thr Cys Lys
865	870	875
Val Leu Val Gln Ala	Thr Lys Ser Thr Val	Phe Lys Pro Pro Asn Pro
	885	890
Trp Leu Met Asp Ile	Leu Ala Leu Leu Leu	Glu Leu Tyr His Phe Ala
	900	905
Glu Leu Lys Leu Asn	Leu Lys Phe Glu Ile	Glu Val Leu Cys Lys Asp
	915	920
Leu Glu Leu Asp His	Lys Thr Ile Glu Pro	Ser Val Val Ile Arg Asp
	930	935
Arg Ser Ala His Ile	Glu Asp Ala Leu Ser	Thr Ala Asn Ile Pro Glu
945	950	955
Gly Leu Glu Ala Phe	Glu Asp Met Ala Leu	Thr Thr Ile Asn Gln Gly
	965	970
Met Arg Thr Glu Arg	Leu Ser Pro Ala Ile	Met Ser Thr Leu Pro
	980	985
Ser Leu Asp Lys Ile	Leu Val Leu Pro Ser	Ser Ala Ser Ser Met Ile
	995	1000
Asp Pro Asn Val Leu	Arg Gln Ile Val His	Thr Ala Val Glu Arg Ala
	1010	1015
Ile Ala Glu Ile Ile	Thr Pro Val Val Glu	Arg Ser Val Thr Ile Ala
1025	1030	1035
Ser Ile Ser Thr Val	Gln Leu Val Ser Lys	Asp Phe Ala Met Glu Pro
	1045	1050
Asp Glu Glu Lys Val	Arg His Ala Ala Ala	Asn Met Val Arg Gln Leu



## 19023

1060	1065	1070
Ala Gly Ser Leu Ala Leu Val Thr Cys Lys Glu Pro Leu Lys Val Ser		
1075	1080	1085
Met Thr Asn Tyr Ile Arg Met Ile Gln Gln Glu Tyr Ser Glu Gln Pro		
1090	1095	1100
Met Pro Glu Gly Leu Ile Leu Met Cys Val Asn Asp Asn Leu Asp Ala		
1105	1110	1115
Ala Cys Gly Ile Val Glu Lys Ala Ala Glu Glu Lys Ser Leu Pro Glu		
1125	1130	1135
Ile Glu Lys Val Ile Glu Pro Gln Leu Glu Ala Arg Arg Arg His Arg		
1140	1145	1150
Ala Ala Arg Pro Asn Glu Pro Phe Ile Asp Pro Ser Met Asn Arg Trp		
1155	1160	1165
Gly Leu Phe Ile Pro Glu Pro Tyr Arg Gln Ala Pro Gly Gly Leu Asn		
1170	1175	1180
Lys Glu Gln Leu Ala Ile Tyr Glu Glu Phe Ala Arg Gln Ala Arg Gly		
1185	1190	1195
Pro Ala Ala Thr His Val Gln Asn Val Ser Thr Asp Ser Gly Arg Gln		
1205	1210	1215
Leu Ala Asp Val Leu Gln Asp Ser Tyr Ala Gln Ile Pro Asn Leu Phe		
1220	1225	1230
Thr Pro Ala Glu Gln Pro Ala Val Pro His Arg Thr Pro Gln Ala Gln		
1235	1240	1245
Gln Asp Thr Arg Leu Gln Gln Thr Gly Leu Val Gly Ala Gln Pro Gln		
1250	1255	1260
Leu Asn Gly Phe Leu Glu Ala Pro Thr Pro Arg Asp Lys Val Asp Ser		
1265	1270	1275
Ile Val Ser Asp Leu Gln Gln Ala Ala Arg Asn Ala Pro Glu Glu Arg		
1285	1290	1295
Val Lys Asp Leu Gly Arg Asp Ser Ala Val Leu Gln Glu Tyr Asn Gln		
1300	1305	1310
Ala Leu Arg Thr Ile Leu Thr Ser Pro Ser Gly Glu Glu Leu Ala Arg		
1315	1320	1325
Leu Thr Ser Leu Lys Ile Cys Thr Thr Leu Tyr Ser Gln Thr Pro Ser		
1330	1335	1340
Asn Leu Glu Ile Glu Val Leu Val His Leu Leu Ala Lys Leu Cys Asp		
1345	1350	1355
Met Ser Ser Leu Val Ala Arg Tyr Thr Trp Val Val Leu Ser Glu Val		
1365	1370	1375
Asp Asp Glu His Ile Phe Asn Val Pro Val Thr Val Ala Leu Ile Asp		
1380	1385	1390
Ala Gly Leu Leu Asp Ile Arg Arg Val Asp Met Ser Leu Thr Arg Leu		
1395	1400	1405
Ile Cys Gln Lys Asn Thr Gly Ala Leu Glu Ile Leu Val Asn Leu Met		
1410	1415	1420
Asp Arg Val Leu Phe Asn Glu Glu Pro Ser Ala Leu Arg Ser Asp Phe		
1425	1430	1435
Ser Gly Ser Leu Glu Ala Met Ser Gln Trp Leu Ala Glu Asp Ala Asn		
1445	1450	1455
Leu Ala Pro Ala Asn Glu Ile Ile Arg Lys Leu Arg Glu Ser Gly Ile		
1460	1465	1470
Pro Glu Val Val Asn Pro Leu Leu Ser Asp Lys Ala Arg Ala Lys Arg		
1475	1480	1485
Asp Gln Met Glu Tyr Ile Phe Ser Glu Trp Ile Gly Ile Tyr Lys Ala		
1490	1495	1500
Pro Gly Ala Thr Asp Arg Thr Tyr Tyr Ser Phe Leu Lys Asp Leu His		

## 19024

1505                    1510                    1515                    1520  
 Gln Arg Gln Val Met Asp Asn Gln Glu Asp Ser Ala Leu Phe Phe Arg  
                          1525                    1530                    1535  
 Leu Ser Ile Asp Ile Ser Val Ala Met Phe Glu His Glu Ser Gln Asn  
                          1540                    1545                    1550  
 Pro Asn Gly Ser Leu Asp Glu Ala Phe Leu Tyr Ile Asp Ala Leu Ala  
                          1555                    1560                    1565  
 Lys Leu Val Ile Leu Leu Val Lys Phe Gln Gly Glu Ser Thr Gly Ser  
                          1570                    1575                    1580  
 Ser Lys Ala Ser Lys Ser Val Tyr Phe Asn Ser Ile Leu Ser Met Leu  
 1585                    1590                    1595                    1600  
 Val Leu Val Leu Asn His His His Val Ile Arg Gly Glu Ala Phe Asn  
                          1605                    1610                    1615  
 Gln Arg Val Phe Phe Arg Leu Phe Ser Arg Tyr Pro Leu Arg Val Phe  
                          1620                    1625                    1630  
 Pro Glu Arg Thr Ser Ala Glu  
                          1635

&lt;210&gt; 42471

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42471

Thr Arg Asp Arg Tyr Glu Gln Asp Cys Leu Arg Ile Lys Gly Tyr Leu  
 1                    5                    10                    15  
 Ala Gln Gly His Met Val Met Gly Gln Glu Glu Arg Lys Asn Lys Ala  
                          20                    25                    30  
 Lys Leu Glu Lys Thr Gln Ile Gln Leu Ala Thr Ser Ser Ser Glu Tyr  
                          35                    40                    45  
 Glu Ala Ala Val Lys Ile Leu Glu Glu Thr Thr Gly Arg Trp Asn Lys  
                          50                    55                    60  
 Glu Trp Lys Ala Ala Cys Asp Ala Arg Pro Ala Leu Asn Met Ile Met  
 65                    70                    75                    80  
 Gly Arg

&lt;210&gt; 42472

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42472

Leu Thr Leu Ala Gly Ser Leu Ala Gly Thr Asp Val Gln Phe Tyr Ile  
 1                    5                    10                    15  
 Leu Val Ser Ser Gly Val Pro Gln His Ser Ser Leu Ser Leu Val Asp  
                          20                    25                    30  
 Lys Glu Leu Thr Phe Ile Leu Phe Val Ala Arg Ala Leu Tyr Ser Tyr  
                          35                    40                    45  
 Thr Ala Ala Ile Pro Glu Glu Leu Gly Phe Ser Lys Gly Asp Val Leu  
                          50                    55                    60  
 Ser Val Ile Arg Leu Gln Asp Asp Gly Trp Trp Glu Ala Glu Ile Thr  
 65                    70                    75                    80  
 Thr Thr Arg Ser Arg Thr Gly Leu Val Pro Ser Asn Tyr Leu Gln Ile  
                          85                    90                    95  
 Ile

<210> 42473  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 42473  
 Cys Gly Arg Leu Phe Val Glu Gln His Ser Val His Gln Ile Asp Gln  
 1 5 10 15  
 Tyr Phe Glu Ser Thr Arg Val Leu Leu Ala Asp Lys Ser Ser Glu Thr  
 20 25 30  
 His Ile Asn Ala Ala Asn Val Gln Gln Ser Ser Val Tyr Glu Cys His  
 35 40 45  
 Cys Asp Trp Asp Ile Glu Tyr Met Leu Val Ile Tyr Phe  
 50 55 60

<210> 42474  
 <211> 120  
 <212> PRT  
 <213> A.fumigatus

<400> 42474  
 Arg Ser Ser Ala Asp Ala Thr Leu Ser Val Arg Leu Leu Thr Asn Arg  
 1 5 10 15  
 Thr Val Arg Ala Ala Ile Glu Asp Glu Tyr Ser Arg Lys Leu Met Ala  
 20 25 30  
 Leu Cys Arg Lys Pro Leu Gly Thr His Glu Thr Gly Ser Leu Arg Ser  
 35 40 45  
 Ser Phe Asp Val Val Arg Gly Glu Thr Glu Ser Ile Ala Lys Ser His  
 50 55 60  
 Ala Ala Ile Ala Thr Gln Met Lys Arg Glu Leu Glu Glu Pro Leu Ile  
 65 70 75 80  
 Ala Phe Ala Gly Gly Ser Lys Glu Arg Arg Lys Ile Ile Gln Thr Gly  
 85 90 95  
 Ile Glu Arg Leu Leu Lys Thr Lys Ile Gln Gln Thr Gln Thr Val Asn  
 100 105 110  
 Lys Val Arg Gln Arg Ser Asp Phe  
 115 120

<210> 42475  
 <211> 645  
 <212> PRT  
 <213> A.fumigatus

<400> 42475  
 His Cys Asp Gln Ser Cys Glu Lys Ile Arg Leu Ala Leu Glu Asn Cys  
 1 5 10 15  
 Glu Val Glu Lys Asp Ile Val Ser Phe Ile Lys Glu Arg Gly Thr Gly  
 20 25 30  
 Gln Asp Ile Pro Asp Pro Pro Lys Phe Ile Asn Phe Ala Arg Gly Asp  
 35 40 45  
 Val Asn Asp Thr Ser Ser Glu Leu Ser Glu Glu Asp Gly Phe Ser Val  
 50 55 60  
 Ala Gln Phe Gln Arg Thr Ile Asn Pro Ala Phe Arg Ser Ser Ser Pro  
 65 70 75 80

## 19026

Gln Pro Ser Thr Tyr Glu Ser His His Glu Pro Arg Gly Glu Ser Ala  
 85 90 95  
 Ala Arg Pro Asp Asn Asn Ser Pro Thr Thr Pro Ala Ser Arg Glu Ala  
 100 105 110  
 Thr Val Thr Pro Gln Lys Pro Thr Gln Pro Pro Ala Pro Leu Asp Leu  
 115 120 125  
 Arg Arg Gly Gly His Leu Pro Pro Asn Tyr Asp Pro Asn Gln His Gly  
 130 135 140  
 Glu Ile Ala Pro Val Pro His Asn Ala Tyr Pro Thr Asp Gly Met Thr  
 145 150 155 160  
 Met Phe Cys Arg Thr Gly Pro Pro Ser Glu Arg Ser Ser Gly Thr Asn  
 165 170 175  
 Ser Ala Tyr Arg Pro Ser Ser Arg Glu Ser Gln Ser Glu Ile Ser Asn  
 180 185 190  
 Pro Thr Ser Val Ser Ser Gln Glu Pro Pro Ser Ala Arg Gln Ser Pro  
 195 200 205  
 Thr Lys Pro Thr Asn Gly Val Ala Leu Pro Gly Leu Gly Gly Asp Lys  
 210 215 220  
 Gln Ile Gln Lys Arg Arg Ser Ala Phe Phe Ser Asn Ser Pro Phe Arg  
 225 230 235 240  
 Arg Lys Ser Arg His Asp Lys Asp Arg Asn Ser Gly Pro Ser His Thr  
 245 250 255  
 Pro Thr Arg Ser Thr Trp Glu Ser Pro Thr Lys Gln Ala Thr Pro Val  
 260 265 270  
 Lys Ala Pro Gln Pro Gln Pro Pro Gln Pro Pro Ala Pro Val Leu Asp  
 275 280 285  
 Asn Glu Arg Gln Val Glu Ser Pro Glu Pro Ala Asp Pro Arg Ala Asn  
 290 295 300  
 Phe Gln Leu Asn Val Gly Asn Asn Val Phe Asp Val Ala Ser Pro Asp  
 305 310 315 320  
 Lys Ala Thr Ala Lys Lys Ala Ala Gln Thr Ala Lys Ala Gly Glu Glu  
 325 330 335  
 Glu Leu Asp Pro Ile Ala Arg Ala Leu Ala Asp Leu Lys Gly Gly Gly  
 340 345 350  
 Lys Gln Ser Met Thr Arg Val Ser Ala Asp Arg Tyr His Gly Ile Ala  
 355 360 365  
 Thr Pro Val Pro Ser Ala Pro Pro Ser Asn Tyr Ser Asp Ala Pro Val  
 370 375 380  
 Ala Thr Pro Pro Pro Ala Tyr Asn Asp Pro Ser Val Lys Arg Leu Asp  
 385 390 395 400  
 Ala Pro Gln Pro Ala Phe Thr Ser Ala Gln Met Gln Lys Thr Thr Gln  
 405 410 415  
 Lys Tyr Thr Gly Gln Thr Lys Ser Met Leu Arg Gly Ser Gly Asn Thr  
 420 425 430  
 Pro Ser Leu Ala Ser Arg Asn Ser Ala Glu Val Pro Arg Ala Lys Gln  
 435 440 445  
 Glu Ile Pro Arg Pro Lys Gln Glu Thr Pro Arg Ala Lys Ser Pro Val  
 450 455 460  
 Pro Arg Arg Ser Ala Ser Pro Gln Val Pro Ser Pro Gln Val Ile Ser  
 465 470 475 480  
 Pro Gln Pro Ile Ser Pro Gln Val Ser Pro Ala Arg Val Glu Thr Arg  
 485 490 495  
 Thr Gly His Tyr Ser Arg Gly Ala Ser Pro Ser Pro Ser Thr Tyr Gln  
 500 505 510  
 Ala Asn Ser Val Arg Ser Arg Tyr Ser Gln Ser Pro Ser Val Ser Thr  
 515 520 525

## 19027

Pro Pro Gln Arg Pro Val Asp Ala Ala Pro Ser Pro Arg Glu Phe Pro  
 530 535 540  
 Arg Arg Ser Ser Pro Asn Pro Ala Ala Ala Arg Ala Val Ser Pro Gln  
 545 550 555 560  
 Pro Gln Phe Arg Gln Gln Thr Arg Pro Ser Ser Ala Gly Gly Met Glu  
 565 570 575  
 Leu Gln Leu Ser Ser Gly Gly Ser Gly Asp Met Tyr Gly Thr Ser Tyr  
 580 585 590  
 Asp Ser Tyr Ser Ala Arg Gly Arg Asp Ser Gly Arg Pro Met Ser Tyr  
 595 600 605  
 Tyr Gly Asp Gly Gly Ser Gln Gly Gly Arg Ser Arg Ser Arg Thr Val  
 610 615 620  
 Ala Val Ala Asp Pro Ser Arg Gln Phe Ser Arg Asp Gly Arg Pro Ile  
 625 630 635 640  
 Leu His Phe Gly Lys  
 645

&lt;210&gt; 42476

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42476

Arg Asp Ile Ser Cys Arg Pro Leu Val Ala Thr Val Glu Val Leu Cys  
 1 5 10 15  
 Gly Leu Glu Pro Arg His Ser Val Met Ser Asp Arg His Glu Arg Leu  
 20 25 30  
 Thr Glu Thr Met Arg Arg Ser Leu Gln Ala Thr Ile Arg Ile Phe Val  
 35 40 45  
 Val Val Val Ile Val Ala Met Ala Ile Val Phe Pro Ser Phe Asp Lys  
 50 55 60  
 Ile Met Ala Leu Met Gly Ser Ala Leu Cys Phe Thr Ile Cys Ile Ile  
 65 70 75 80  
 Leu Pro Leu Ala Phe Tyr Leu Lys Ile Phe Gly Lys Glu Ile Gly Met  
 85 90 95  
 Gly Glu Arg Ile Leu Asp Trp Phe Leu Leu Val Thr Ser Ser Val Met  
 100 105 110  
 Ala Val Ile Gly Thr Ala Trp Ala Phe Leu Pro Gln Asp Met Ile Phe  
 115 120 125  
 Ala Asn  
 130

&lt;210&gt; 42477

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42477

Ile Ala Pro Ala Phe Thr Thr Ala Gly Ile Tyr Gly Val Leu Gly Leu  
 1 5 10 15  
 Met Ile Pro Ile Ile Gly Gln Asp Lys Ser Pro Leu Gln Pro Asn Leu  
 20 25 30  
 Tyr Leu Ile Ile Phe Met Met Val Asp Phe Phe Ser Leu Leu Leu Gln  
 35 40 45  
 Ala Val Gly Gly Gly Leu Ala Gly Ala Ala Phe Ser Gln Asn Ser Ser  
 50 55 60

## 19028

Pro Trp Pro Gly Thr Tyr Thr Met Val Ala Gly Ile Ile Trp Gln Leu  
65 70 75 80  
Val Ser Thr Cys Val Phe Ala Thr Leu Val Glu Tyr Val Pro Trp Pro  
85 90 95  
Arg Thr Asp Cys Ala Glu Ser Ser Pro Ala Ala Asp Leu Ala Val Val  
100 105 110  
Asp Asp Cys Gly Tyr Val Tyr Gly Gly Ala Gly Arg Val Ser Glu His  
115 120 125  
Gly Val Asp Glu Trp Val Ala Arg Val Ser Val Tyr Ala His Leu Thr  
130 135 140  
Thr Gly Leu Glu Ser Thr Ala Ser Leu  
145 150

&lt;210&gt; 42478

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42478

Arg Thr Thr Val Asp Pro Ser Ser Pro Val Val Lys Thr Ser Ser Ala  
1 5 10 15  
Glu Leu Ser Pro Arg Leu Ser Phe Ala Asp Ala Phe Ala Ala Val Gln  
20 25 30  
Gln Gly Glu Ala Asp Tyr Ala Ile Ile Pro Val Glu Asn Ser Thr Asn  
35 40 45  
Gly Ser Val Val Gln Asn Leu Asp Leu Leu Gly Asp Arg Tyr Gly Leu  
50 55 60  
Tyr Glu Asp Val Asn Val Cys Gly Glu His Tyr Leu Thr Val His His  
65 70 75 80  
Cys Leu Leu Val Arg Lys Gly Leu Ser Gln Pro Asp Ile Arg Ser Ile  
85 90 95  
Thr Lys Leu Tyr Thr His Pro Gln Ala Trp Gly Gln Cys Glu Asn Phe  
100 105 110  
Leu Gly Lys Phe Leu Lys Gly Val Glu Arg Gln Asp Val Ser Ser Thr  
115 120 125  
Ser Lys Ala Ala Glu Met Val Ser Leu Glu Thr Gln Glu Arg Ser Gly  
130 135 140  
Ala Ile Ala Ser Arg Phe Ala Ala Asp Tyr His Gly Leu His Val Leu  
145 150 155 160  
Ser Glu Asn Ile Glu Asp Arg Ala Asp Asn Thr Thr Arg Phe Leu Val  
165 170 175  
Leu Arg Asn Thr Lys Ser Glu Arg Thr Ala Ser Leu Pro Phe Asp Ala  
180 185 190  
Val Lys Ala Pro Ala Val Ser Leu Lys Pro Pro Pro Thr Pro Ser Ala  
195 200 205  
Glu Lys Thr Leu Ile Ser Phe Arg Ile Arg Gln Asp Phe Pro Gly Ala  
210 215 220  
Leu Ala Asp Ala Leu Leu Ile Phe Lys Glu Phe Gly Met Asn Leu Thr  
225 230 235 240  
Ser Ile Asn Thr Arg Pro Ser Gln Arg Arg Ala Trp Gln Tyr Ile Phe  
245 250 255  
Phe Val Glu Cys Gln Gln Phe Pro Thr Asp Gln Asn Asn Gln Gly Val  
260 265 270  
Thr Lys Ile Leu Asp Lys Met Gln Gln Val Thr Glu Gly Cys Arg His  
275 280 285  
Leu Gly Thr Trp Lys Asp Gln Leu Ser Thr Ser Lys Val

290

295

300

&lt;210&gt; 42479

&lt;211&gt; 394

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42479

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Ile Thr Thr Cys Pro Ala Met Thr Ser Ser His Met Lys Gly Gly Phe
1          5          10          15
Leu Ile Pro Met Pro Thr Ala Lys Pro Ala His Gln Ala Thr Met Asp
20          25          30
Val Arg Ser Met Ile Thr Ile Cys Arg Asp Lys Gly Glu Thr Tyr Gln
35          40          45
Asp His Leu Ala His Lys Ala Phe Ser Gln Leu Thr Ser Leu Ser Arg
50          55          60
Ser Ser Ser Phe Ser Ala Arg Phe Arg Phe Ala Gly Gly Pro Asn Ser
65          70          75          80
Ile Asp His Phe Ala Arg Ser Trp Gln Arg Ala Ala Cys Phe Pro Glu
85          90          95
Val Leu Pro Arg Arg Ser Ser Phe Ala Ala Val Arg Pro Asp Glu Glu
100         105         110
Trp Thr Ser Gly Trp Asn Glu Asp Leu Ala Ser Arg Ser Ser Leu Ser
115         120         125
Ala Arg Gln Glu Thr Asp Tyr Thr Arg Pro Leu Leu His Gly Asp Glu
130         135         140
Glu Glu Asp Gly Gly Asn Thr Gly His Ser Lys Lys Ala Phe Pro Ser
145         150         155         160
Thr Thr Ile Leu Ser Ser Ser Leu Asp Arg Ser Leu Gly Thr Ser Tyr
165         170         175
Gly Thr Ile Ser Ser Arg Val Ser Glu Ala Thr Arg Arg His Ala Leu
180         185         190
Gln Leu His Arg Glu Gln Leu Ala His Arg Asn Ala Ala Val Val Pro
195         200         205
Asp Gly Glu Pro Leu Leu Val Lys Gln Ile Gln Arg Asp Asp Gly Thr
210         215         220
Arg Asp Ser Val Ile Val Gly Gln Ser Thr Val Pro Gln Thr Val Phe
225         230         235         240
Asn Ser Val Asn Val Leu Ile Gly Val Gly Leu Leu Ser Leu Pro Leu
245         250         255
Ala Met Lys Tyr Ala Gly Trp Leu Leu Gly Leu Phe Phe Leu Leu Phe
260         265         270
Ala Ala Val Thr Thr Ser Tyr Thr Ala Lys Ile Leu Ala Lys Cys Leu
275         280         285
Asp Val Asp Arg Asn Leu Val Thr Tyr Ala Asp Val Ala Tyr Ile Ser
290         295         300
Phe Gly His His Ala Arg Ile Val Thr Ser Leu Leu Phe Cys Leu Glu
305         310         315         320
Leu Ile Gly Ala Cys Val Ala Leu Val Val Leu Phe Ala Asp Ser Leu
325         330         335
Asn Ala Leu Ile Pro Gly Leu Ser Ile Leu Gln Trp Lys Ile Ile Cys
340         345         350
Gly Phe Met Leu Met Pro Leu Asn Phe Val Pro Leu Arg Leu Leu Ser
355         360         365
Val Thr Ser Val Leu Gly Ile Leu Ser Cys Thr Ser Ser Val Leu Phe
370         375         380

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## 19030

Leu Ser Leu Asn Asp Ala Arg Arg Met Tyr  
385 390

<210> 42480  
<211> 63  
<212> PRT  
<213> A.fumigatus

<400> 42480  
Cys Val Ser Leu Pro Leu Pro Leu Ser Met Cys Gln Leu Asp Leu Phe  
1 5 10 15  
Leu Asn Ser Ala Pro Trp Gly Ala His Ser Cys Phe Pro Cys Ile Tyr  
20 25 30  
Arg Asp Met Arg His Pro His Lys Tyr Gly Lys Ser Leu Trp Ala Thr  
35 40 45  
Tyr Ile Phe Thr Val Cys Ile Ala Ala Arg Leu Arg Val Glu Asp  
50 55 60

<210> 42481  
<211> 60  
<212> PRT  
<213> A.fumigatus

<400> 42481  
His Asn Gln Gln Tyr Ser Leu Asp Cys Ala Met Ala Ile Val Gly Trp  
1 5 10 15  
Leu Met Phe Gly Asp Gly Val Leu Asp Glu Ile Thr Ala Asn Val Leu  
20 25 30  
Leu Thr Thr Glu Tyr Pro Gln Ala Leu Ser Ile Cys Val Ile Val Leu  
35 40 45  
Ile Ala Ile Ile Pro Ile Thr Lys Val Pro Leu Lys  
50 55 60

<210> 42482  
<211> 98  
<212> PRT  
<213> A.fumigatus

<400> 42482  
Lys Ala Leu Gln Gly Phe Val Arg Pro Glu Leu Thr Ser Tyr Thr Leu  
1 5 10 15  
Ser Arg Thr Ser Ser Thr Ile Pro Tyr Tyr Arg Thr Val Arg Cys Arg  
20 25 30  
Tyr Arg Tyr Thr Ala Lys Asp Phe His Leu Gly Gln Leu Gly Arg Leu  
35 40 45  
Phe Tyr Val Val Ala Asp Tyr Ser Thr Phe Pro Glu Asp Thr Met Met  
50 55 60  
Val Gly Ile Asn Gln Thr Arg Ile Ser Trp Thr Gly Tyr Glu Ile Gly  
65 70 75 80  
Phe Gly Asn Gln Leu His Ile Thr Asn Lys Ser Glu Thr Val Ala Lys  
85 90 95  
Lys Gly

<210> 42483  
<211> 156



19031

<212> PRT

<213> A.fumigatus

<400> 42483

```

Asp Ala Thr Met Glu Lys Thr Pro Asp Cys Leu Pro Tyr Ser Leu Asn
1          5          10          15
Ile Pro Thr Pro Phe Gly Tyr Arg Pro Ser Leu Val Ala Gly Ile Ile
          20          25          30
Phe Met Ile Leu Phe Leu Gly Val Thr Ile Val His Val Trp Gln Ala
          35          40          45
Phe Arg His Arg Asn Ile Trp Leu Gly Leu Ala Phe Ser Leu Gly Thr
          50          55          60
Phe Gly Glu Leu Val Gly Trp Leu Gly Arg Thr Val Ala Tyr Arg Cys
65          70          75          80
Leu Tyr Ser Val Lys Leu Leu Glu Met Gln Leu Ala Ala Leu Ile Met
          85          90          95
Gly Lys Ser Ser Phe Phe Phe Phe Phe His Cys Gln Glu Thr Ile
          100          105          110
Tyr Asn Tyr Met Asn Ser Pro Arg Leu His Asp Ser Arg His Leu Arg
          115          120          125
Cys Pro Gly Pro Asp Asp Pro Asn His Arg Thr Gly Gln Val Pro Leu
          130          135          140
Ala Ala Glu Pro Leu Pro His His Leu Tyr Asp Gly
145          150          155

```

<210> 42484

<211> 297

<212> PRT

<213> A.fumigatus

<400> 42484

```

Ala Thr Ala Ile Asp Ser Val Phe Gln Ser Thr Met Ala Ala Val Lys
1          5          10          15
Lys Arg Leu Lys Arg Pro Lys Leu Leu Ser His Thr Arg Pro Pro Thr
          20          25          30
Ala Arg Ala Gln Asn Pro Lys Leu Ser Ala Lys Ala Thr Arg Asn Leu
          35          40          45
Ile Arg Thr His His Arg Leu Leu Lys Ser Arg Ala Gln Ala Leu Lys
          50          55          60
Ala Gly Asn Glu Asp Leu Val Arg Glu Ile Asp Glu Arg Ile Glu Ala
65          70          75          80
Asn Gly Gly Leu Glu Ser Tyr Gln Leu Ala Ser Lys Leu Gly Gln Ser
          85          90          95
Leu Glu Arg Gly Gly Asp Ser Ser Lys Val Leu Val Asp Trp Ile Ala
          100          105          110
Pro Ser Leu Thr Gln Leu Lys Asn Ser Pro Tyr Lys Leu Arg Met Leu
          115          120          125
Glu Val Gly Ala Leu Ser Thr Glu Asn Ala Cys Ser Lys Asn Gln Tyr
          130          135          140
Leu Asp Val Thr Arg Ile Asp Leu Asn Ala Gln Glu Pro Gly Ile Leu
145          150          155          160
Lys Gln Asp Phe Met Lys Arg Pro Leu Pro Leu Thr Asp Gly Asp Arg
          165          170          175
Phe His Ile Ile Ser Leu Ser Leu Val Leu Asn Tyr Val Pro Asn Ala
          180          185          190
Thr Gly Arg Gly Asp Met Leu Lys Arg Cys Val Gly Phe Leu Thr Gln

```

## 19032

```

      195              200              205
Thr Pro Pro Ala Gly Ser Ser Ile Thr Ile Arg Pro Ser Leu Phe Leu
  210              215              220
Val Leu Pro Leu Ala Cys Val Lys Asn Ser Arg Tyr Leu Thr Pro Ser
  225              230              235              240
Arg Leu Gln Asp Ile Leu Ser Ser Met Gly Phe Thr Leu Ala Lys Ser
      245              250              255
Lys Glu Thr Ser Lys Leu Ile Phe Gln Leu Trp Glu His Asp Arg Gln
      260              265              270
Gly Glu Pro Arg Pro Phe Lys Lys Glu Ile Leu Asn Pro Gly Lys Met
      275              280              285
Arg Asn Asn Phe Ala Ile Asn Val Gln
  290              295

```

<210> 42485  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42485
Ala Gln Glu Pro Pro Ser Val Phe His Cys Gln Arg Gln Arg Gln Gln
  1              5              10              15
Ala Asp Ser Asn Gln Asp Ile Asp Arg Ile Glu Asn Ser Leu Arg His
      20              25              30
Ser Arg Leu Ala Tyr Asn Asp Thr Val Ser Arg Ser Ile Ile Ala Leu
      35              40              45
Asn Leu Phe Asp Lys Glu Arg Leu Thr Ile Gly Asn Tyr Ser Cys Val
      50              55              60
Ala Met Cys Gln Leu Phe Pro Met Glu Leu
  65              70

```

<210> 42486  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42486
Ser Thr Leu Thr Ser Arg Trp Ala Leu Ala Val Pro Pro Gly Leu Gly
  1              5              10              15
Leu Cys His Pro Gly Lys Thr Gly Gly Thr Asp Pro Tyr Tyr Tyr Tyr
      20              25              30
Ser Phe Ala Leu Leu Leu Ser Val Pro Cys His Pro Thr Glu Pro Asp
      35              40              45
Glu Ile Cys Ser Asn Thr Pro Leu Asp Leu Asp Gly Lys Leu Thr Ser
      50              55              60
Phe Lys Val Cys Asp Trp Ile Pro Ser Leu Ser Leu Phe Ser Phe Cys
  65              70              75              80
Phe Phe Leu Ile Thr Thr Leu Ser Leu Lys
      85              90

```

<210> 42487  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 42487

## 19033

```

Ser Leu Pro Ala Ser Asp Cys Gln Val Leu Asn Pro Ile Leu Pro Leu
1           5           10           15
Val Ala Asn His Arg Arg Val Ala Asn Met Ser Ala Pro Gln Pro Asn
           20           25           30
Glu Ala Glu Lys Asn Ile Glu Ile Trp Lys Val Lys Lys Leu Ile Lys
           35           40           45
Arg Leu Glu Ala Ala Arg Gly Asn Gly Thr Ser Met Ile Ser Leu Ile
           50           55           60
Ile Arg Glu Ala Leu Arg Ile Arg Pro Phe Ala Arg Trp Phe Ala Asn
65           70           75           80
Val Ile Pro Gln Pro Pro Lys Ile Lys Ser His Glu Arg Gln Arg Cys
           85           90           95

```

&lt;210&gt; 42488

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42488

```

Gly Thr Ala Ser Asn Ile Lys Ser Arg Val Asn Arg Leu Ser Val Leu
1           5           10           15
Ser Ala Ile Thr Ser Thr Gln Gln Arg Leu Lys Leu Tyr Asn Lys Val
           20           25           30
Pro Pro Asn Gly Leu Val Ile Tyr Cys Gly Glu Ile Ile Thr Ser Glu
           35           40           45
Gly Lys Glu Arg Lys Ile Asn Ile Asp Phe Glu Pro Phe Lys Pro Ile
           50           55           60
Asn Thr Ser Leu Tyr Leu Cys Asp Asn Gln Val Pro Tyr Arg Ser Phe
65           70           75           80
Glu

```

&lt;210&gt; 42489

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42489

```

Ser Thr Val Val Lys Ser Ser Arg Gln Lys Ala Lys Asn Glu Arg Ser
1           5           10           15
Thr Leu Ile Ser Ser His Ser Asn Pro Ser Ile Pro Arg Ser Ile Phe
           20           25           30
Val Thr Thr Lys Phe His Thr Glu Ala Leu Ser Glu Leu Leu Glu Ser
           35           40           45
Asp Gln Lys Phe Gly Phe Ile Val Met Asp Glu Thr Ala Ala Phe Phe
           50           55           60
Gly Thr Leu Ser Gly Asn Thr Arg Glu Val Ile Gln Lys Leu Ser Val
65           70           75           80
Asp Leu Pro Lys Lys His Gly Arg Gly Gly Gln Ser Ala Leu Arg Phe
           85           90           95
Ala Arg Leu Arg Glu Glu Lys Arg His Asn Tyr Val Arg Lys Ile Ala
           100           105           110
Glu Leu Ala Val Gln Asn Phe Ile Thr Asn Asp Lys Val Asn Val Ala
           115           120           125
Gly Leu Ile Leu Ala Gly Ser Ala Asp Phe Lys Asn Asp Leu Asn Gln
           130           135           140

```

## 19034

Ser Asp Met Phe Asp Gln Arg Leu Gln Ala Lys Val Ile Lys Val Val  
 145 150 155 160  
 Asp Val Ser Tyr Gly Gly Glu Asn Gly Phe Asn Gln Ala Ile Glu Leu  
 165 170 175  
 Ser Ser Glu Thr Leu Ser Asn Val Lys Phe Val Gln Glu Lys Lys Leu  
 180 185 190  
 Ile Gly Gln Tyr Phe Gln Glu Ile Ser Gln Asp Thr Gly Lys Val Cys  
 195 200 205  
 Tyr Gly Ile Asp Asp Thr Leu Lys Ala Leu Glu Leu Gly Ala Ala Glu  
 210 215 220  
 Thr Leu Ile Val Tyr Glu Asn Leu Asp Val Thr Arg Tyr Val Leu Lys  
 225 230 235 240  
 Ala Ser Thr Gly Ser Glu Val Ile Val His Ala Thr Lys Ala Gln Glu  
 245 250 255  
 Glu Asn Arg Ala Leu Phe Thr Asp Lys Asp Thr Gly Thr Glu Met Glu  
 260 265 270  
 Val Val Glu Gln Thr Ser Phe Leu Glu Trp Leu Ala Glu Asn Tyr Lys  
 275 280 285  
 Asp Phe Gly Ala Thr Leu Glu Phe Val Ser Asp Lys Ser Ser Glu Gly  
 290 295 300  
 Asn Gln Phe Val Lys Gly Phe Gly Gly Ile Gly Ala Leu Leu Arg Tyr  
 305 310 315 320  
 Lys Val Asn Phe Glu Gln Leu Ala Asp Leu Asp Asp Glu Asp Glu Phe  
 325 330 335  
 Tyr Asp Gly Thr Ser Arg Ile Leu Lys Tyr Leu Val Met Tyr Ala Asn  
 340 345 350  
 Ala Gly His Leu Cys Arg Leu Thr Val Leu Arg Pro Arg Arg Glu Arg  
 355 360 365  
 Gly

&lt;210&gt; 42490

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42490

Ala Pro His His Leu Val Tyr Gln Gly His Thr Cys Ile Thr Ile Ser  
 1 5 10 15  
 Gln Tyr Ile Val Ser Pro Met Tyr Leu Gly Asp Phe Asn Asp Pro Leu  
 20 25 30  
 Gly Arg Gln Pro Lys Asp Gly Tyr Gln Tyr Ala Ser Ile Thr Ala Ala  
 35 40 45  
 Leu Val Ala Pro Val Ser Arg Gly Asn Val Thr Ile Gln Ser Ala Asp  
 50 55 60  
 Ser Arg Asp Pro Pro Val Ile Asn Thr Asn Thr Leu Gly Ser Ala Thr  
 65 70 75 80  
 Asp Gln Gln Val Ala Ile Ala Ala Phe Lys Arg Leu Arg Glu Ile Phe  
 85 90 95  
 Glu Ala Pro Glu Leu Ala Pro Val Arg Leu Gly Asp Glu Tyr Tyr Pro  
 100 105 110  
 Gly Lys His Ser Val Arg Thr Asp Ala Glu Ile Leu Gln Phe Ile Gln  
 115 120 125  
 Gln Asn Gly Leu Ala Phe Tyr His Ala Gly Ser Ser Cys Ala Met Gly  
 130 135 140  
 Asp Pro Asp Ala Val Asn Ser Thr Ala Val Val Asp Ser Lys Ala Arg

Year	Country	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)	Population growth rate (%)	Urban population growth rate (%)	Population growth rate (per 1,000)	Urban population growth rate (per 1,000)
1950	United States	150.0	100.0	66.7	30.0	100.0	1.2	1.5	12.0	15.0
1955	United States	155.0	105.0	67.7	31.0	105.0	1.3	1.6	13.0	16.0
1960	United States	160.0	110.0	68.8	32.0	110.0	1.4	1.7	14.0	17.0
1965	United States	165.0	115.0	69.7	33.0	115.0	1.5	1.8	15.0	18.0
1970	United States	170.0	120.0	70.6	34.0	120.0	1.6	1.9	16.0	19.0
1975	United States	175.0	125.0	71.4	35.0	125.0	1.7	2.0	17.0	20.0
1980	United States	180.0	130.0	72.2	36.0	130.0	1.8	2.1	18.0	21.0
1985	United States	185.0	135.0	72.9	37.0	135.0	1.9	2.2	19.0	22.0
1990	United States	190.0	140.0	73.7	38.0	140.0	2.0	2.3	20.0	23.0
1995	United States	195.0	145.0	74.4	39.0	145.0	2.1	2.4	21.0	24.0
2000	United States	200.0	150.0	75.0	40.0	150.0	2.2	2.5	22.0	25.0
2005	United States	205.0	155.0	75.6	41.0	155.0	2.3	2.6	23.0	26.0
2010	United States	210.0	160.0	76.2	42.0	160.0	2.4	2.7	24.0	27.0
2015	United States	215.0	165.0	76.7	43.0	165.0	2.5	2.8	25.0	28.0
2020	United States	220.0	170.0	77.3	44.0	170.0	2.6	2.9	26.0	29.0
2025	United States	225.0	175.0	77.8	45.0	175.0	2.7	3.0	27.0	30.0
2030	United States	230.0	180.0	78.3	46.0	180.0	2.8	3.1	28.0	31.0
2035	United States	235.0	185.0	78.7	47.0	185.0	2.9	3.2	29.0	32.0
2040	United States	240.0	190.0	79.2	48.0	190.0	3.0	3.3	30.0	33.0
2045	United States	245.0	195.0	79.6	49.0	195.0	3.1	3.4	31.0	34.0
2050	United States	250.0	200.0	80.0	50.0	200.0	3.2	3.5	32.0	35.0
2055	United States	255.0	205.0	80.4	51.0	205.0	3.3	3.6	33.0	36.0
2060	United States	260.0	210.0	80.8	52.0	210.0	3.4	3.7	34.0	37.0
2065	United States	265.0	215.0	81.1	53.0	215.0	3.5	3.8	35.0	38.0
2070	United States	270.0	220.0	81.5	54.0	220.0	3.6	3.9	36.0	39.0
2075	United States	275.0	225.0	81.8	55.0	225.0	3.7	4.0	37.0	40.0
2080	United States	280.0	230.0	82.1	56.0	230.0	3.8	4.1	38.0	41.0
2085	United States	285.0	235.0	82.5	57.0	235.0	3.9	4.2	39.0	42.0
2090	United States	290.0	240.0	82.8	58.0	240.0	4.0	4.3	40.0	43.0
2095	United States	295.0	245.0	83.1	59.0	245.0	4.1	4.4	41.0	44.0
2100	United States	300.0	250.0	83.3	60.0	250.0	4.2	4.5	42.0	45.0
1950	China	550.0	100.0	18.2	150.0	100.0	1.0	1.0	10.0	10.0
1955	China	560.0	110.0	19.6	155.0	110.0	1.1	1.1	11.0	11.0
1960	China	570.0	120.0	21.1	160.0	120.0	1.2	1.2	12.0	12.0

<210> 42491

<211> 237

&lt;212&gt; PRT

<213> A.fumigatus

 $\langle 220 \rangle$ 

<221> UNSURE

 $\langle 222 \rangle$  (172), (178)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42491

<210> 42492

<211> 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42492

```

Thr Ile Ser Cys Leu Leu Ile Tyr Pro Asn Pro Asp Ser Ala Leu Asn
1           5           10           15
Ser Thr Ala Gly Ala Leu Leu Gln Glu Asp Tyr Asp Ala Phe Ala Arg
          20           25           30
Gln Ala Lys Leu Met Thr Ser Ile His Ala Pro Val Pro Pro Asp Leu
          35           40           45
Arg Asn Ala Val Val Glu Ala Lys Ser Arg Gly Glu Glu Pro Gly Thr
          50           55           60
Leu Ile Pro Glu His Glu Gly Ala Arg Cys Leu Arg Pro Arg Lys Gly
65           70           75           80
Thr Arg Ile Gln Ser Leu Thr Met Lys Thr Lys Lys Pro Ser Val Thr
          85           90           95
Pro Arg Pro Ser Asn Gln Thr Asn Ala Asp Thr Asn Asp Ser His Pro
          100          105          110
Glu Ser Asp Asp Asp Ser Asp Thr Thr Arg Pro Ser Thr Ser Lys Glu
          115          120          125
Asn Asp Pro Ser Leu Ser Pro Ser Pro Val Lys Leu Ala Pro Pro Ser
          130          135          140
Pro Arg Lys Asn Ser His Gly Lys Arg Pro Leu Ser Asp Leu Thr Thr
145           150           155           160

```

&lt;210&gt; 42493

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42493

```

Pro Phe Pro Ser Thr Ser Ser Pro Pro Cys Thr Trp Ala Ile Ser Thr
1           5           10           15
Thr Arg Trp Ala Ala Ser Arg Lys Thr Ala Thr Ser Thr Arg Pro Ser
          20           25           30
Pro Arg Pro Ser Ser Pro Pro Ser Arg Gly Ala Thr Ser Pro Ser Ser
          35           40           45
Pro Pro Thr Ala Ala Ile Arg Arg Ser Ser Thr Pro Thr Arg Trp Ala
          50           55           60
Leu Pro Pro Thr Ser Lys Ser Pro Ser Pro Pro Leu Ser Val Cys Glu
65           70           75           80
Arg Phe Ser Arg Leu Gln Ser Trp Arg Pro Phe Ala Ser Val Thr Ser
          85           90           95
Ile Thr Pro Gly Asn Ile Pro Phe Gly Pro Met Arg Arg Ser Tyr Asn
          100          105          110
Ser Ser Ser Arg Thr Ala Trp Leu Ser Thr Thr Leu Gly Leu Arg Ala
          115          120          125
Pro Trp Gly Ile Pro Thr Pro Leu Thr Ala Arg Arg Trp Trp Thr Ala
          130          135          140
Arg His Gly
145

```

&lt;210&gt; 42494

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (110), (116)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42494

```

Pro Gly Pro Thr Gly Ser His Pro Ser Pro Ala Pro Pro Pro Arg His
1          5          10          15
Pro Leu Pro Leu Glu Thr Arg Ser Arg Pro Pro Leu Arg Arg Pro Gly
          20          25          30
Arg Pro Leu His Ala Pro Leu Pro Pro Arg Ser Gly Arg Pro Arg Ala
          35          40          45
Gly Thr Gln Gln Ser Arg Pro Ser Pro Pro Gln Pro Ser Thr Pro Trp
          50          55          60
Leu Leu Leu Leu Phe Val Val Leu Val Leu Val Pro Asn Pro Arg
65          70          75          80
Thr Arg Pro Ser Leu Ser Pro Arg His Leu His Pro Gly Arg His Gly
          85          90          95
Asp Val Pro Ala Pro Ala His Leu Ala Val Tyr Arg Arg Xaa Ala Pro
          100          105          110
Ala Val Leu Xaa Cys Ala Arg Ala Arg Leu Pro Arg Arg Gly Arg Arg
          115          120          125
Pro Gly Pro Arg Pro Pro Leu Leu Gly Pro Arg Thr Ala Arg Ile Tyr
          130          135          140
Arg Arg Arg Arg Ala
145

```

&lt;210&gt; 42495

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42495

```

Arg Ser Ser Phe Arg Arg Leu Ala Ala Asp His Ala Ala Leu His Glu
1          5          10          15
Glu Leu Pro Pro Asn Tyr Leu Phe Pro Thr Glu Glu Ser Ser Asp Asp
          20          25          30
Leu Thr Gln Leu Thr Thr Leu Leu Ala Gly Pro Gln Gly Thr Pro Tyr
          35          40          45
Ser Gln Gly Leu Trp Arg Leu His Leu Lys Met Pro Glu Asp Tyr Pro
          50          55          60
Lys Ser Pro Pro Lys Ala Thr Phe Lys Thr Arg Ile Trp His Pro Asn
65          70          75          80
Val Glu Glu Ser Thr Gly Ala Val Cys Val Asp Thr Leu Lys Arg Asp
          85          90          95
Trp Lys Ser Thr Leu Thr Leu Lys Asp Val Leu Val Val Arg Val Leu
          100          105          110
Gln Ser Thr
          115

```

&lt;210&gt; 42496

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42496

Ala Leu Val Phe Pro Ala Pro Trp Ser Ile Pro Tyr Leu Lys Glu Cys  
 1 5 10 15  
 Ala Asp Leu Pro Asn Leu Thr Val Tyr Thr Glu Thr Val Ala Lys Arg  
 20 25 30  
 Ile Leu Phe Asp Asp Thr Lys Thr Ala Thr Gly Val Val Val Glu Met  
 35 40 45  
 Ala Gly Leu Glu His Thr Leu Ala Val Asp Lys Glu Val Ile Leu Ser  
 50 55 60  
 Ala Gly Ala Leu Gln Ser Pro Gln Leu Leu Met Val Ser Gly Val Gly  
 65 70 75 80  
 Pro Ala Arg Thr Leu Asp Ser Leu Asp Ile Pro Ile Val His Asp Ser  
 85 90 95  
 Pro Tyr Val Gly Gln Asn Leu Ile Asp His Val Trp Phe Gly Ala Ala  
 100 105 110  
 Tyr Arg Val Asn Val Pro Thr Trp Thr Gln Trp Ala Asn Asp Ala Phe  
 115 120 125  
 Asp Met Leu Arg Leu Tyr Val Asp Asn Tyr Arg Gln His Arg Gln Gly  
 130 135 140  
 Pro Leu Thr Ala Asn Ala Gly Asp Phe Gly Ala Phe Glu Lys Val Pro  
 145 150 155 160  
 Ser His Leu Arg Ala Ala Phe Thr Ala Lys Thr Leu Gln Asp Leu Ala  
 165 170 175  
 Glu Phe Pro Asp Asp Trp Pro Glu Val Glu Val Ser Thr Ala Ser Pro  
 180 185 190  
 Cys Val Ser Arg Ser His Val His Asn His Phe Pro Val His Arg Leu  
 195 200 205  
 Pro His Val Pro Gly Arg Phe Gln Arg Pro Ala Gly Pro Pro Ala Glu  
 210 215 220  
 Arg Arg Leu Pro Val Arg Val His His Arg Gly Pro Arg Arg Pro Arg  
 225 230 235 240  
 Leu Ala Gly Gln Arg His His Pro Val Arg Arg Gln Pro Arg Ser Ala  
 245 250 255  
 Gly His Gln His Gln His Ala Gly Leu Cys His Arg Pro Ala Ser Arg  
 260 265 270  
 His Arg Arg Leu  
 275

&lt;210&gt; 42497

&lt;211&gt; 597

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (382), (387)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42497

Ser Ile Thr Ser Ser Thr Asn Ser Ser Pro Ala Asn Cys Gly Asn Ser  
 1 5 10 15  
 Ala Phe Asp Ile Asp Ser Pro Pro Pro Ser Ser Thr Leu Val His  
 20 25 30  
 Ile Thr Ser His Arg Ile Ser Thr Ser Ile Asp Asn Ile Pro Asp Leu  
 35 40 45  
 Asn Met Ala Ala Thr Ser Val Val Ala Val Ile Val Ile Gly Leu Leu



50						55						60					
Thr	Val	Leu	Tyr	Ile	Ser	Arg	Lys	Asn	Gly	Lys	Lys	Thr	Asp	Lys	Val		
65	70					75					80						
Leu	Leu	Lys	Leu	Pro	Leu	Ile	Gly	Asp	Leu	His	Ser	Ser	Pro	Ile	Glu		
				85					90					95			
Lys	Pro	Leu	Ala	Asn	Trp	Asp	Ser	Trp	Ala	Gln	Gln	Asn	Gly	Pro	Ile		
				100					105					110			
Ala	Val	Pro	Lys	Leu	Phe	Gly	Ile	Ile	Pro	Ile	Val	Val	Leu	Asn	Ser		
				115					120					125			
Asn	Glu	Ala	Ala	Thr	Glu	Leu	Phe	Asn	Arg	Arg	Ser	Gln	Trp	Tyr	Ser		
				130					135					140			
Asn	Arg	Pro	Pro	Ser	Val	Ser	Met	Glu	Met	Ile	Thr	Gly	Ala	Pro	Pro		
145	150					155					160						
Gly	Arg	Ser	Arg	Phe	Thr	Leu	Met	His	Asp	Tyr	Asp	Asp	His	Leu	Lys		
				165					170					175			
Leu	His	His	Arg	Ile	Leu	Ser	Pro	Ser	Leu	Gly	Ala	Leu	Ala	Ala	Pro		
				180					185					190			
Lys	Tyr	Gln	Pro	Leu	Met	Glu	Leu	Glu	Ala	Lys	Gln	Leu	Leu	His	Asp		
				195					200					205			
Leu	Val	Lys	Ala	Leu	Gln	His	Ser	Pro	Asp	Gly	Ala	Thr	Ile	Ser	Thr		
				210					215					220			
Asn	Thr	Ile	Tyr	Pro	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Ser	Val	Ile	Leu		
225	230					235					240						
Ala	Leu	His	Tyr	Gly	Leu	Arg	Ile	Pro	His	Pro	Asp	Glu	Arg	Ile	Leu		
				245					250					255			
His	Gln	Val	Ile	Asp	Ile	Gln	Val	Gln	Val	Thr	His	Leu	Ala	Ala	Asn		
				260					265					270			
Pro	Ala	Leu	Pro	Asp	Leu	Ile	Pro	Ala	Leu	Arg	His	Leu	Pro	Ala	Ile		
				275					280					285			
Leu	Ser	Pro	Trp	Lys	Arg	Ala	Ala	Asp	Arg	Leu	Tyr	Ala	Ala	Gln	Val		
				290					295					300			
Asp	Leu	Tyr	Met	Arg	Leu	Phe	His	His	Gly	Arg	Asp	Ala	Arg	Gly	Leu		
305	310					315					320						
Glu	Arg	Asn	Lys	Ala	Gly	Pro	Leu	His	Arg	Ser	Gln	Val	Arg	Pro	Gly		
				325					330					335			
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Gln	Ile	Pro		
				340					345					350			
Leu	Asp	Leu	Arg	Phe	His	Leu	Ala	Thr	Ser	Ile	Gln	Gly	Gly	Met	Glu		
				355					360					365			
Met	Ser	Pro	Arg	Gln	Leu	Ile	Trp	Leu	Phe	Ile	Ala	Ala	Xaa	His	Gln		
				370					375					380			
Gln	Ser	Xaa	Val	Ala	Arg	Ala	His	Ala	Phe	Leu	Asp	Glu	Val	Val	Gly		
385	390					395					400						
Arg	Asp	Arg	Val	Pro	Arg	Phe	Ser	Asp	Arg	Ala	Gln	Leu	Ala	Phe	Ile		
				405					410					415			
Asp	Ala	Val	Ala	His	Glu	Leu	Phe	Arg	Trp	Arg	Pro	Ile	Ala	Pro	Gly		
				420					425					430			
Ser	Ile	Pro	Arg	Arg	Ala	Asp	Arg	Asp	Asp	Glu	Phe	Gln	Gly	Val	Lys		
				435					440					445			
Ile	Asn	Lys	Gly	Val	Thr	Ile	Met	Ala	Asn	Ala	Trp	Gly	Ile	Gly	Arg		
				450					455					460			
Asp	Glu	Gln	Val	Phe	Asp	Pro	Ala	Leu	Gly	Asp	Leu	Gln</					

## 19040

[illegible]

<210> 42498

<211> 124

<212> PRT

<213> A.fumigatus

<400> 42498

Pro	Cys	Thr	Ser	Pro	Asp	Gly	Asp	Met	Glu	Glu	Ser	Thr	Ser	Leu	His
1				5					10					15	
Val	Cys	Gln	Tyr	Leu	Ala	Ala	Val	Ser	Leu	Ser	Glu	Met	Thr	Val	Ile
			20					25					30		
Phe	Pro	Ile	Gln	Thr	Arg	Asp	Gln	Arg	Ala	Val	Leu	Ala	Val	Ala	Phe
			35				40					45			
Thr	Phe	Ser	Ile	Leu	Ala	Val	Val	Ala	Val	Ser	Leu	Arg	Leu	Leu	Ala
			50			55					60				
His	His	Ile	Ala	His	Lys	Pro	Trp	Thr	Ala	Ser	Asp	Tyr	Phe	Leu	Ile
65					70					75				80	
Ala	Ala	Cys	Val	Arg	Gln	Ala	Leu	Ala	Met	Gly	Ser	Thr	Asn	Asn	Leu
				85					90					95	
Ser	Ile	Gly	Leu	Ser	Ser	Ser	Arg	Ser	Val	Ser	Ser	Pro	Ser	Val	Ser
			100					105					110		
Leu	Ala	Tyr	Ser	Arg	Leu	Val	Ser	Ala	Ser	Thr	Ile				
			115				120								

<210> 42499

<211> 296

&lt;212&gt; PRT

<213> A.fumigatus

<400> 42499

Tyr	Pro	Ser	Lys	Met	Ile	Gly	Ile	Pro	Leu	Leu	Ala	Ser	Leu	Leu	Leu
1				5					10					15	
Ser	Gly	Ile	Ala	Gln	Gly	Leu	Ala	Ile	Ala	Glu	Arg	Ala	Thr	Thr	Pro
			20					25					30		
Val	Trp	Leu	Thr	Leu	Pro	Pro	Thr	Pro	Pro	Leu	Pro	Ala	Pro	Ile	Ser
		35					40					45			
Glu	Ala	Arg	Ile	Ser	Val	Asp	Gly	Val	Glu	Leu	Trp	Ile	Gln	Lys	Tyr
	50					55					60				
Asn	Glu	Asp	Ala	His	Lys	Thr	Pro	Leu	Val	Leu	Asp	His	Gly	Gly	Leu
65					70					75					80
Gly	Tyr	Ser	Ala	Tyr	Phe	Gly	Ala	Val	Leu	Ser	Arg	Leu	Ile	Ala	Lys
				85					90					95	
Gly	His	Tyr	Val	Ile	Ala	Leu	Asp	Arg	Arg	Gly	His	Gly	Arg	Ser	Thr

## 19041

	100		105		110										
Phe	Lys	Glu	Asp	Asp	Val	Phe	Thr	Phe	Asp	Leu	Phe	Ala	Asp	Asn	Ile
	115						120					125			
Tyr	Glu	Gln	Leu	Lys	Ala	Val	Gly	Val	Ser	Lys	Tyr	Asn	Val	Val	Gly
	130						135					140			
Trp	Ser	Asp	Gly	Gly	Ala	Thr	Thr	Ile	Ala	Ala	Leu	Leu	Asn	Arg	Lys
145					150					155					160
Ile	Ser	Pro	Thr	Ile	Glu	Lys	Ala	Phe	Leu	Phe	Gly	Ala	Phe	Met	Val
			165						170					175	
Pro	Ser	Asp	Ser	Asn	Pro	Asn	Phe	Pro	Asn	Thr	Asp	Ile	Asn	Ser	Glu
		180						185					190		
Phe	Val	Ser	Arg	Cys	Ala	Lys	Glu	Tyr	Ser	Gln	Leu	Gln	Pro	Gln	Ala
	195						200					205			
Asn	Phe	Thr	Ser	Phe	Ala	Thr	Lys	Val	Ala	Thr	Leu	Glu	Ala	Thr	Leu
	210					215						220			
Pro	Gln	Phe	Thr	Thr	Asp	Gln	Leu	Arg	Thr	Ile	Asp	Gly	Ser	Arg	Val
225					230					235					240
Arg	Ile	Ala	Gly	Ala	Gln	Tyr	Asp	Glu	Ala	Val	Asn	Leu	Asp	Val	Pro
			245						250					255	
Ala	Lys	Leu	His	Ala	Ala	Ile	Pro	Gly	Ser	Ser	Leu	Val	Ile	Leu	Asn
		260						265					270		
Asn	Val	Ser	His	Phe	Ala	Pro	Leu	Gln	Asp	Pro	Asp	Gln	Phe	Thr	Arg
	275						280					285			
Ala	Leu	Glu	Asp	Phe	Phe	Tyr	Ala								
	290					295									

&lt;210&gt; 42500

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42500

Ser	Cys	Ile	Ser	Val	Lys	Arg	Asp	Arg	Pro	Gly	Gly	Ala	Pro	Val	Ile
1			5					10					15		
Ile	Ser	Met	Leu	Thr	Asp	Gly	Gly	Arg	Leu	Leu	Tyr	His	Trp	Leu	Arg
		20					25					30			
Arg	Leu	Asn	Asn	Ser	Val	Ala	Ala	Ser	Phe	Glu	Leu	Ser	Thr	Thr	Ile
	35					40					45				
Gly	Ile	Ile	Pro	Asn	Ser	Leu	Gly	Thr	Ala	Met	Gly	Pro	Phe	Cys	Trp
	50				55					60					
Ala	Gln	Glu	Ser	Gln	Phe	Ala	Arg	Gly	Phe	Ser	Ile	Gly	Glu	Leu	
65				70					75						

&lt;210&gt; 42501

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42501

Phe	Phe	Ala	Val	Gly	Leu	Gln	Ser	Ile	Ser	Ile	Thr	Gly	Val	Phe	Gln
1			5					10					15		
Ala	Gly	Ile	Gly	Phe	Asp	His	Met	Thr	Ser	Ile	Val	Ala	Val	Tyr	Gly
	20						25					30			
Met	Glu	Pro	Val	Thr	Lys	Leu	Phe	Gln	Leu	Ile	Ile	Pro	Leu	Gln	Phe
	35					40					45				
Thr	Trp	Val	Leu	Ser	Leu	Ser	Cys	Thr	Lys	Ile	Ser	Ile	Leu	Leu	Leu

## 19042

50                      55                      60  
 Tyr Leu Arg Ile Phe Pro Val Val Ser Val Val Arg Val Ala Trp Ala  
 65                      70                      75                      80  
 Thr Ile Gly Val Ile Val Ala Trp Ala Ile Ala Thr Ile Leu Ala Gly  
                     85                      90                      95  
 Cys Leu Ile Cys Arg Pro Phe Ala Phe Asn Trp Asp Gln Thr Ile Pro  
                     100                      105                      110  
 Gly Gly Ser Cys Gly Asp Gln Val Thr Ser Phe Thr Ala Thr Gly Val  
                     115                      120                      125  
 Ile Asn Leu Val Thr Asp Val Val Val Leu Val Thr Pro Met Pro Ser  
                     130                      135                      140  
 Leu Tyr Arg Leu Gln Met Ala Thr Tyr Lys Lys Val Thr Leu Ile Thr  
 145                      150                      155                      160  
 Val Phe Gly Leu Gly Val Val  
                     165

&lt;210&gt; 42502

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42502

Val Ala Lys Glu Val Ala His Lys Phe Gln Pro Asn Ala Lys Leu Glu  
 1                      5                      10                      15  
 Ala Tyr His Ala Asn Ile Lys Asp Ser Gln Phe Asn Val Asp Trp Phe  
                     20                      25                      30  
 Ala Thr Phe Asp Leu Val Phe Asn Ala Leu Asp Asn Leu Asp Ala Arg  
                     35                      40                      45  
 Arg His Val Asn Arg Met Cys Leu Ala Ala Asn Val Pro Leu Ile Glu  
                     50                      55                      60  
 Ser Gly Thr Thr Gly Phe Asn Gly Gln Val Gln Val Ile Lys Lys Val  
 65                      70                      75                      80  
 Ser Leu Ser Cys Ser Ser  
                     85

&lt;210&gt; 42503

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42503

Cys Gln Pro Leu Lys Ala Arg Lys Arg Gln Phe Gly Pro Arg Asp Ala  
 1                      5                      10                      15  
 Phe Thr Leu Arg Leu Cys Thr Phe Asn Thr Tyr Glu Asp Thr Ser Thr  
                     20                      25                      30  
 Cys Lys Ser His Phe Asp Thr Ala Thr Pro Ser Lys Tyr Asn Glu Gln  
                     35                      40                      45  
 Val Asp Ala Ser Gln Thr Gly Cys Gln Cys Leu Gly Gln Ser Gly Cys  
                     50                      55                      60  
 Ser Ile Ala His Ser Ser Glu Asn Gln Gln Ala Pro Ser Gln Trp Ser  
 65                      70                      75                      80  
 Val Arg Leu Tyr Asp His Pro Arg Cys Thr Cys Val Gly His Gly Phe  
                     85                      90                      95  
 Asn Pro Asp Cys Met Gln Asp Thr Phe Tyr Ser Ser Thr Ala His Glu  
                     100                      105                      110  
 His Met Val Ser Ala Ala Asn Leu Pro Asn Ser Ala Ala Thr Tyr Leu

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<210> 42504
<211> 84
<212> PRT
<213> A.fumigatus
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[illegible]

```
<210> 42505
<211> 163
<212> PRT
<213> A.fumigatus
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[illegible]

<210> 42506  
<211> 493

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42506

```

Tyr Tyr Leu Met Leu Phe Phe Leu Val Thr Leu Phe Leu His Leu His
1      5      10      15
Ser His Ser Ser Leu Thr Ala Leu Ile Gly Arg Arg Gln Gln Pro Ile
      20      25      30
His Ile Ser Thr Ala Ala Asp Pro Ser Ser Pro Val Val Arg Leu Val
      35      40      45
Ile Cys Leu Phe Ser Ala Pro Arg Arg Gln Leu Leu Thr His Lys Thr
      50      55      60
Phe Lys Gly Val Thr Arg Leu Leu Leu Leu Arg Val Pro Phe Phe Arg
65      70      75      80
Asp Ile Ile Leu Glu Ser Phe Glu Cys Glu His Cys Gly His Arg Asp
      85      90      95
Asn Ser Val Lys Ser Ala Gly Gln Ile Gln Glu Lys Gly Thr Lys Tyr
      100      105      110
Thr Leu Asp Val Glu Asn Glu Glu Asp Phe Gln Arg Gln Val Ile Arg
      115      120      125
Ser Asp Val Ser Ile Phe Arg Val Glu Ser Leu Gly Ile Glu Met Pro
      130      135      140
Lys Gly Glu Ser Gln Leu Thr Thr Val Glu Gly Val Ile Gln Arg Ile
145      150      155      160
Tyr Glu Asn Leu Ser Ser Asp Gln Pro Leu Arg Lys Glu Gln Ala Pro
      165      170      175
Glu Leu His Asp Ala Phe Val Pro Ile Ile Glu Lys Leu Glu Lys Ile
      180      185      190
Leu Lys Arg Glu Gly Phe Pro Phe Thr Ile Ser Phe Asp Asp Pro Thr
      195      200      205
Gly Asn Ser Trp Ile Ala Pro Asn Thr Gln Asp Lys Thr Asn Lys Tyr
      210      215      220
Arg Arg Arg Asp Tyr Pro Arg Thr His Glu Gln Asn Glu Glu Leu Gly
225      230      235      240
Ile Ala Ala Asp Pro Glu Ala Gln Lys Asn Glu Gly Ile Asn Val Glu
      245      250      255
Gly Glu Ile Asp Asp Ser Glu Ile Val Glu Gly Gln Val Tyr Ser Leu
      260      265      270
Pro Ala Glu Cys Pro Gly Cys Thr Lys Ala Cys Phe Val Asn Met Lys
      275      280      285
Lys Val Asn Ile Pro Tyr Phe Lys Glu Val Phe Ile Trp Gly Thr Val
      290      295      300
Cys Asp His Cys Gly Tyr Arg Thr Ser Glu Val Lys Thr Gly Gly Glu
305      310      315      320
Val Pro Glu Lys Gly Lys Arg Ile Thr Leu Arg Val Glu Asn Glu Val
      325      330      335
Asp Leu Ser Arg Asp Ile Leu Lys Ser Asp Thr Cys Ala Leu His Ser
      340      345      350
Glu Glu Leu Glu Val Thr Val Gln Pro Gly Thr Leu Gly Gly Arg Phe
      355      360      365
Thr Thr Val Glu Gly Leu Leu Thr Glu Ile Arg Asp Gln Leu His Gly
      370      375      380
Gln Ile Phe Asp Val Asp Asp Thr Thr Asn Ser Gly Gly Asp Ser Met
385      390      395      400
Ala Ala Ser Asp Lys Glu Lys Trp Glu Arg Phe Phe Ser Arg Leu Asn
      405      410      415

```

## 19045

Asp Ala Ile Ser Gly Lys Met Lys Phe Val Ile Thr Leu Glu Asp Pro  
 420 425 430  
 Met Ala Asn Ser Tyr Val Gln Asp Leu Cys Ala Pro Ala Pro Asp Pro  
 435 440 445  
 Gln Ile Thr Thr Glu Glu Tyr Thr Arg Thr Glu Glu Glu Glu Glu Glu  
 450 455 460  
 Leu Gly Leu Lys Asp Met Lys Val Glu Gly Tyr Glu Gln Glu Gln Lys  
 465 470 475 480  
 Glu Glu Lys Pro Ala Glu Glu Ala Asp Glu Arg Lys Ser  
 485 490

<210> 42507  
 <211> 129  
 <212> PRT  
 <213> A.fumigatus

<400> 42507  
 Gln Ser Asn Ser Leu Glu Arg Leu Ser Arg Arg Leu Lys Thr Leu Gln  
 1 5 10 15  
 Glu Thr Ala Lys Asp Gly Leu Lys Pro Ile Leu Phe Phe Asp Lys Asp  
 20 25 30  
 Asp Val Asp Thr Leu Asp Phe Val Thr Ala Ser Ala Asn Leu Arg Ala  
 35 40 45  
 Thr Ile Phe Gly Ile Glu Pro Lys Ser Lys Phe Asp Thr Lys Arg Lys  
 50 55 60  
 Leu Asp Ala Ile Thr Asp Ser Phe Leu Leu Leu Ile Leu Val Ser Glu  
 65 70 75 80  
 Met Ala Gly Asn Ile Ile Pro Ala Ile Ala Thr Thr Asn Ala Met Thr  
 85 90 95  
 Ala Gly Leu Cys Val Leu Gln Ala Phe Lys Val Leu Lys Asp Asp Phe  
 100 105 110  
 Gln Asn Ala Lys Met Val Arg Ala Thr Ser Glu Leu Val Pro Arg Val  
 115 120 125  
 Ile

<210> 42508  
 <211> 161  
 <212> PRT  
 <213> A.fumigatus

<400> 42508  
 Gly Leu Leu Glu Ile Asp Arg Met Ile Ala Arg Ala Met Ser Asp Asp  
 1 5 10 15  
 Glu Ala Asp Pro Glu Leu Leu Ala Leu Leu Arg Lys Ser Leu Gly Leu  
 20 25 30  
 Asp Gly Gly Pro Ala Asn Pro Arg Thr Ala Glu Thr Lys Val Leu Glu  
 35 40 45  
 Asn Ala Gln Phe Val Phe Asp Asn Ala Val Asp Val Ala Leu Ser Pro  
 50 55 60  
 Ala Lys Val Lys Glu Ala Ala Glu Thr Ile Trp Arg Leu Met Gln Lys  
 65 70 75 80  
 Lys Asn Tyr Ser Thr Glu Thr Trp Thr Asp His Glu Leu His Pro Lys  
 85 90 95  
 Ala Lys Asp Gly Ser Thr Val Asp Phe Ile Phe Thr Met Asp Leu Leu  
 100 105 110

## 19046

Asn Phe Ser Phe Trp Ser Asp Gln Thr Asp Pro Ser Lys Arg Phe Cys  
 115 120 125  
 Ile Glu Tyr Arg Gly Lys Lys Trp Thr Gly Tyr Trp Ser Leu Val Ala  
 130 135 140  
 Ala Leu Gln Arg Ala Leu Asp Glu Gly Lys Ser Ser Val Lys Ile Phe  
 145 150 155 160  
 Ala

&lt;210&gt; 42509

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42509

Arg Leu Ala Asp Tyr Arg Ile Pro Gln Met Leu His Gln Leu Gly Cys  
 1 5 10 15  
 Leu Leu Tyr Ser Pro Ser Leu Glu Gly His Ile Arg Ser Asn Lys Leu  
 20 25 30  
 Ile Pro Ser Gly Ser Asn Trp Glu Ile Glu Leu Arg Ala Thr Ser Ile  
 35 40 45  
 Trp Cys Val Glu Leu Ile Arg Arg Glu Ile Glu Arg Gln His Pro Glu  
 50 55 60  
 Val Lys Lys Gln Lys Leu Leu Lys Gly Ala Pro Thr Glu Ser Ser Val  
 65 70 75 80  
 Asn Gly Ala Thr Ser Phe Glu Asn Glu Thr Asn Leu Ala Ala Gln Lys  
 85 90 95  
 His Ile Arg Gln Ala Ser Thr His Gly Thr Ser Gly Ser Gly Ile Asn  
 100 105 110  
 Ala Ile Leu Ile Asp Phe Phe Leu Tyr Asp Thr Ala Lys Glu Met Glu  
 115 120 125  
 Arg Asp Gly Arg Glu Thr Ile Pro His His Arg Thr Arg Ser Ile Trp  
 130 135 140  
 Tyr  
 145

&lt;210&gt; 42510

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42510

Asn Phe Leu Ala Leu Cys Ala Cys Gly Ala Tyr Asn Asn Thr Pro Phe  
 1 5 10 15  
 His Arg Ile Phe Pro Gly Phe Met Ile Gln Gly Gly Asp Ile Ser Leu  
 20 25 30  
 Gly Pro Ala Pro Gly Thr Leu Asn Thr Leu Lys Pro Met Leu Pro Val  
 35 40 45  
 Asn Glu Ile Pro Lys Gly Gly Thr Ser Ile Tyr His Pro Arg Ala Leu  
 50 55 60  
 Asn Gln Glu Ile His Leu Pro Ala Leu Arg His Asn Ala Arg Gly Ile  
 65 70 75 80  
 Leu Ser Met Ala Ser Arg Pro Val Lys Asp Arg Thr Ala Pro Gly Ser  
 85 90 95  
 Gln Gly Ala Thr Gly Ala Thr Val Asn Gly Ser Gln Phe Phe Ile Thr  
 100 105 110



19047

Phe Ala Ala Ala Pro His Leu Asp Gly Ala Ser Thr Val Phe Gly Lys  
 115 120 125  
 Val Leu Asn Leu Ser Pro Gln Asp Glu Gly Gly Asp Val Leu Ser Lys  
 130 135 140  
 Leu Glu Lys Ala Lys Leu Lys Val Asp Lys Lys Gly Arg Val Thr Gln  
 145 150 155 160  
 Pro Lys Glu Gly Glu Glu Gly Gly Tyr Glu Ala Ile Gly Ile Asn Ser  
 165 170 175  
 Val Thr Ile His Ala Asn Pro Phe Ala Lys  
 180 185

<210> 42511

<211> 660

<212> PRT

<213> A.fumigatus

<400> 42511

Pro His Leu Leu Glu Cys Arg His Ile Ile Ser Arg Met Leu Val Thr  
 1 5 10 15  
 Asp Pro Lys Gln Arg Ala Ser Leu Ala Glu Ile Met Asn His Pro Trp  
 20 25 30  
 Met Asn Lys Gly Phe Ser Gly Pro Pro Glu Asn Tyr Leu Pro Ala Arg  
 35 40 45  
 Glu Pro Ile Gln Leu Pro Leu Asp Pro Glu Val Val Glu Lys Met Thr  
 50 55 60  
 Gly Phe Asp Phe Gly Pro Pro Glu Tyr Ile Thr Ala Gln Leu Thr Lys  
 65 70 75 80  
 Ile Ile Glu Ser Glu Asp Tyr Gln His Ala Val Arg Thr Ser Val Arg  
 85 90 95  
 Glu Gln Pro Leu Gln Val His Ser Glu Lys Lys Arg Gly Met Phe Asp  
 100 105 110  
 Phe Tyr Lys Arg Arg Asn Ser Ala Ser Arg Asp Thr Leu Ser Ala Pro  
 115 120 125  
 Ser Val Glu Ala Val Gln Leu Gly Asn Asp Pro Leu Asn Ala Tyr Ser  
 130 135 140  
 Pro Leu Leu Ser Val Tyr Leu Val Lys Glu Lys Leu Asp Arg Glu  
 145 150 155 160  
 Arg Ala Glu Ser Asn Pro Gly Ala Leu Gly Ile Pro His Ser Ala Gly  
 165 170 175  
 Glu Asn Val Leu Arg Met Pro Asp Leu Pro Ala Pro Glu Ala Ala His  
 180 185 190  
 Thr Asn Gln Tyr Gln Leu Pro Gly Glu Lys Asp Thr Gly Arg Arg Ser  
 195 200 205  
 Arg Pro Arg Ala Arg Thr His Gly Asp Asp Asp Leu Asn Asp Gly Ile  
 210 215 220  
 Lys Asp Leu His Leu Thr Pro Gln Ala Gly Gln Ala Thr Pro Ile Pro  
 225 230 235 240  
 Ala Ile Pro Pro Glu Thr Pro Val Lys Lys Glu Ser Thr Ala Ala Gly  
 245 250 255  
 Ile Leu Arg Arg Phe Ser Thr Arg Arg Val Lys Asp Arg Ser Arg Asp  
 260 265 270  
 Pro Glu Arg Glu Arg Ile Thr Ser Ser Gln Ala Pro Ser Leu Ser Val  
 275 280 285  
 Gln Pro Pro Ala Asp Ser Ala Ser Pro Leu Ser Arg Gly Phe Ser Met  
 290 295 300  
 Arg Arg Ser Arg Arg Ala Asp Pro Leu Pro Ser Asp Thr Pro Gly Gly

Variable	Mean	Standard deviation	Minimum	Maximum
Age	34.5	10.2	22	55
Gender	0.5	0.5	0	1
Marital status	0.6	0.5	0	1
Education	12.5	1.5	10	15
Income	1500	500	1000	2500
Health status	0.8	0.2	0	1
Smoking status	0.3	0.5	0	1
Alcohol consumption	0.2	0.4	0	1
Exercise frequency	0.5	0.5	0	1
Stress level	0.7	0.3	0	1
Depression score	0.4	0.4	0	1
Life satisfaction	0.6	0.3	0	1
Work satisfaction	0.5	0.4	0	1
Family satisfaction	0.6	0.3	0	1
Community satisfaction	0.5	0.4	0	1
Overall quality of life	0.6	0.3	0	1

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<210> 42512
<211> 357
<212> PRT
<213> A.fumigatus
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```

<400> 42512
Val Gln Arg Gln Ser Gln Gln Glu Ser Gln Arg Ser Pro Lys Ala Thr
1          5          10          15
Phe Phe Ser Asn Leu Thr His Arg Thr Pro Ser Ser Ser Ile Pro Leu
          20          25          30

```

## 19049

Lys Arg Lys Ser Asp Arg Ser Ser Val Ser Pro Ser Leu Ala Val Pro  
 35 40 45  
 Lys Ala Asp His Leu Thr Asn Asn Asn Ile His Gln Thr Thr Asn Lys  
 50 55 60  
 Gln Gly Leu Gly Asn His Ser Asn Pro Ile Thr Ser Asn Ser Asn Thr  
 65 70 75 80  
 Ala Asn Asn Ala Ile Ala Lys Ala Asn Thr Pro Asp Pro Asn His Val  
 85 90 95  
 Phe Asn Pro Lys Ile Gln Asn Pro Ser Thr Pro Ser Pro Thr Pro Ser  
 100 105 110  
 Ser Gln Gln Glu Ala Val Gly Val Val Ile Pro Ser Pro Ser Arg Gln  
 115 120 125  
 Leu Arg Lys Glu Ile Glu Lys Ser Val Trp Val Lys Ala Pro Pro Val  
 130 135 140  
 Thr Pro Glu Lys Thr Ala Leu Ser Thr Glu Tyr Tyr Pro Ile Asp Ala  
 145 150 155 160  
 His Glu Lys Arg Ala Leu Arg Gly Ala Tyr Pro Ser Ala Arg Lys Val  
 165 170 175  
 Lys Arg Ser Glu Ile Pro Phe Ser Ile Glu Thr Pro Gly Pro Ile Leu  
 180 185 190  
 Ala Asp Arg Ile Pro Val Gln Arg Gln Leu His Glu Thr Leu Gln Arg  
 195 200 205  
 Lys Leu Ser Lys Ile Asn Gly Pro Pro Val Thr Phe Ala Pro Gly Glu  
 210 215 220  
 Glu Asp Leu Leu Ala Val Phe Ala Ser Asn Phe Glu Phe Val Asn Ser  
 225 230 235 240  
 Tyr Ile Leu Arg Lys Gly Val Ser His Ile Pro Ala Asp Phe Ile Ala  
 245 250 255  
 Gly Cys Asp Cys Lys Lys Ile Cys Asp Pro Ala Arg Cys Gly Cys Leu  
 260 265 270  
 Glu Gln Asp Glu Glu Ser Lys Glu Ile Ile Val Pro Tyr Gln Arg Ala  
 275 280 285  
 Gln Asp Asp Ala Arg Leu Leu Val Leu Thr Pro Asp Phe Leu Lys Arg  
 290 295 300  
 Thr Asp Ile Ile Ile Glu Cys Ser Ser Lys Cys Thr Cys Asp Glu Arg  
 305 310 315 320  
 Lys Cys Trp Asn Arg Val Val Gln His Gly Arg Thr Val Arg Leu Glu  
 325 330 335  
 Ile Phe His Thr Gly Asn Arg Gly Phe Gly Lys Leu Tyr Lys Ala Ile  
 340 345 350  
 Glu Ala Glu Glu Cys  
 355

&lt;210&gt; 42513

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42513

Pro Val Gly Ile Ser Gly Phe His Gly Gly Thr His Ser Asn Ser Ser  
 1 5 10 15  
 Arg Arg Asp His Ser Lys Glu Arg Ser Arg Glu Arg Pro Thr Ser Ala  
 20 25 30  
 His Arg Thr Asp Pro Ser Pro Ser Lys His Arg Arg Asn Leu Ser Val  
 35 40 45  
 Gln Ser His Gln Arg Asp Ser Ile Asp Met Ala Ser Thr Gly Pro Val

## 19050

Val 65	Ala	Glu	Pro	Ala	Pro	Pro	Pro	Ala	Gln	Ala	Ala	Ser	Gly	Ser	His
Leu	His	Pro	Ser	Ser	Ser	Val	Gln	Pro	Lys	Arg	Arg	Thr	Thr	Ile	Thr
Thr	Pro	Ser	Gly	Gln	Trp	Ala	Leu	Gly	Lys	Thr	Ile	Gly	Ala	Gly	Ser
Met	Gly	Lys	Val	Lys	Leu	Ala	Lys	Asn	Met	Glu	Thr	Gly	Glu	Gln	Val
Phe	Arg	Thr	Glu	Ala	Thr	Asp	Leu	Thr	Leu	Thr	Leu	Met	Thr	Ile	Ala
Gly	Gly	Cys	Gln	Asn	Ser	Thr	Glu	Thr	Ile	Gly	Arg				

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<210> 42514
<211> 213
<212> PRT
<213> A.fumigatus
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<400>	42514
Gln Leu Gln Val Ala Val Lys Ile Val Pro Arg Gln Ser Ala Asp Glu	
1	5 10 15
His Arg Ser Ser Arg Asp Thr Glu Arg Ala Asp Arg Ser Lys Glu Ile	
	20 25 30
Arg Thr Ala Arg Glu Ala Ala Ile Val Ser Leu Val Asn His Pro Tyr	
	35 40 45
Ile Cys Gly Met Arg Asp Val Val Arg Thr Thr Tyr His Trp Tyr Met	
	50 55 60
Leu Phe Glu Tyr Val Asn Gly Gly Gln Met Leu Asp Tyr Ile Ile Ser	
65	70 75 80
His Gly Lys Leu Lys Glu Lys Gln Ala Arg Lys Phe Ala Arg Gln Ile	
	85 90 95
Ala Ser Ala Leu Asp Tyr Cys His Arg Asn Ser Ile Val His Arg Asp	
	100 105 110
Leu Lys Ile Glu Asn Ile Leu Ile Ser Lys Thr Gly Asp Ile Lys Ile	
	115 120 125
Ile Asp Phe Gly Leu Ser Asn Leu Phe Ser Pro Arg Ser Leu Leu Lys	
	130 135 140
Thr Phe Cys Gly Ser Leu Tyr Phe Ala Ala Pro Glu Leu Leu Gln Ala	
145	150 155 160
Arg Gln Tyr Thr Gly Pro Glu Val Asp Val Trp Ser Phe Gly Ile Val	
	165 170 175
Leu Tyr Val Leu Val Cys Gly Lys Val Pro Phe Asp Asp Gln Ser Met	
	180 185 190
Pro Gln Leu His Ala Lys Ile Lys Lys Gly His Val Glu Tyr Pro Gln	
	195 200 205
Gly Leu Ser Ala Gly	
210	

```
<210> 42515
<211> 159
<212> PRT
<213> A.fumigatus
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<400> 42515  
Gly Gly Arg Val Leu Met Arg Pro Gly Leu Arg Ser Pro Asp Trp Ile

## 19051

```

1           5           10           15
Arg Ala Gly Gln Phe Ile Asp Cys Tyr Leu Gly Glu Val Ile Thr Lys
      20           25           30
Gln Glu Ala Asp Val Arg Glu Glu Val Val Thr Ser Gln His Gly His
      35           40           45
Ser Tyr Leu Phe Glu Leu Asp Phe Phe His Asn Asp Asp Glu Ile Tyr
      50           55           60
Val Val Asp Gly Gln Lys Phe Gly Ser Pro Thr Arg Phe Met Asn His
      65           70           75           80
Ser Cys Asn Pro Asn Cys Lys Leu Phe Pro Val Thr Arg Thr Tyr Gly
      85           90           95
Asp Glu Arg Leu Tyr Asp Leu Ala Phe Phe Ser Leu His Asn Ile Pro
      100          105          110
Pro Asn Thr Glu Leu Thr Phe Asp Tyr Asn Pro Asn Trp Glu Glu Gly
      115          120          125
Lys Lys Val Asp Pro Asn Ala Val Arg Cys Leu Cys Gly Glu Lys Asn
      130          135          140
Cys Arg Gly Gln Leu Trp Pro Asn Gln Arg Lys Gly Thr Lys Cys
      145          150          155

```

&lt;210&gt; 42516

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42516

```

Ser Ala Leu Ser Asp Tyr Leu Val Leu Leu Ser Val Ile Ile Ser Ile
1           5           10           15
Ile Pro Ser Leu Ala Gly Gly Met Asp Tyr His His Ile His Ala Ile
      20           25           30
Ala Gly Ser Ile Tyr Ser Met Gln Gly Gln Met Thr Glu Thr Arg Trp
      35           40           45
Thr Asp Leu Phe Gln Ser Pro Leu Tyr Pro Ser Arg Trp Thr Leu Glu
      50           55           60
Trp His Ala Ala Trp Gln Ser Gln
      65           70

```

&lt;210&gt; 42517

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42517

```

Asn Ile Ser Thr Ser Gln Gln Gln His Ser Asn Arg Thr Leu Leu His
1           5           10           15
Arg His His Leu His Thr Thr Tyr Thr Gln Thr Ser Thr Pro Lys Arg
      20           25           30
Glu Thr Asp Lys Thr Ala Lys Met His Pro Asn Leu Ser Leu Thr Thr
      35           40           45
Ser Phe Pro Ser Ser Ser Pro Asn Asn His Leu Pro Thr Ser Thr Ala
      50           55           60
Thr Ser Pro Ala Ser Ser Ala Ser Pro Ser Ala Ser Ser Pro Phe Ser
      65           70           75           80
Phe Arg Leu Phe His Pro Tyr Arg Gly Ala Ser Pro Ser Ser Thr Gly
      85           90           95
Ser Ile Ser Ala Asn Arg Ser Arg Ser Thr Ser Pro Leu Arg Leu Ser

```

## 19052

```

      100              105              110
Ala Leu Phe Leu Cys Arg Arg Pro Ser Lys Val Asp Leu Ala Leu Ser
      115              120              125
Ala Glu Arg Thr Arg Cys Asp Gly Asp Ala Ile Glu Arg Gln Gly Leu
      130              135              140
Asp Leu Met Glu Pro Arg Pro Val Asp Pro Val Asp Tyr Arg Leu Pro
145              150              155              160
Met Asp Gly Ser Ile Phe Ala Ser Ser Ala Leu Thr Gln Gly Phe Glu
      165              170              175
Ala Ser Arg Gly Arg Ser Ser Leu His Ser Gln Leu His Thr Gln Pro
      180              185              190
Tyr Gly Phe Val Arg Pro Arg Phe Val Met Gly Gly Ile Phe Glu Val
      195              200              205
Met Glu Gly Arg Asp
      210

```

&lt;210&gt; 42518

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42518

```

Trp Ala Gly Pro Phe Asp Arg Ile Ser Asn Arg Arg Ser Ser Cys Ile
1              5              10              15
Trp Asn Glu Pro Val Ser Leu Ala Phe Pro Val Ser Tyr Ser Tyr Ser
      20              25              30
Phe Lys Val Gln Thr Ser Lys Lys Leu Phe Ala Ile Gly Thr Pro Phe
      35              40              45
Phe Val Asp Ser Arg Asp Leu Gly Leu Lys Arg Tyr Leu Gly Ala Lys
      50              55              60
Pro Gln Gln Val Thr Pro Trp Arg Cys Val Trp Met Glu Gln Thr Ser
65              70              75              80
His Gly Phe Asn Asp Glu Asp Glu Arg Pro
      85              90

```

&lt;210&gt; 42519

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42519

```

Thr Gln Lys Ala Asp Val Gly Ser Val Ile Leu Lys Tyr Ala Gly Arg
1              5              10              15
Asp Ala Thr Lys Ala Tyr Ser Glu Val His Ser Pro Gly Val Ile Lys
      20              25              30
Ser Asn Leu Pro Pro Glu Lys Tyr Lys Gly Ile Leu Asp Ser Ser Ser
      35              40              45
Ile Asp Glu Glu Trp Leu Lys Gln Pro Pro Ser Glu Asn Pro Gln Val
      50              55              60
Val Leu Asp Asp Glu Lys Pro Pro Leu His Thr Leu Ile Asn Ser His
65              70              75              80
Asp Phe Glu Leu Val Ala Ser Lys Thr Ala Ser Lys Lys Thr Trp Ala
      85              90              95
Phe Tyr Ser Ser Ala Ser Thr Asp Leu Ile Thr Arg Asp Ala Asn Lys
      100              105              110
Ser Cys Phe Asp Arg Ile Trp Phe Arg Pro Arg Val Leu Arg Asn Val

```

## 19053

115 120 125  
 Arg Ser Val Asp Ser Arg Thr Lys Val Leu Gly Val Asp Cys Ser Met  
 130 135 140  
 Pro Leu Phe Val Ser Pro Ala Ala Met Ala Lys Leu Ile His Pro Asp  
 145 150 155 160  
 Gly Glu Cys Ala Ile Ala Arg Ala Cys Glu Arg Lys Gly Ile Ile Gln  
 165 170 175  
 Gly Val Cys His Asp Leu Ile Ser His Ser Val Ser Leu His Asn Ala  
 180 185 190  
 Lys Leu

<210> 42520  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 42520  
 Pro Thr Ala Pro Leu Asn Ile Arg Phe Arg Phe Ile Ser Cys Ser Tyr  
 1 5 10 15  
 Ser Ser Ile Ile Thr Leu Thr Trp Ser Leu Arg Lys Asn Leu Ser Phe  
 20 25 30  
 Lys Pro Val Ile Cys Ala Asn Phe Lys Arg Val Lys Met Ala Gly Glu  
 35 40 45  
 Lys Leu Leu Ser Thr Lys Glu Val Ser Lys His Lys Ser Pro Asp Asp  
 50 55 60  
 Cys Trp Ile Val Val Asn Asn Lys Val Trp Asp Val Thr Asp Phe Val  
 65 70 75 80  
 Glu Glu His Pro Gly Gly Ser Thr Ser Lys Ser Cys Trp Leu Leu Cys  
 85 90 95

<210> 42521  
 <211> 263  
 <212> PRT  
 <213> A.fumigatus

<400> 42521  
 Ser Tyr Ile Pro Phe Ser Leu Ile Ala Gln Arg Gln Ala Leu Val Leu  
 1 5 10 15  
 Ile Ile Gly Gln Val Ser Asn Asn Ser Ser Tyr Thr Leu Asp Gln Leu  
 20 25 30  
 Arg Glu Ala Ala Pro Ser Ala Asn Phe Phe Phe Gln Leu Tyr Val Asn  
 35 40 45  
 Arg Asp Arg Thr Lys Ser Ala Ala Leu Leu Arg Gln Cys Ser Ala Asn  
 50 55 60  
 Pro Asn Val Arg Ala Ile Phe Val Thr Val Asp Ala Ala Trp Pro Gly  
 65 70 75 80  
 Lys Arg Glu Ala Asp Glu Arg Val Lys Ala Asp Glu Asn Leu Ser Val  
 85 90 95  
 Pro Met Ala Pro Ala Arg Ala Lys Asn Asp Lys Lys Gly Gly Gly Leu  
 100 105 110  
 Gly Arg Val Met Ala Gly Phe Ile Asp Pro Gly Leu Thr Trp Asp Asp  
 115 120 125  
 Leu Val Trp Val Arg Lys His Thr His Leu Pro Val Cys Leu Lys Gly  
 130 135 140  
 Val Met Ser Ala Asp Asp Ala Ile Leu Ala Met Gln Ala Gly Leu Asp

## 19054

```

145          150          155          160
Gly Ile Leu Leu Ser Asn His Gly Gly Arg Asn Leu Asp Thr Ser Pro
          165          170          175
Pro Ser Ile Val Thr Leu Leu Glu Leu His Lys Arg Cys Pro Glu Ile
          180          185          190
Phe Asp Lys Met Glu Ile Tyr Val Asp Ser Gly Ile Arg Arg Gly Thr
          195          200          205
Asp Ile Leu Lys Ala Ile Cys Leu Gly Ala Thr Ala Val Gly Met Gly
          210          215          220
Arg Ser Met Leu Phe Ala Thr Asn Tyr Gly Gln Glu Gly Val Glu His
225          230          235          240
Leu Ile Asp Ser Arg Cys Cys Pro Met Tyr Asn Pro Met Lys Leu Thr
          245          250          255
Ser Asn Cys Ser Tyr Glu Arg
          260

```

&lt;210&gt; 42522

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42522

```

Gln Ala Arg Leu Pro Ala Gly Phe Cys Tyr Ala Thr Val Gly Val His
1          5          10          15
Pro Cys Gln Ala Lys Leu Phe Asp Glu Phe Pro Gly Gly Pro Asp Lys
          20          25          30
Met Leu Glu Glu Leu Lys Ser Leu Ala Leu Glu Ala Lys Ala Ala Gly
          35          40          45
His Ala Val Ala Phe Gly Glu Ile Gly Leu Asp Tyr Asp Arg Leu Phe
          50          55          60
Leu Ser Ala Lys Glu Pro Gln Leu Lys Tyr Phe Glu Ala Gln Leu Asp
65          70          75          80
Leu Ala Val Glu Ile Gln Leu Pro Leu Phe Leu His Ser Arg Ala Ala
          85          90          95
Ser Glu Asp Phe Glu Lys Leu Leu Ala Pro Arg Leu Glu Lys Leu Pro
          100          105          110
Lys Lys Gly Leu Val His Ser Phe Thr Gly Thr Met Asp Glu Met Lys
          115          120          125
Arg Met Leu Ala Leu Gly Leu Asp Val Gly Val Asn Gly Cys Ser Leu
          130          135          140
Lys Thr Glu Glu Asn Leu Glu Val Val Lys Ala Ile Pro Leu Asp Arg
145          150          155          160
Ile Gln Ile Glu Thr Asp Gly Pro Trp Val Trp Ser Ser His Leu Pro
          165          170          175
Tyr Asn Ile Leu Thr Phe Phe Pro Leu
          180          185

```

&lt;210&gt; 42523

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42523

```

Cys Glu Ile Arg Pro Ser His Ala Ser Ala Lys His Leu Glu Gly Ser
1          5          10          15
Pro Ala Leu Pro Lys Ala Val Lys Lys Glu Lys Trp Gln Lys Gly Leu

```



## 19055

20 25 30  
 Met Val Lys Gly Arg Asn Glu Pro Val Ala Ile Ala His Val Ala His  
 35 40 45  
 Val Ile Ala Lys Leu Lys Asn Ile Thr Ala Ala Glu Val Cys Glu Ala  
 50 55 60

<210> 42524  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 42524  
 Phe Asp Val Pro Gly Val Asp Leu Pro Ser Trp His Leu Leu Thr Lys  
 1 5 10 15  
 Lys Ala Val Tyr Phe Pro Ile Thr Thr Lys Val Thr Gln Gln Arg Ser  
 20 25 30  
 Asp Phe Ser Cys Asp Cys Cys Ser Gly His Asp Ile Leu Ser Leu Asp  
 35 40 45  
 Tyr Asn Gly Leu Asn Met Arg Pro Ser Leu Leu Lys Gln Asn Asp Val  
 50 55 60  
 Thr Glu Val Val Ala Val Phe Leu Thr Cys Asn Arg  
 65 70 75

<210> 42525  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 42525  
 His Arg Thr Gly Cys Ile Val Gly Cys Phe Arg Lys Val Gln Gly Trp  
 1 5 10 15  
 Asp Met Pro Ala Ile Arg Lys Glu Tyr Leu Asn Phe Ser Leu Pro Lys  
 20 25 30  
 Ser Arg Pro Leu Asp Glu Arg Phe Ile Glu Leu Phe Asp Asp Thr Arg  
 35 40 45  
 Leu Gly Pro Leu Ala Val Ser Ser Gly Ala Ser Ser Trp Pro Ala Gly  
 50 55 60  
 Val Met Leu Asp Pro Leu Arg Glu Glu Val Val Glu Asp Glu Asn Thr  
 65 70 75 80  
 Pro Arg Gly Ser Arg His Ser Ser Ala Ser Val Phe His Lys Ser Asp  
 85 90 95  
 Ala Met

<210> 42526  
 <211> 114  
 <212> PRT  
 <213> A.fumigatus

<400> 42526  
 Ile Gly Ile Asn Leu Gly Asp Pro Val Phe Arg Gly Glu Tyr His Gly  
 1 5 10 15  
 Arg Gln Val His Asp Asn Asp Leu Asp Asp Val Ile Gln Arg Ala Arg  
 20 25 30  
 Asp Val Gly Cys Thr Lys Phe Met Val Thr Gly Ser Asp Leu Val Glu  
 35 40 45

## 19056

Ser Arg His Ala Ile Gln Leu Ala Gln Ser Tyr Arg Lys Leu Arg Thr  
 50 55 60  
 Gln His Pro Tyr Pro Leu Phe Leu Arg Ala Ile Lys Pro Asn Lys Leu  
 65 70 75 80  
 Gly Cys Gln Leu Val Ser Val Thr Gln Leu Leu Val Phe Ile His Val  
 85 90 95  
 Lys Gln Ser Ser Leu Met Asn Phe Leu Ala Ala Gln Thr Arg Cys Trp  
 100 105 110  
 Arg Ser

&lt;210&gt; 42527

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42527

Lys Leu Phe Pro Ala Thr Leu Ala Phe Pro Ser Ala Lys Glu Ala Gly  
 1 5 10 15  
 Thr Gln Asp Asp Cys Val Ser Gly Cys His Ile Arg Ser Leu Pro Leu  
 20 25 30  
 Ser Tyr Ala Cys Pro His Ser Thr Leu Val Glu Gly Asp Tyr Thr Gln  
 35 40 45  
 Asp His Gln Val Phe Leu Lys Glu Asn Gly Ile Glu His Arg Arg Ile  
 50 55 60  
 Leu Ile Leu Ala Asn Lys Asp Pro Thr Ile Arg Thr Pro Asp His Val  
 65 70 75 80  
 Val Asn Arg Val Leu Glu Ile Met Leu Asn Lys Thr Asn His Pro Leu  
 85 90 95  
 Leu Leu His Cys Asn Lys Gly Lys Val Ser Ala Asn Ala Asp Asn Thr  
 100 105 110  
 Asn Ser Thr Arg Leu Thr Arg Leu Asn Ser Ile Gly Leu Asp Ala Leu  
 115 120 125  
 Ser Ala Ala Phe Gly Arg Phe Arg Ala Gly Thr Cys Gln Leu Phe Ala  
 130 135 140  
 Arg Asn Thr Ser Ile Phe Arg Cys Arg Asn Gln Gly Leu Ser Thr Asn  
 145 150 155 160  
 Asp Ser Leu Asn Phe Ser Met Thr Pro Asp Ser Gly Pro Ser Leu Phe  
 165 170 175  
 Leu Leu Val Gln Ala Pro Gly Leu Leu Val  
 180 185

&lt;210&gt; 42528

&lt;211&gt; 511

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42528

Thr Leu Gly Leu Val Ser Pro Thr Ala Val Pro Phe Thr His Val Arg  
 1 5 10 15  
 Leu Gly Lys Ser Thr Phe Gln Ile Thr Thr Cys Val Gly Arg Ala Leu  
 20 25 30  
 His Thr Tyr Asp Leu Arg Arg Gly Leu Ser Leu Ile Phe Val Ser Arg  
 35 40 45  
 Pro Gln Thr Pro Glu Ala Ile Thr Ala Thr Phe Ala Trp Arg Glu Lys  
 50 55 60

## 19057

Val Phe Ala Ala Trp Gly Asn Leu Arg Pro Gly Thr Cys Gly Gly Ile  
 65 70 75 80  
 Trp Val Phe Lys Arg Gly Lys Lys Val Ala Ala Leu Glu Val Pro Ser  
 85 90 95  
 Gly Arg Ala Gly Pro Ile Ile Lys Val Leu Val Phe Gly Ala Trp Ile  
 100 105 110  
 Val Gly Cys Thr Gly Thr Ser Ile Glu Val Trp Lys Asn Thr Thr Tyr  
 115 120 125  
 Glu His Tyr Thr Thr Leu Ile Pro His Gly Ile Glu Ala Val Ser Gly  
 130 135 140  
 Asp His Ile Tyr Gly Gly Gln Met Cys Ser Met Pro Thr Tyr Ile Asn  
 145 150 155 160  
 Lys Val Phe Val Gly Arg Val Asp Gly Cys Val Asp Ile Trp Asn Val  
 165 170 175  
 Arg Thr Gly Gln Leu Leu His Thr Ile Pro Ala Ala Trp Pro Ser Val  
 180 185 190  
 Gly Ala Val Thr Ala Leu Gln Pro Thr Pro Val Leu Ser Leu Ile Ala  
 195 200 205  
 Ile Ala His Ala Asp Gly Ser Leu Phe Ile Arg Asn Val Asp Thr Glu  
 210 215 220  
 Gln Ile Ile Leu Ser Leu Arg Ser Gly Ser Ser His Ile Thr Ser Leu  
 225 230 235 240  
 Ala Phe Arg Thr Asp Ser Leu Gly Ala Gly Ala Asp Gly Gln Ser Pro  
 245 250 255  
 Gly Val Leu Ala Thr Ala Ser Ala Asp Ser Gly Asp Ile Thr Leu Trp  
 260 265 270  
 Asp Leu Asn Asn Ala Gly Arg Val Thr Gly Val Leu Arg Asn Ala His  
 275 280 285  
 Arg Thr Leu Gln Asn Glu Ile Ala Ser Gly Val Asn Cys Val Asp Phe  
 290 295 300  
 Leu Asp Gly Gln Pro Leu Leu Val Ser Thr Gly Lys Asp Asn Ser Leu  
 305 310 315 320  
 Arg Thr Trp Ile Phe Asp Glu Thr Pro Phe Ser Pro Ile Pro Arg Gln  
 325 330 335  
 Leu His Phe Arg Ser Gly His Ser Ala Pro Val Thr Val Leu Ser Phe  
 340 345 350  
 Leu Pro Ser Ala Thr Asp Gly Ser Glu Ala Asn Gly Lys Trp Leu Leu  
 355 360 365  
 Ser Ala Ser Lys Asp Cys Ser Leu Trp Gly Leu Ser Val Arg Lys Asp  
 370 375 380  
 Ser Gln Asn Thr Glu Ile Ser Gln Gly Ala Val Glu Lys Lys Ala Lys  
 385 390 395 400  
 Lys Met Ser Ala Gln Gly Pro Val Ser Leu Asp Ile Gln His Arg Thr  
 405 410 415  
 Gln Gly Val Arg Ala Ser Glu Ile Thr Cys Ile Ala Cys Ser Leu Asn  
 420 425 430  
 Arg Asp Gly Gly Met Gly Val Thr Thr Ser Gly Pro Ile Trp Ala Asn  
 435 440 445  
 Pro Arg Ala Ala Asp Ala Ala Ser Asn Lys Thr Gly Trp Glu Ser  
 450 455 460  
 Ile Ile Thr Gly His Arg Gly Asp Lys Phe Ala Arg Thr Trp Phe Trp  
 465 470 475 480  
 Gly Arg Lys Arg Ala Gly Arg Trp Thr Phe Glu Thr Ser Asp Gly Ser  
 485 490 495  
 Val Val Lys Val Asn Asp Cys Gln Gln Tyr Ala Thr Glu Tyr Arg  
 500 505 510

<210> 42529  
 <211> 115  
 <212> PRT  
 <213> A.fumigatus

<400> 42529  
 Met Ile Val Asn Asn Met Pro Leu Asn Ile Ala Asn Thr Leu Leu Gln  
 1 5 10 15  
 Ser Val Ala Ile Thr Gln Cys Gly Thr Phe Ala Leu Ile Gly Ser Ser  
 20 25 30  
 Met Gly Ser Ile Asp Val Phe Asn Leu Gln Ser Gly Gln His Arg Gln  
 35 40 45  
 Cys Phe Pro Ala Arg Gly Leu Lys Ser Arg Arg Thr Gly Glu Leu Gly  
 50 55 60  
 Leu Ala Asn Gly Ser Gln Glu Lys Asn Ile Gly His Thr Lys Ala Val  
 65 70 75 80  
 Thr Gly Leu Val Val Asp Ser Leu Asn Arg Thr Ala Ile Ser Cys Gly  
 85 90 95  
 Leu Asp Gly Lys Val Lys Val Arg Tyr Thr Thr Pro Gln His Asn His  
 100 105 110  
 Asn Thr Asp  
 115

<210> 42530  
 <211> 230  
 <212> PRT  
 <213> A.fumigatus

<400> 42530  
 Phe Trp Asp Phe His Ser Gly Leu Leu Leu Asp Glu Leu Asp Trp His  
 1 5 10 15  
 Pro Met Thr Ala Ile Thr Gly Leu Arg Tyr Asn Ser Ser Ser Asp Leu  
 20 25 30  
 Val Ala Phe Ser Cys Asp Asp Leu Ser Ile Arg Val Val Asp Ile Glu  
 35 40 45  
 Thr Arg Lys Leu Ile Arg Glu Phe Trp Gly Cys Val Gly Gln Ile Asn  
 50 55 60  
 Asp Phe Ile Phe Ser Asn Asp Ser Arg Trp Ile Val Ala Ala Ser Met  
 65 70 75 80  
 Asp Ser Arg Val Arg Val Trp Asp Leu Ser Thr Gly His Leu Ile Asp  
 85 90 95  
 Ile Phe Arg Val Pro Ser Thr Cys Thr Ser Leu Ser Met Ser Ala Thr  
 100 105 110  
 Gly Glu Phe Leu Ala Thr Ala His Ser Asp Asn Val Gly Ile Arg Leu  
 115 120 125  
 Trp Thr Asn Arg Ser Leu Phe Ile Pro Ile Ser Thr Gln Asn Leu Asp  
 130 135 140  
 Glu Ser Val Phe Ala Asp Ser His Ile Pro Ile Thr Ser Ala Glu Glu  
 145 150 155 160  
 Arg Ala Gly Ala Leu Glu Ala Ala Phe Ala Glu Glu Asp His Gln Asp  
 165 170 175  
 Glu Ala Glu Gly Pro Val Leu Cys Asp Glu Gln Leu Ser Thr Glu Met  
 180 185 190  
 Val Thr Leu Ser Ala Ile Pro Arg Ser Arg Trp Gln Thr Leu Leu His  
 195 200 205

## 19059

Leu Asp Leu Ile Arg Val Trp Ser His Ala Ser Ser Thr Ile Cys Phe  
 210 215 220  
 Ile Ile Ala Asp Cys Cys  
 225 230

<210> 42531  
 <211> 114  
 <212> PRT  
 <213> A.fumigatus

<400> 42531  
 Glu Arg Asn Lys Pro Lys Asp Pro Pro Lys Ala Pro Glu Lys Ala Pro  
 1 5 10 15  
 Phe Phe Leu Pro Ser Val Ser Glu Lys Ser Ser Ile Glu Ile Ser Asp  
 20 25 30  
 Arg Ser Thr Val Leu Ser Val Glu His Thr Leu Ala Glu Arg Ser Arg  
 35 40 45  
 Ile Ala Arg His Gln Arg Ser Gln Thr Val Asp Asp Ser Gly Ser Leu  
 50 55 60  
 Phe Thr Val Leu Leu His Ser Gly Arg Gln Ser Asn Asp Phe Ala Pro  
 65 70 75 80  
 Phe Ile Asp Tyr Leu Lys Ser Leu Ser Pro Ala Arg Thr Asp Leu Glu  
 85 90 95  
 Ile Arg Ser Leu Trp Ser Thr Thr Gly Leu Glu Glu Pro Gln Pro Gln  
 100 105 110  
 Thr Gln

<210> 42532  
 <211> 483  
 <212> PRT  
 <213> A.fumigatus

<400> 42532  
 Val Asn Val Ala Gln Ile Trp Ala Cys Ser Phe Leu Asp Gln Lys Glu  
 1 5 10 15  
 Leu Pro Asp Asp Phe Ile Gln Val Arg Lys Asp Leu Leu Asp Asp Ser  
 20 25 30  
 Asn Ala Ala Lys Asp Val Met Asp Lys Val Lys Lys Lys Leu Lys Leu  
 35 40 45  
 Leu Leu Arg Glu Gly Ser Ala Pro Ser Gln Phe Thr Trp Pro Lys Asp  
 50 55 60  
 Asn Ile Pro Glu Pro Ser Val Val Leu Ala Thr Val Val Glu Leu Met  
 65 70 75 80  
 Lys Phe His Arg Asn Val Met Arg His Asn Phe Glu Lys Leu Asn Asn  
 85 90 95  
 Ser Pro His Cys Ala Ser Ser Ile Ser Pro Leu Ser Asp Asn Pro Thr  
 100 105 110  
 Ser Gln Asp Val Ile Gln Gly Thr Val Ser Pro Thr Leu Thr Ser Ile  
 115 120 125  
 Gln Gly Arg Trp Cys Thr Gly Glu Asp Pro Met Leu Phe Lys Glu Arg  
 130 135 140  
 Trp Glu Lys Leu Phe Ala Glu Phe Cys Asp Thr Glu Lys Val Asp Pro  
 145 150 155 160  
 Ser Lys Leu Ser Glu Leu Tyr Asp Ser Met Lys Phe Asp Ala Leu His  
 165 170 175

## 19060

Asn Arg His Phe Leu Glu Trp Val Phe Met Pro Pro Asp Glu Gly Thr  
 180 185 190  
 Asn Glu His Glu Arg His Ser Ser Asn Ser Asn Asn Thr Asn Arg His  
 195 200 205  
 Asp Leu Ala Glu Asp Arg Leu Pro Gly His Asp Ser Leu Thr Ser Glu  
 210 215 220  
 Gly Ile Glu Glu Asn Val Glu Asn Pro Thr Leu Ser His Leu Leu Arg  
 225 230 235 240  
 Phe Lys Lys Arg Ala His Ala Phe Asp Ser Ile Pro His Leu Arg Ala  
 245 250 255  
 Leu Asp Asp Ser Tyr Asp His Tyr Phe Lys Leu Tyr Pro Gly Ser Ser  
 260 265 270  
 Pro Thr Lys Thr Lys Met Asp Gly Arg Leu Ser Lys Leu Arg Glu Leu  
 275 280 285  
 Tyr Lys Leu Ala Lys Val Leu Phe Asp Tyr Val Thr Pro Gln Glu Tyr  
 290 295 300  
 Gly Ile Thr Asp Ser Glu Lys Leu Glu Ile Gly Leu Leu Thr Ser Leu  
 305 310 315 320  
 Pro Leu Leu Gln Glu Ile Val Arg Asp Leu Glu Glu Val Gln Ala Ser  
 325 330 335  
 Pro Asp Ala Lys Ser Phe Phe Tyr Phe Thr Lys Glu Ser His Ile Tyr  
 340 345 350  
 Thr Leu Leu Asn Cys Ile Ile Glu Gly Gly Ile Gln Thr Lys Ile Ala  
 355 360 365  
 Arg Ser Ala Ile Pro Glu Leu Asp Tyr Leu Ser Gln Ile Cys Phe Glu  
 370 375 380  
 Leu Tyr Glu Ala Lys Asp Cys Glu Ser Ser Thr Ser Ser Tyr Ser Ile  
 385 390 395 400  
 Arg Ile Ser Ile Ser Pro Gly Cys His Ala Phe Asp Pro Leu Asp Val  
 405 410 415  
 Gln Leu Asp Ser Arg His Ala Ile Gly Cys Ala Pro Arg Arg Ser Leu  
 420 425 430  
 Thr Ala His Gln Asp Trp Lys Glu Val Ile Glu Thr Leu Lys Ala Lys  
 435 440 445  
 Phe Asp Thr Cys Val Ser Gln Pro Thr Phe Ile Pro Leu Arg Phe Ile  
 450 455 460  
 Gly Pro Thr Thr Asp Gln Asn Ser Leu Gly Leu Asn Phe Pro Arg Leu  
 465 470 475 480  
 Ser Leu Pro

&lt;210&gt; 42533

&lt;211&gt; 869

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42533

Ala Leu His Ile Ile Phe Ser Leu Glu Asn Leu Ala Gln Thr His Lys  
 1 5 10 15  
 His Lys Lys Glu Asn Lys Leu Tyr Arg Ala Ala Thr Glu Ile Trp Asp  
 20 25 30  
 Glu Ser Phe Gln Ala Gln Pro Gln Ser Leu Arg Phe Arg Phe Tyr Glu  
 35 40 45  
 Gln Pro Ser Lys Met Thr Gln Ser Asn Ser Ile Gln Asp Phe Pro Pro  
 50 55 60  
 Ser Ala Thr Gln Asp Asn Cys Ser Ser Asp Ile Gly Cys Ala Thr Gly

## 19061

65					70					75					80
Ser	Asp	Glu	Arg	Asn	Ala	Leu	Ile	Ala	Thr	Pro	Leu	Pro	Asn	Met	Val
				85					90					95	
Pro	Asp	Gln	Thr	Gly	Asp	Lys	Ser	Ser	Phe	Thr	Leu	Leu	Tyr	Asp	Pro
			100					105					110		
Val	Ser	Pro	Ser	Ser	Arg	Ala	Ser	Pro	Ser	Asn	Gly	Gln	Phe	His	Gln
		115					120				125				
Asn	Lys	Pro	Gln	Thr	Ser	Asp	Val	Met	Thr	Asp	His	Ala	Gly	Gly	Ala
	130					135				140					
Arg	Val	Ala	Leu	Ser	Ala	Arg	Ser	Ser	Ser	Arg	Thr	Pro	Arg	Arg	Leu
145					150					155					160
Ser	Gly	Ser	Thr	Ala	Thr	Ser	Ser	Val	Ser	Glu	Ala	Glu	Thr	Gly	Pro
			165						170					175	
Ser	Ser	Ile	Gly	Arg	Ile	Gly	Val	Cys	Ala	Leu	Asp	Val	Lys	Ala	Arg
		180					185						190		
Ser	Lys	Pro	Ser	Gln	Asn	Ile	Leu	Thr	Arg	Leu	Gln	Ala	Lys	Gly	Gly
	195					200					205				
Phe	Glu	Val	Ile	Val	Phe	Gly	Asp	Lys	Val	Ile	Leu	Asp	Glu	Ala	Val
	210					215					220				
Glu	Asn	Trp	Pro	Val	Cys	Asp	Phe	Leu	Ile	Ala	Phe	Phe	Ser	Asp	Gly
225					230					235					240
Phe	Pro	Leu	Glu	Lys	Ala	Ile	Ala	Tyr	Ala	Arg	Leu	Arg	Lys	Pro	Phe
			245					250						255	
Cys	Val	Asn	Asp	Leu	Pro	Met	Gln	Lys	Val	Leu	Trp	Asp	Arg	Arg	Leu
		260					265						270		
Cys	Leu	Arg	Ile	Leu	Asp	His	Met	Asn	Val	Pro	Thr	Pro	Lys	Arg	Leu
	275					280						285			
Glu	Val	Asn	Arg	Asp	Gly	Gly	Pro	Arg	Leu	Glu	Ser	Pro	Glu	Leu	Ala
	290				295						300				
Gln	His	Val	Tyr	Arg	Leu	Thr	Gly	Val	Lys	Leu	Glu	Gly	Pro	Glu	Asp
305					310					315					320
Gly	Thr	Gly	Gly	Gly	Ser	Gln	Lys	Thr	Gln	Val	Val	Thr	Met	Ser	Glu
			325					330						335	
Asp	Gly	Glu	Ala	Leu	Ile	Val	Asp	Gly	Lys	Ser	Ile	Arg	Lys	Pro	Phe
		340					345						350		
Val	Glu	Lys	Pro	Val	Asn	Gly	Glu	Asn	His	Asn	Ile	His	Ile	Tyr	Phe
	355					360						365			
Pro	Asn	Asp	His	Gln	Tyr	Gly	Gly	Gly	Gly	Arg	Arg	Leu	Phe	Arg	Lys
	370				375					380					
Val	Gly	Asn	Lys	Ser	Ser	Glu	Tyr	Asp	Pro	His	Leu	Val	Val	Pro	Arg
385				390						395					400
Ser	Val	Thr	Glu	Lys	Asp	Thr	Ser	Tyr	Ile	Tyr	Glu	Gln	Phe	Leu	Arg
			405					410						415	
Val	Asp	Asn	Ser	Glu	Asp	Val	Lys	Ala	Tyr	Thr	Val	Gly	Pro	Asp	Phe
		420				425						430			
Cys	His	Ala	Glu	Thr	Arg	Lys	Ser	Pro	Val	Val	Asp	Gly	Val	Val	Arg
	435					440					445				
Arg	Asn	Thr	His	Gly	Lys	Glu	Leu	Arg	Tyr	Ile	Thr	Lys	Leu	Ser	Gln
	450				455						460				
Asp	Glu	Ala	Ala	Ile	Ala	Ser	Lys	Ile	Ser	Asn	Gly	Phe	Gly	Gln	Arg
465				470						475					480
Ile	Cys	Gly	Phe	Asp	Met	Leu	Arg	Val	Gly	Asp	Arg	Ser	Tyr	Val	Ile
			485					490					495		
Asp	Val	Asn	Gly	Trp	Ser	Phe	Val	Lys	Asp	Asn	Asn	Asp	Tyr	Tyr	Asp
	500						505					510			
Lys	Cys	Ala	Ser	Ile	Leu	Ser	Asp	Met	Phe	Leu	Asn	Glu	Lys	Arg	Lys

## 19062

515                      520                      525  
 Arg Glu Gly Leu Gln Arg Ser Leu Glu Met Val Ser Pro Asp Thr Ser  
 530                      535                      540  
 His His Val Arg His Ser Val Ser His Arg His Thr Leu Lys Thr Leu  
 545                      550                      555                      560  
 Leu Lys Ser Pro Ser Thr Ser Lys Leu Tyr Gly Gly His Lys Ser Leu  
 565                      570                      575  
 Asp Asn Ser Phe Gln Asp Leu Ala Ala Leu Pro Pro Ala Ser Cys Gly  
 580                      585                      590  
 Ala Glu Ser Met Asp Tyr Lys Arg Ser Arg Thr Ser Pro Asp Ala Arg  
 595                      600                      605  
 Gln Ile Asp Ser Asp Ile Gly Asp Leu Asp Gln Lys Asn Arg Glu Leu  
 610                      615                      620  
 Thr Gly His Pro Asp Glu Thr Ile Pro Pro Pro Pro Pro Ala Ser  
 625                      630                      635                      640  
 Lys His Ser Trp Lys Leu Lys Gly Met Val Ala Val Ile Arg His Ala  
 645                      650                      655  
 Asp Arg Thr Pro Lys Gln Lys Phe Lys Phe Thr Phe His Ser Gln Pro  
 660                      665                      670  
 Phe Ile Asp Leu Leu Lys Gly His Gln Glu Glu Val Val Ile Lys Gly  
 675                      680                      685  
 Gln Ala Ala Leu Ala Ser Val Ser Asp Ala Val Thr Leu Ala Met Asp  
 690                      695                      700  
 Gln Lys Leu Glu His Met Glu Lys Leu Lys Leu Leu Arg Thr Ser Leu  
 705                      710                      715                      720  
 Glu Lys Lys Gly Gly Trp Pro Gly Thr Lys Val Gln Ile Lys Pro Met  
 725                      730                      735  
 Phe Arg Glu Arg Thr Gln Glu Glu Leu Ser Met His Ser Ser Glu Asn  
 740                      745                      750  
 Ser Asn Ser Asp Gly Ala Gln Ile Asn Trp Thr Gln Val Ala Asp Asp  
 755                      760                      765  
 Ala Ser Gly Asp Lys Glu Asn Phe Pro Arg Thr Ser Thr Arg Ser Asp  
 770                      775                      780  
 Ser Ile Ser Gly Thr Thr Phe Ser Arg Phe Ser Ala Ala Glu Asn Asp  
 785                      790                      795                      800  
 Leu Ile Leu Asp Lys Leu Gln Leu Val Ile Lys Trp Gly Gly Glu Pro  
 805                      810                      815  
 Thr His Ala Ala Arg Tyr Gln Ser Gln Asp Leu Gly Leu Asn Met Arg  
 820                      825                      830  
 Asp Asp Leu Lys Leu Met Asn Lys Glu Ala Leu Asn Asn Val Arg Ile  
 835                      840                      845  
 Phe Thr Ser Ser Glu Arg Arg Val Ser Thr Ser Gly Arg Ser Phe Pro  
 850                      855                      860  
 Lys His Val Ser Val  
 865

&lt;210&gt; 42534

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42534

Val Cys Ser Ile Ala Ile Lys Ile Phe Asp Val Thr Gln Thr Ile Ala  
 1                      5                      10                      15  
 Ser Lys Arg Gln Leu Val Ser Ile Glu Thr Lys Thr Asn Ile Ser Asn  
 20                      25                      30



## 19063

Ile Lys Ser Leu Phe Pro Val Ile Arg Gly Pro Gly Ile Cys Cys Asn  
           35                          40                          45  
 Pro Val Asp Gln Tyr Ser Ala Leu Thr Leu Arg Leu Met Ala Ser Ser  
           50                          55                          60  
 Pro Pro  
 65

<210> 42535  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

<400> 42535  
 Pro Leu Val Thr Pro Leu Thr Leu His Leu Gly Leu Ile Ser Val Ile  
 1                  5                          10                          15  
 Val Ala Tyr Arg Phe Ser Ile Gln Gly Gly Ser Ile Ile Cys Trp His  
           20                          25                          30  
 Ser Ser Phe Leu Val Gln Ile Glu Met Thr Gln Phe Thr Pro Ala Tyr  
           35                          40                          45  
 Asn Asp Phe Ser Leu Arg Asn Glu Ser Ser Val Pro Ser Arg Lys Lys  
           50                          55                          60  
 Cys Lys Arg Glu Gly Gly Lys Trp Thr Arg Ser Gly Cys Leu Thr Cys  
 65                          70                          75                          80  
 Lys Arg Arg Arg Lys Arg Cys Asp Glu Ala Lys Pro Gly  
                           85                          90

<210> 42536  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

<400> 42536  
 Ala His Arg Leu Leu Thr Gln Val Val Val Thr Gly Ala Arg Val Phe  
 1                  5                          10                          15  
 Gly Arg Ala Phe Ala Glu Ala Tyr Lys Gln Ala Ser Ala Ser Ser Lys  
           20                          25                          30  
 Tyr Ala Gln Ala Asn Lys Gly Lys Gly Gly Ser Ser Ser Thr Phe Ala  
           35                          40                          45  
 Ser Ser Gly Leu Thr Leu Glu Glu Ala Cys Lys Ile Leu Asn Val Lys  
           50                          55                          60  
 Pro Pro Ala Gly Gly Glu Thr Asn Leu Glu His Val Met Glu Arg Phe  
 65                          70                          75                          80  
 Lys Lys Leu Phe Asp Leu Asn Asp Pro Lys Lys Gly Gly Ser Phe Tyr  
                           85                          90                          95  
 Leu Gln Ser Lys Ile Leu Arg Ala Arg Glu Arg Ile Glu Met Glu Ile  
           100                          105                          110  
 Arg Gln Ala Glu Arg Lys Ala Ala Gln Glu Lys Glu Leu Arg Glu Gly  
           115                          120                          125  
 Trp Asn Pro Lys Val Tyr Lys Asp Arg  
           130                          135

<210> 42537  
 <211> 101  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 42537

```

Asp Ser Ser His Thr Leu Ala Asp Ala Asp Asp Ala Arg Ala Tyr Phe
1          5          10          15
Ser Glu Lys Tyr Lys His Asp Ser Glu Leu Pro Ser Gln Gly Tyr Asp
          20          25          30
Thr Cys Val Asn Met Gly Asp Lys Tyr Ile Val Asn Asp His Pro His
          35          40          45
Phe Ala Gly Cys Leu Ser Glu Asn Ile Leu Val Lys Thr Ser Lys Tyr
          50          55          60
Pro Gln Ile Leu Phe Glu Met Trp Met Met Ser Leu Met Ile Tyr Ala
65          70          75          80
Ser Glu Cys Tyr Tyr Ile Leu Gly Lys Val Thr Leu Phe Ser Asp Glu
          85          90          95
Lys Pro Lys Asn Gly
          100

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&lt;210&gt; 42538

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42538

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Gln Ile Phe Leu Ser Phe Leu Ser Pro Arg Leu Ile Thr Gly Leu Leu
1          5          10          15
Ile Val Ser Ser Val Lys Ile Val Ala His Tyr Ser Ser Tyr Leu Gln
          20          25          30
Glu Leu Arg Gly Gly Leu Gln Val Ala Ile Thr Ile Met Gly Arg Pro
          35          40          45
Ser Val Pro Leu Ser Ala Asp Leu Pro Pro Leu Ile Met Gly Thr Ala
          50          55          60
Thr Phe Asn Ser Gln Tyr Asn Gln Asp Pro Tyr Ala Leu Pro Thr Thr
65          70          75          80
Glu Leu Val His Arg Ala Leu Glu Asn Gly Val Arg Ala Phe Asp Thr
          85          90          95
Ser Pro Tyr Tyr Gly Pro Ala Glu Glu Leu Leu Gly Arg Ala Leu Ala
          100          105          110
Thr Asp Tyr Val Arg Ser Asn Phe Pro Arg His Thr Tyr Arg Leu Leu
          115          120          125
Thr Lys Val Gly Arg Val Ala Ala Ser Ser Phe Asp Tyr Ser Ser Arg
          130          135          140
Trp Val Arg Tyr Ser Val Lys Arg Ser Leu Arg Arg Leu His Thr Asp
145          150          155          160
Tyr Leu Asp Val Val Tyr Cys His Asp Val Glu Phe Val Ser Pro Glu
          165          170          175
Gln Val Ile Glu Ala Ile Arg Glu Leu Arg Arg Ile Arg Asp Thr Glu
          180          185          190
Gly Thr Ile His Tyr Val Gly Ile Ser Gly Tyr Pro Val Asp Val Leu
          195          200          205
Cys Asn Leu Ala Glu Leu Val Leu Arg Glu Thr Gly Glu Pro Leu Asp
210          215          220
Ala Val Gln Ser Tyr Ala Asn Phe Thr Leu Gln Asn Thr Arg Leu Leu
225          230          235          240
Thr Gln Gly Leu Pro Arg Leu Val Ala Ala Gly Val Asp Val Ile Pro
          245          250          255
Asn Ala Ser Pro Leu Gly Met Gly Leu Leu Arg Arg Lys Gly Val Pro
          260          265          270

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## 19065

Ile Gly Ser Met Gly Asp Phe His Pro Ala Pro Asp Gly Leu Arg Lys  
 275 280 285  
 Ala Ile Arg Leu His His Gly Ala Gly Arg Ser Arg Ala  
 290 295 300

<210> 42539  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 42539  
 Asp Cys Gln Arg Leu Gly Asp Leu Gly Arg Trp Lys Thr Ser Ala Ser  
 1 5 10 15  
 Ser Ile Asp Gly Trp Cys Leu Gly Trp Asp Arg Ser Met Asp Arg Leu  
 20 25 30  
 Ile Asp Pro Arg Ala Val Val Arg Glu Arg Arg Glu Lys Leu Lys Pro  
 35 40 45  
 Asn Ser Arg Tyr Thr Leu Tyr Ala Ser Pro Thr Ile Lys Glu Asp Lys  
 50 55 60  
 Arg Tyr Thr Leu Asn Tyr Ser Cys Ser Val Ile Val Arg Ala Gly Ser  
 65 70 75 80  
 Ile

<210> 42540  
 <211> 440  
 <212> PRT  
 <213> A.fumigatus

<400> 42540  
 Ser Ile Ala Pro Leu Leu Ser Pro Ala Arg Lys Lys Gln His Gly Ser  
 1 5 10 15  
 Gly Leu Val Glu Glu Tyr Thr Gly Asp Ala Asp Ala Val Val Glu Asp  
 20 25 30  
 Ile Pro Trp Ile Asp Ser Met Ala Pro Ser Tyr Ala Gln Asp Asp Gly  
 35 40 45  
 Leu Gln Pro Asp Ser Gln Pro Pro Thr Val Ala Ala Phe Ser Pro Thr  
 50 55 60  
 Thr Ile Ser Gly Ser Ser Leu Thr Ser Arg Gln Arg Ser Ser Ile Ile  
 65 70 75 80  
 Val His Arg Lys Ser Pro Leu Leu Val Ala Thr Pro Pro Ala Ile Thr  
 85 90 95  
 Arg Ala Leu Ala Tyr Ser His Pro Phe Ile Leu Pro Leu Asn Lys Leu  
 100 105 110  
 Ala Gly Leu Leu Thr Trp Thr Thr Asp Asp Pro Trp Gln Ser Phe Leu  
 115 120 125  
 Leu Val Ala Gly Phe Trp Thr Val Val Leu Tyr Ser Asp Ala Ile Ile  
 130 135 140  
 Leu Trp Gly Gly Pro Ile Leu Val Val Val Gly Leu Ile Leu Gly Met  
 145 150 155 160  
 Tyr Trp Arg Arg Phe Ser Pro Leu Ser Thr Ala Ala Phe Thr Gly Glu  
 165 170 175  
 Lys Arg Gln His Gln Lys Ser Val Ser Glu Gly Ser Ser His Gln His  
 180 185 190  
 Glu Thr Leu Asp Glu Ile Val Glu Thr Leu Arg Thr Phe Thr Thr Arg  
 195 200 205

Cys Asn Ile Leu Leu Glu Pro Leu Leu Glu Leu Thr Asp Phe Leu Ser  
 210 215 220  
 Thr Gln Arg Thr Ala Thr Ser Ala Thr Thr Arg Pro Ala Leu Thr Thr  
 225 230 235 240  
 Met Phe Ile Arg Ile Leu Phe Val Thr Pro Ile Trp Ile Ala Leu Thr  
 245 250 255  
 Leu Pro Pro Phe Tyr Ile Ile Thr Thr Arg Arg Val Val Met Thr Ile  
 260 265 270  
 Gly Thr Ile Ile Leu Thr Tyr His Ser Arg Pro Ala Arg Val Ser Arg  
 275 280 285  
 Val Ile Leu Trp Arg Ser Leu Thr Val Arg Arg Ile Cys Ser Met Ile  
 290 295 300  
 Thr Gly Leu Ser Phe Ser Leu Asn Ala Asn Gln Ser Gln Ser Leu Trp  
 305 310 315 320  
 Ala Gln Ser His Gly His Ala Ala Ser Ile Ala Thr Arg Arg Arg Gly  
 325 330 335  
 Asp Ser Ser Gly Val Arg Phe Thr Phe Val Leu Tyr Glu Asn Gln Arg  
 340 345 350  
 Arg Trp Leu Gly Ile Gly Trp Thr Tyr Ser Leu Phe Pro Ser Glu Arg  
 355 360 365  
 Ala Ala Trp Thr Asp Glu His Leu Asn Pro Ala Pro Ser Lys Asp Asp  
 370 375 380  
 Phe Glu Leu Pro His Val Gln Ala Gly Asn Ala Lys Trp Arg Trp Val  
 385 390 395 400  
 Glu Gly Ser Glu Trp Arg Ile Glu Gly Ala Asp Asp Thr Asn Ser Lys  
 405 410 415  
 Ala Asp Gly Lys Ala Ala Asp Gly Gly Gly Trp Ile Tyr Tyr Asp Asn  
 420 425 430  
 Lys Val Arg Pro His Leu Arg Pro  
 435 440

&lt;210&gt; 42541

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42541

Gly Pro Ile Asp Val Asp Glu Val Thr Glu Ile Glu Ala Leu Cys Met  
 1 5 10 15  
 Arg His Pro Ala Val Leu Ala Glu Ile Glu Lys Leu Lys Leu Pro Pro  
 20 25 30  
 Gly Met Ala Val Cys Asn Asp Pro Trp Met Tyr Gly Ser Asp Ser Pro  
 35 40 45  
 Asn Glu Thr Arg Arg Leu Phe Gln Cys Phe Met Tyr Met Val Glu Val  
 50 55 60  
 Asp His Pro Glu Asn Asn His Tyr Ser Leu Pro Cys Lys Phe Ser Pro  
 65 70 75 80  
 Val Phe Asp Ala Ser Thr Arg Glu Leu Val Arg Met Asp Tyr Leu Pro  
 85 90 95  
 Gly Gly Thr Asp Thr Lys Val Thr Glu Thr Gln Pro Trp Arg Pro Val  
 100 105 110  
 Lys Thr Ile Gln Tyr Ala His Asp Leu Leu Asp Glu Pro Leu Arg Asn  
 115 120 125  
 Asp Leu Lys Pro Tyr Ile Val Gln Gln Pro Glu Gly Ala Ser Phe Ser  
 130 135 140  
 Ile Asp Gly Asn Ser Val Tyr Trp Gln Lys Trp Arg Phe Arg Val Gly

## 19067

145                      150                      155                      160  
 Phe Asn Asn Arg Glu Gly Leu Val Leu Tyr Asn Ile Thr Tyr Asp Asn  
                                  165                      170                      175  
 Arg Asn Val Phe Tyr Arg Leu Ser Val Ser Glu Met Thr Val Pro Tyr  
                                  180                      185                      190  
 Gly Gly Glu Leu Ala Met Arg Arg Arg Val Arg Ala Leu Tyr  
                                  195                      200                      205

<210> 42542  
 <211> 210  
 <212> PRT  
 <213> A.fumigatus

<400> 42542  
 Trp Asn Asp Gly Arg Arg Gly Gln Asp Gly Trp Asp Arg Tyr Thr Arg  
 1                      5                      10                      15  
 Arg Arg Lys Trp Cys Arg Asp Ala Glu Leu Val Glu Ile Pro Gln Ala  
                                  20                      25                      30  
 Thr Glu Asn Thr Pro Ala Thr Ala Lys Ser Gly Leu Thr Gln Ala Leu  
                                  35                      40                      45  
 Asp Lys Gln Arg Glu Ser Gly Asn Ile Asp Ala Ser Thr Val Asp Thr  
                                  50                      55                      60  
 Asp Ala Val Ser Leu Ser Pro Ser Ala Ser Ser Lys Thr Arg Lys Arg  
 65                      70                      75                      80  
 Arg Trp Phe Gly Gly Ser Lys Pro Val Ser Asp Lys Ala Ser Ser Thr  
                                  85                      90                      95  
 Ser Phe Ala Leu Pro Ala Phe Thr Asn Thr Ser Ser Val Asp Ala Gly  
                                  100                      105                      110  
 Lys Ile Thr Ser Thr Pro Ser Tyr Ser Pro Ser Gly Thr His Val Ala  
                                  115                      120                      125  
 Arg Pro Ile Asp Ile Ala His Ser Arg Lys Pro Ser Asn Tyr Ser Gly  
                                  130                      135                      140  
 Asn Ala Ser His Gly Ser Val Gly Arg Asp Ser Ser Val Ala Gly Ser  
 145                      150                      155                      160  
 Val Ser His Ser Asp Ser Ala Ser Ile Arg Asp Lys Glu Ile Ile His  
                                  165                      170                      175  
 Ala Gln Asp His Leu Asp Arg Trp Gly Thr Arg Ala Thr Gly Gly Ile  
                                  180                      185                      190  
 Glu Arg Ala Glu Arg Glu Leu Gly Leu Gly Asp Glu Val Asn Met Gly  
                                  195                      200                      205  
 Leu Ser  
 210

<210> 42543  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 42543  
 Val Asn Asp Cys Met Ile Asn Ser Arg Ser Ile Val Ser Ser His Ser  
 1                      5                      10                      15  
 His Pro Val Met Lys Ser Gly Lys Val Ser Ala Glu Tyr Ser Gln Trp  
                                  20                      25                      30  
 Ser Ser Ser Gly Asp Glu Arg Ile Ile Leu Arg Gln Arg Ser Thr Ala  
                                  35                      40                      45  
 Pro Arg Phe Asp Asn Asp Met Lys Glu Val Gln Asn Glu Asp Ala Leu

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	38.5	12.5	25	65	-0.1	3.2	0.95
Gender	0.5	0.5	0	1	0.0	0.0	0.99
Marital Status	0.7	0.5	0	1	0.0	0.0	0.99
Education	12.5	2.5	9	16	-0.2	3.5	0.96
Income	1500	500	500	3000	0.5	4.0	0.92
Health	0.8	0.4	0	1	0.0	0.0	0.99
Stress	4.5	1.5	1	7	0.2	3.8	0.94
Depression	2.5	1.0	1	5	0.1	3.0	0.97
Life Satisfaction	5.5	1.0	1	7	-0.1	3.2	0.95
Work Satisfaction	4.0	1.0	1	7	0.0	3.0	0.98
Family Satisfaction	5.0	1.0	1	7	-0.1	3.2	0.95
Community Satisfaction	4.5	1.0	1	7	0.0	3.0	0.98
Overall Satisfaction	4.8	1.0	1	7	-0.1	3.2	0.95

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<210> 42544
<211> 137
<212> PRT
<213> A.fumigatus
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Tyr	Thr	Asn	Pro	Ser	Leu	Cys	Ser	Met	Leu	Ala	Ser	Gln	Ser	Ser	Pro
1				5					10					15	
Ser	Thr	Thr	Ser	Val	Ser	Leu	His	Pro	Phe	Asp	Pro	Ile	Thr	Pro	Glu
			20					25					30		
Glu	Ile	Lys	Leu	Ala	Val	Arg	Ile	Leu	Glu	Ala	Ala	Phe	Pro	Gly	Val
		35					40					45			
Thr	Leu	Arg	Tyr	Lys	Arg	Ile	Asp	Leu	Gln	Glu	Pro	Ile	Lys	Lys	Asp
	50					55					60				
Val	Ile	Ala	Tyr	Ile	Glu	Ala	Glu	Arg	Leu	Arg	Lys	Pro	Leu	Pro	Gln
65					70					75					80
Lys	Pro	Pro	Arg	Leu	Leu	Phe	Ser	Tyr	Phe	His	Arg	Leu	Asp	Ser	Gly
				85					90					95	
Val	Phe	His	Lys	Ala	Leu	Leu	Asn	Ala	Asp	Ser	Lys	Ser	Val	Ile	His
			100					105					110		
Ile	Lys	Glu	Leu	Pro	Ala	His	Val	Gln	Val	Ser	Arg	Ser	Phe	Leu	Phe
		115					120					125			
Pro	Phe	Pro	Ser	Ala	Cys	Pro	Asp	Ser							
	130					135									

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<210> 42545
<211> 417
<212> PRT
<213> A.fumigatus
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Ala	Gly	His	Glu	Thr	Lys	Ser	Lys	Ser	Thr	Val	Leu	Ile	Asn	Trp	Ile
1				5					10					15	
Ala	Thr	Asp	Pro	Arg	Ala	Pro	Tyr	His	Arg	Lys	Gln	Ala	Phe	Asp	Val
			20					25					30		
Gly	Asp	Val	Gly	Phe	Gly	Leu	Asn	Ala	Asn	Gln	Leu	Thr	Leu	Gly	Cys
		35				40					45				
Asp	Cys	Leu	Gly	His	Ile	Lys	Tyr	Phe	Asp	Gly	Tyr	Arg	Thr	Asp	Ser
	50					55					60				
Lys	Gly	Asn	Pro	Val	His	Leu	Lys	Asn	Ile	Ile	Cys	Met	His	Glu	Gln
65					70					75					80
Asp	Asn	Gly	Leu	Gln	His	Lys	His	Thr	Asn	Tyr	Arg	Ser	Gly	Ala	Ala
				85					90					95	
Thr	Val	Val	Arg	Asn	Arg	Gln	Leu	Val	Leu	Gln	Met	Ile	Cys	Thr	Val
			100					105					110		
Ala	Asn	Tyr	Glu	Tyr	Ile	Phe	Ala	Tyr	Ile	Phe	Asp	Gln	Ala	Ala	Asn
		115					120					125			
Val	Glu	Leu	Glu	Val	Arg	Ala	Thr	Gly	Ile	Leu	Ser	Thr	Val	Pro	Phe
	130					135					140				
Asp	Asn	Glu	Asn	Gly	Glu	Thr	Val	Ala	Trp	Gly	Thr	Asn	Val	Gly	Pro
145					150					155					160
Gly	Val	Met	Ala	Pro	Phe	His	Gln	His	Met	Phe	Ser	Leu	Arg	Ile	Asp

## 19069

```

                165                170                175
Pro Ala Ile Asp Gly Phe Lys Asn Thr Val Tyr Tyr Glu Asp Ser Val
                180                185                190
Pro Leu Pro Glu Asp Glu Lys Asn Pro Tyr Leu Val Gly Tyr Thr Thr
                195                200                205
Glu Gln Thr Val Ile Arg Lys Ser Gly Ser Ala Asn Thr Asp Ile Asn
                210                215                220
Arg His Arg Val Phe Lys Ile Arg Asn Asp Asn Ile Ile Asn Pro Val
225                230                235                240
Thr Tyr Lys Pro Val Ala Tyr Lys Leu Gln Thr Ala Pro Ser Gln Met
                245                250                255
Leu Leu Leu Ser Gln Asn Ala Met Gly Tyr Arg Arg Ala Glu Phe Ala
                260                265                270
Ser Lys Pro Ile Trp Val Thr Lys Tyr Asn Asp Asp Glu Leu Tyr Ala
                275                280                285
Ala Gly Glu Phe Thr Asn Gln Ser Arg Arg Ala Glu Gly Val Glu Thr
                290                295                300
Trp Val Gln Arg Asn Asp Ser Thr Glu Asn Glu Asp Val Val Leu Trp
305                310                315                320
His Ser Lys Leu Pro Arg Ala Leu Trp Val Ser Gln Ser Gly Leu Thr
                325                330                335
Arg Ser Ala Ala Phe Gly Leu Thr His Asn Pro Arg Val Glu Asp Phe
                340                345                350
Pro Val Met Pro Met Glu Arg Ile Ser Val Met Leu Lys Pro Asp Gly
                355                360                365
Phe Phe Thr Lys Asn Pro Ala Leu Asp Val Pro Pro Ser Thr Gln Ser
                370                375                380
Phe Asn Lys Ser Thr Leu His Ala Glu Pro Ala Pro Val Ala Arg Cys
385                390                395                400
Cys Ser Asn Gly Gly Ala Ser Thr Lys Ala Lys Leu Tyr Lys Arg Ile
                405                410                415
Glu

```

<210> 42546  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42546
Tyr Phe Pro Phe Asp Phe Asn Ser Ile Lys Lys Pro Lys Thr His Arg
1                5                10                15
Tyr Pro Ser Leu Lys Gly Val Asp Pro Lys Phe Arg Arg Asn His Arg
                20                25                30
His Ala Leu His Gly Thr Met Lys Ala Leu Val Arg Trp Pro Cys Cys
                35                40                45
Cys Leu Gly Arg Lys Gln Pro Asp Val Gly Gly His Gly
50                55                60

```

<210> 42547  
 <211> 306  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42547
Pro Thr Val Ser Ile Met Leu Tyr Ala Glu Gly Asp Lys Leu Ile Tyr

```

# 19070

```

1           5           10           15
Arg Phe Asp Asp His Ile Leu Trp Ile Gln Pro Trp Ser Glu Asn Ala
      20           25           30
Phe Arg Ile Arg Ala Thr Lys Leu Ala Ser Met Pro Ser Glu Asp Trp
      35           40           45
Ala Leu Ser Ala Lys Pro Ser Thr Gln Gln Pro Ile Ile Glu Thr Pro
      50           55           60
Ala Gly Lys Glu Ala Arg Ile Ser Asn Gly Lys Ile Lys Ala Val Val
65           70           75           80
Ser Gln Arg Gly Lys Ile Thr Ile Tyr Asn Ser Asn Gly Lys Lys Leu
      85           90           95
Leu Glu Glu Tyr Ala Arg His Arg Arg Asp Pro Met Asp Pro Lys Cys
      100          105          110
Ser Ala Leu Glu Ile Glu Ala Arg Glu Leu Arg Pro Ile Leu Gly Gly
      115          120          125
Asp Tyr His Leu Thr Leu Arg Leu Glu Ser Leu Asp Pro Lys Glu Lys
      130          135          140
Ile Tyr Gly Met Gly Gln Tyr Gln Gln Pro Tyr Leu Asn Leu Lys Gly
145          150          155          160
Ala Asp Leu Glu Leu Gly His Arg Asn Ser Gln Ala Ser Val Pro Phe
      165          170          175
Ala Leu Ser Ser Leu Gly Tyr Gly Leu Leu Trp Asn Asn Pro Gly Ile
      180          185          190
Gly Arg Ala Val Leu Gly Thr Asn Ile Met Ser Phe Glu Ala Tyr Ser
      195          200          205
Thr Lys Val Leu Asp Tyr Trp Ile Val Ala Gly Asp Thr Pro Ala Glu
      210          215          220
Ile Glu Glu Gly Tyr Cys Lys Val Thr Gly Tyr Val Pro Met Met Pro
225          230          235          240
Glu Tyr Gly Leu Gly Phe Trp Gln Cys Lys Leu Arg Tyr Trp Asn Gln
      245          250          255
Glu Gln Leu Leu Asn Val Ala Arg Glu Tyr Lys Arg Arg Asn Val Pro
      260          265          270
Leu Asp Val Ile Val Val Asp Phe His Trp Lys His Gln Gly Glu
      275          280          285
Trp Ser Phe Asp Pro Glu Phe Trp Pro Asp Pro Gly Gly Ser Ile Ser
      290          295          300
Ala Thr
305

```

<210> 42548

<211> 80

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (34), (35), (43), (51)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42548

```

Arg Gly Leu Pro Ser Tyr Leu Cys Asn Val Met Ala Thr Ser His Ile
1           5           10           15
Phe Asp Pro Asn Asn Pro Arg Gly Phe Gly Asn Ile Ser Trp Lys Lys
      20           25           30
Ala Xaa Xaa Thr Thr Asn Asn Lys Gly Ser Xaa Ile Ser Gly Leu Asp

```



Parameter	Estimate	Standard Error	t-Statistic	p-Value	95% Confidence Interval
Intercept	1.234	0.012	102.8	0.000	1.210 - 1.258
Age	0.005	0.001	5.2	0.000	0.003 - 0.007
Gender	0.123	0.021	5.8	0.000	0.081 - 0.165
Education	-0.012	0.003	-4.1	0.000	-0.018 - -0.006
Income	0.008	0.002	4.3	0.000	0.004 - 0.012
Health	0.015	0.004	3.8	0.000	0.007 - 0.023
Marital Status	0.034	0.018	1.9	0.058	-0.001 - 0.069
Religion	0.001	0.001	0.8	0.421	-0.001 - 0.002
Occupation	0.002	0.001	2.1	0.034	0.000 - 0.004
Region	0.001	0.001	0.5	0.612	-0.001 - 0.001
Constant	1.234	0.012	102.8	0.000	1.210 - 1.258
Adjusted R-squared	0.123				
F-Statistic	102.8				
Prob > F	0.000				
Prob > Chi-Square	0.000				
Prob > Z	0.000				
Prob > Likelihood Ratio	0.000				
Prob > Wald	0.000				
Prob > Score	0.000				
Prob > Information Criterion	0.000				
Prob > Akaike Information Criterion	0.000				
Prob > Schwarz Information Criterion	0.000				
Prob > Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn Information Criterion	0.000				
Prob > Consistent Akaike Information Criterion	0.000				
Prob > Consistent Schwarz Information Criterion	0.000				
Prob > Consistent Hannan-Quinn					

```
<210> 42549
<211> 117
<212> PRT
<213> A.fumigatus
```

```

<400> 42349
Leu Ser Leu Pro Ser Val Phe Ile Arg Pro Tyr Val Ser Ala Asp Phe
1          5          10          15
Leu Phe Phe Ser Phe Leu Pro Thr Tyr Leu Val Ser Ser Val Met Glu
20          25          30
Val Ala Ser Met Thr Gln Pro Asp Pro Thr Asn Gly Ala His Leu Thr
35          40          45
Ser Ile Ala Met Asp Ala Ser Met Asp Ile Asp Met Asp Ile Asp Leu
50          55          60
Gly Pro Leu Pro Glu Pro Glu Ser Ile Glu Ile Val Ser Asp Asn Gly
65          70          75          80
Pro Ile Leu Ser Ala Cys Leu Ser Leu Ile Thr Asn Val Ser Gln Pro
85          90          95
Ser Leu Gly Thr Arg Asp Asp Asn Ser Tyr Tyr Ser Arg Arg Leu Gly
100         105         110
Arg Ser His Asn Gly
115

```

```
<210> 42550
<211> 66
<212> PRT
<213> A.fumigatus
```

```

<400> 42550
Ala Leu Arg Cys Asp Ile Val Gly Pro Arg Arg Cys Arg Ile Ala Ser
1          5          10          15
Tyr Ser Ile Ala Leu Thr Ser Met Arg Ser Ser Val Ser Gly Gly Phe
          20          25          30
Ala Val Val Gln Pro Asp Ser Ala Leu Ser Ile Asn Ala Val Glu Ala
          35          40          45
Tyr Pro Leu Glu Asp Phe Ser Ala Asp Val Ser Cys Gly Asn Glu Glu
          50          55          60
Met Ser
65

```

```
<210> 42551
<211> 431
<212> PRT
<213> A.fumigatus
```

Glu Pro Ala Thr Thr Val Thr Thr Gln Asp Gly Leu Val Asp Pro  
 1 5 10 15  
 Thr Thr Ala Glu Ala Gln Tyr Glu Lys Val His Ile Arg Gly Val Asp  
 20 25 30

## 19072

```

Asp Leu Thr Thr Asp Asn Ile Lys Gln Phe Ala Thr Asp Tyr Phe Ser
   35                               40               45
Gly Glu Thr Pro Ser Arg Ile Glu Trp Ile Asp Asp Thr Ser Ala Asn
   50                               55               60
Ile Ile Tyr Ser Ser Pro Glu Val Gly Leu Gln Ala Leu Ala Ala Phe
  65                               70               75               80
Thr Gln Ala Ser Glu Glu Glu Asp Thr Ser Ser Phe Pro Pro Leu Arg
                               85               90               95
Leu Arg Ser Ala Lys Ala Leu Ser Thr His Pro Glu Ser Val Leu Gln
                               100              105              110
Val Arg Ser Ala Val Lys Thr Asp Arg Lys Lys Pro Arg Ala Tyr Glu
                               115              120              125
Ala Ser Arg Phe Tyr Leu Met His Pro Glu His Asp Pro Arg Glu Lys
  130              135              140
Leu Arg Arg Glu Leu Ala Glu Arg Arg Arg Gln Gly Gly Gln Gly Ser
  145              150              155              160
Ser Asp Gly Asp Tyr Gln Arg Arg Arg Phe Asp Gly Arg Glu Leu Arg
                               165              170              175
Arg Arg Arg Asp Arg Asp Ala Asp Asp Asn Phe Ser Ala Asn Met Tyr
                               180              185              190
Asp Asp Glu Gly Pro Arg Ala Ser Thr Asp Tyr Ser Asp Ser Glu Arg
                               195              200              205
Gly Arg Asn Gly Arg Thr Arg Arg Gly Gln Arg Glu Leu Phe Pro Asp
  210              215              220
Glu Gly Arg Leu Ser Gly Arg Leu Arg Asn Arg Ser Ala Ser Pro Gly
  225              230              235              240
Arg Asp Thr Leu Ala Glu Ser Gly Arg Leu Glu Gln Glu Glu Arg Gly
                               245              250              255
Thr Arg Ser Arg Phe Arg Glu Arg Ser Pro Gln Leu Ile Arg Arg Asn
                               260              265              270
Glu Gly Lys Glu Leu Phe Pro Ser Arg Thr Ser Asp Ser Asp Ser Asn
  275              280              285
Ala Arg Glu Leu Phe Pro Asn Lys Pro Ala Ser Ser Tyr Leu Lys Lys
  290              295              300
Glu Leu Phe Pro Ser Lys His Ser Asn His Arg Arg Ser Asp Ala Ile
  305              310              315              320
Asp Ala Ala Asp Glu Thr Ala Asp Leu Phe Ser Arg Arg Ile Ser Val
                               325              330              335
Pro Arg Ala Asp Gly Ala Arg Asp Gln Asn Ser Ser Arg Asn Lys Asn
                               340              345              350
Ile Glu Leu Phe Pro Asp Ser Glu Asp Gln Thr Gly Val Ser Ile Arg
  355              360              365
Gly Ala Ala Gly Gln Asp Gln Gly Ile Ser Ile Arg Gly Ala Ala Asn
  370              375              380
Gly Met Ser Ile Lys Gly Arg Gly Ser Ser Val Arg Glu Leu Phe Pro
  385              390              395              400
Ser Lys Tyr Asn Ser Asn Ala Gly Lys Glu Leu Phe Ser Asp Lys Ile
                               405              410              415
Glu Gly Arg Gly Gly Pro Arg Arg Arg Ala Glu Asp Met Phe Gly
  420              425              430

```

&lt;210&gt; 42552

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42552

His Asp Pro Ala Pro Ser Thr Pro Asn Val Ile Gln Thr Pro Ser Ser  
 1 5 10 15  
 Ala Asn Leu Leu Ala Cys Ser Val Glu Pro Trp Gln Asn Pro Ser Gln  
 20 25 30  
 Glu Glu Asn Gln Glu Gly Ala Ser His Tyr Ile Val Ala Thr Asp Ala  
 35 40 45  
 Asp Arg Gln Val His Leu Phe Lys Ala Asp Lys Gly Asn Asp Val Val  
 50 55 60  
 Thr Ser Phe Ala Gly His Ser Asp Ser Pro Val Leu Ser Tyr Ala Thr  
 65 70 75 80  
 Ile Gln Asn Gly Lys Tyr Val Leu Met Thr Asn Met Ser Gly Gln Leu  
 85 90 95  
 Leu Leu Gln Arg Gly Ala Glu Ile Leu Ser Arg Arg Lys Asp His Ala  
 100 105 110  
 Lys Tyr Ala Val Lys Val Ile Ala Tyr Glu Asp Glu Gln Pro Gly Glu  
 115 120 125  
 Thr Ala Ser Asn Ala Val Trp Val Ala Thr Ala Gly Trp Asp Ser Lys  
 130 135 140  
 Ile Leu Leu Tyr Arg Leu Arg Ile Pro Ser Arg Ala Gly Asp Pro Ala  
 145 150 155 160  
 Pro Val Glu Leu Lys Glu Pro Ile Thr Ser Ile Asn Leu Leu Thr Asn  
 165 170 175  
 Pro Glu Ser Ile Leu Phe Val Arg His Pro Asp Thr Lys Glu Leu Val  
 180 185 190  
 Leu Leu Ala Ser Arg Arg Asp Ser Thr Tyr Leu Phe Tyr Tyr Ala Val  
 195 200 205  
 Pro Pro Ser Thr Pro Thr Glu Ala Pro Thr Glu Cys Lys Leu Leu Gly  
 210 215 220  
 Lys Gln Asn Leu Ala Pro His Ser Asn Ala Trp Val Ala Phe Ser Pro  
 225 230 235 240  
 Ser Cys Leu Ala Leu Ser Pro His Asp Pro Gly Leu Ile Ala Val Ala  
 245 250 255  
 Ala Ser Thr Leu Pro His Met Lys Val Ile Ile Val Arg Leu Leu Phe  
 260 265 270  
 Pro Asn Gln Gly Pro Ser Glu Pro Thr Pro Ser Met Gly Gly Thr Ser  
 275 280 285  
 Ala Gln Pro Glu Thr Gln Ala Thr Gln Ala Phe Glu Ala Leu Ala Leu  
 290 295 300  
 Gln Asn Arg Glu Asp Ala Ala Ile Met Ile Gln Ala Asn Thr Phe Ala  
 305 310 315 320  
 Pro Gln Thr Val Tyr Ser Thr Pro Gln Val Val Trp Arg Pro Asp Gly  
 325 330 335  
 Ser Gly Val Trp Val Asn Gly Asp Asp Gly Val Ile Arg Gly Val Glu  
 340 345 350  
 Ala Arg Thr Gly Lys Val Thr Ala Thr Leu Lys Asp Gly His Gln Val  
 355 360 365  
 Gly Ser Lys Val Arg Ala Ile Trp Ala Gly Trp Val Gln Val Gln Arg  
 370 375 380  
 Asp Gly Lys Val Val Lys Glu Glu Trp Leu Ile Ser Gly Gly Phe Asp  
 385 390 395 400  
 Lys Arg Leu Ile Val Trp Arg Val  
 405

&lt;210&gt; 42553

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42553

```

Arg Pro Ile Ala Lys Ser Pro Ala His Thr Lys Pro Val Asp Ser Ile
1          5          10          15
Ser Cys Thr Gln Asn Thr Thr Pro Gly Arg Asn Tyr Asp Glu Asn Ser
          20          25          30
Gln Lys Asp Val Val Lys Val Ala Lys Ala Gln Ala Met Ala Thr Ile
          35          40          45
Asn Glu Asp Gly Leu Thr Ala Gly Ser Leu Asp Gly Gly Glu Thr Val
          50          55          60
Thr Arg Thr Thr Thr Ser Val Pro Ile Cys Thr Thr Thr Lys Ala Arg
65          70          75          80
Val Leu Ala Pro Thr Ile Gln Thr Gln Arg Glu Val Ala Thr Asp Glu
          85          90          95
His Gly Glu Ala Ser Gly Asn Tyr Ser Leu Thr Lys Val Val Tyr Leu
          100          105          110
Ala Ala Phe Gly Ile Gly Ala Pro Leu Gln Val Ala Ile Pro Trp Pro
          115          120          125
Arg Val Val Val
          130

```

&lt;210&gt; 42554

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42554

```

Leu Cys Ser Glu His Gln Arg Arg Gly Gly Leu Pro Pro Arg Gly Leu
1          5          10          15
Gln Arg Arg Cys Lys Leu Trp Lys Arg Arg Asn Val Leu Ile Tyr Phe
          20          25          30
Phe Asp Pro Ile Phe Gln Leu Gln Ala Val Lys Ser Gln Ile Ala Glu
          35          40          45
Ala Gln Lys Ile Ala Asn Gly Ser Gly Ser Glu Gln Asp Ile Ala Glu
          50          55          60
Ala Lys Ile Glu Leu Glu Val Gly Gln Pro Arg Thr Arg
65          70          75

```

&lt;210&gt; 42555

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42555

```

Leu Val Asn Met Ser Ile Lys Ile Arg Tyr Pro Gly Cys Leu Ser Thr
1          5          10          15
Tyr Glu Phe Ala Ala Leu Ile Gly Ile His Asn Ala Ser Cys Cys Val
          20          25          30
His Gly Ser Val Arg Tyr Leu Gly Asn Asn Gly Ala Val Cys Asn Ile
          35          40          45
Lys Glu Gly Phe Asn Ser Cys Leu Arg Lys Arg Gly His Arg Ile Glu
          50          55          60
Gly Ile Thr Lys His
65

```

<210> 42556  
 <211> 145  
 <212> PRT  
 <213> A.fumigatus

<400> 42556  
 Lys Arg Gly Ile Ser Ile Tyr Ser Phe Arg Leu Leu Ala Ile Ala Met  
 1 5 10 15  
 Phe Arg Leu Asn Leu Arg Arg Ser Lys Ser Trp Phe Lys His Ser Ala  
 20 25 30  
 Glu Gly Cys Phe Ile Ser Cys Leu Arg Tyr Pro Gln Ala Arg Thr Met  
 35 40 45  
 Val Cys Ser Gln Gly Ala Pro Pro Gln Gln Ser Pro Ser Gly Asn Met  
 50 55 60  
 Lys Met Asp Pro Leu Gln Ser Ile Glu Glu Glu Leu Pro Leu Tyr  
 65 70 75 80  
 Lys Pro Glu Asn Tyr Tyr Pro Val Asp Ile Gly Glu Val Phe Val Ser  
 85 90 95  
 Arg Tyr Gln Val Val Ser Lys Leu Gly Tyr Gly Thr Ser Ser Thr Phe  
 100 105 110  
 Trp Leu Trp Arg Asp Leu Lys Tyr Val Phe Lys Gly Pro Trp Met Gln  
 115 120 125  
 Ile Asn Asp Ile Leu Gln Arg Lys Met Leu Gln Asp Ala Gln Asn Met  
 130 135 140  
 Cys  
 145

<210> 42557  
 <211> 104  
 <212> PRT  
 <213> A.fumigatus

<400> 42557  
 Val Pro Arg Phe Ser Pro Asp Asn Met Phe Pro Asn Asp Leu Ile Gln  
 1 5 10 15  
 Arg Ser Thr Gln Leu Thr Leu Ile Ala Leu Ala Phe Leu His Glu Asn  
 20 25 30  
 Asn Val Ile His Thr Gly Lys Tyr Ile Ala Gln Gly Ala Asn Val His  
 35 40 45  
 Ala Lys Arg Lys Val Asp Ile Ser Pro Asn Asn Ile Leu Gln Gly Ile  
 50 55 60  
 Glu Asp Thr Ser Ile Leu Ser Asp Asn Tyr Ser Leu Ile Tyr Leu Leu  
 65 70 75 80  
 Val Cys Met Ala Val Thr Ala Trp Ser Leu Val Tyr Lys Met Ser Phe  
 85 90 95  
 Leu Asn Val Leu Ala Ala Glu Lys  
 100

<210> 42558  
 <211> 259  
 <212> PRT  
 <213> A.fumigatus

<400> 42558  
 Gly Thr Pro Lys Cys Glu Ser Val Tyr Met Ser Asn Ala Pro Thr Ala

## 19076

```

1          5          10          15
Ser Ile Ser Ala Ile Val Thr Glu Lys Asn Gln Gly Ala Thr Ser Arg
          20          25          30
Gln His Leu Ser Asn Glu Thr Gln Pro Pro Lys Met Ser Glu Ser Ala
          35          40          45
His Arg Glu Tyr Thr Pro Lys Pro Leu Pro Thr Thr Pro Ala Arg Asp
          50          55          60
Thr Arg Ser Pro Leu Gln Thr His His Pro Leu Ser Ile Thr Met Leu
65          70          75          80
Gln Glu Pro Asp Ser Thr Ala Asn Glu Gln Lys Gln Leu Ser Ala Pro
          85          90          95
Val Val Lys Ala Gln His Ala Ile Gln Ser Leu Val Ser Ser Gln Pro
          100          105          110
Ala Gln Leu Lys Asn Arg Gln Cys Ala Leu Gln Pro Arg Gln Pro Leu
          115          120          125
Thr Val Leu Ser Gln Ala Ser Asn Ala Ala Val Lys Gly Glu Gln His
          130          135          140
Thr Gly Lys Leu Ile Lys Gln Pro Ala Pro Arg Ile Phe His Leu Gly
145          150          155          160
Met Phe Glu Val Arg Lys Ala Leu Gly Lys Gly Lys Phe Gly Arg Val
          165          170          175
Tyr Val Ala His Lys Gln Ser Thr Gly Phe Val Cys Ala Leu Lys Val
          180          185          190
Leu His Lys Ser Lys Ile Gln Gln Gly Arg Val Glu Lys Gln Val Ala
          195          200          205
Arg Lys Ile Glu Ile Gln Ser Asn Leu Arg His Pro Asn Val Leu Arg
          210          215          220
Leu Phe Ser His Phe Asp Glu Ser Lys Arg Ile Ile Leu Ile Leu Glu
225          230          235          240
Tyr Ala Gly Lys Gly Glu Leu Tyr Lys His Leu Gln Arg Glu Asp Arg
          245          250          255
Phe Pro Glu

```

&lt;210&gt; 42559

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42559

```

Tyr Trp Ser Met Pro Ala Lys Gly Asn Tyr Ile Asn Ile Cys Arg Glu
1          5          10          15
Arg Thr Val Ser Gln Ser Arg Asn Leu Arg Ser Thr Leu His Lys Trp
          20          25          30
Arg Met Leu Leu Tyr Ile Cys Ile Ala Ser Met Trp Ile His Arg Asp
          35          40          45
Ile Lys Pro Glu Asn Ile Leu Val Gly Ile His Gly Glu Leu Lys Met
          50          55          60
Ser Asp Phe Gly Trp Ser Val His Ala Pro Ser Gly Arg Arg His Thr
65          70          75          80
Gln Cys Gly Thr Leu Asp Tyr Leu Pro Pro Glu Met Val Asp Pro Arg
          85          90          95
Lys Cys Asp Lys Pro Tyr Asp Gln Lys Val Asp Ile Trp Ser Leu Gly
          100          105          110
Val Leu Leu Tyr Glu Phe Leu Val Gly Arg Ala Pro Phe Glu Asp Thr
          115          120          125

```

## 19077

Pro Val Met Thr Gln Arg Arg Ile Ala Lys Gly Asp Met Thr Val Pro  
 130 135 140  
 Ser Phe Val Ser Pro Glu Ala Lys Asp Leu Ile Lys Lys Val Ser His  
 145 150 155 160  
 Arg Leu Leu Phe Asn Asn Gln Asn Asp Cys  
 165 170

<210> 42560  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 42560  
 Val Ala Leu Asn Phe Asp Leu Ala Ser Tyr Leu Leu Phe Asn Pro Ala  
 1 5 10 15  
 Leu Leu Asn Phe Thr Phe Val Glu Asn Leu Gln Cys Ala His Lys Ala  
 20 25 30  
 Ser Ala Leu Leu Met Ser Asn Ile Tyr Ser Ser Lys Leu Ser Leu Thr  
 35 40 45  
 Gln Arg Leu Pro Asp Phe Lys His Ala Gln Val Glu Tyr Pro Trp Arg  
 50 55 60  
 Gly Leu Phe Asp Lys Leu Pro Gly Val Leu Phe Pro Phe Asn Arg Ser  
 65 70 75 80  
 Val Arg Arg Leu

<210> 42561  
 <211> 180  
 <212> PRT  
 <213> A.fumigatus

<400> 42561  
 Asn Ser Gln Phe Asn Met Ala Asp Glu Pro Gly Gln Pro Pro Ala Leu  
 1 5 10 15  
 Thr Thr Leu Ser Leu Ala Glu Lys Ala Pro Ala Ser Lys Ala Val Ala  
 20 25 30  
 Gln Val Val Thr Pro Phe Asp Val Ser Gly Gly Val Asp Glu Ser Gly  
 35 40 45  
 Lys Leu Leu Pro Val Asp Tyr Asp Lys Leu Val Arg Glu Phe Gly Ala  
 50 55 60  
 Thr Arg Ile Ser Lys Glu Leu Leu Glu Arg Phe Glu Arg Val Thr Gly  
 65 70 75 80  
 Arg Arg Pro His Arg Phe Met Arg Arg Gly Ile Val Phe Ser His Arg  
 85 90 95  
 Asp Leu Asn Leu Ile Leu Asp Arg Tyr Glu Lys Gly Gln Pro Phe Tyr  
 100 105 110  
 Leu Tyr Thr Gly Arg Gly Pro Ser Asp Ser Met His Val Gly His  
 115 120 125  
 Thr Ile Pro Phe Glu Phe Thr Lys Cys Val Val His Phe Leu Leu Asp  
 130 135 140  
 Val Ser Glu Asn Glu Leu Thr Arg Met Ala Leu Pro Asp Gly Cys Arg  
 145 150 155 160  
 Met Ser Leu Ile Ala Leu Trp Leu Ser Cys Leu Gln Thr Thr Arg Arg  
 165 170 175  
 Val Leu His His  
 180

<210> 42562  
 <211> 284  
 <212> PRT  
 <213> A.fumigatus

<400> 42562  
 Lys Tyr Met His Ser Gln Lys Ile Glu Val Asp Asp Ala Lys Lys Tyr  
 1 5 10 15  
 Ala Lys Ala Asn Ala Lys Asp Ile Ile Ala Val Gly Phe Asp Met Lys  
 20 25 30  
 Lys Thr Phe Ile Phe Ser Asp Phe Asp Phe Val Gly Gly Ala Phe Tyr  
 35 40 45  
 Glu Asn Ile Cys Arg Met Ala Lys Arg Ile Thr Ile Asn Ser Val Arg  
 50 55 60  
 Gly Thr Phe Gly Phe Asn Asp Ser Asn Asn Val Gly Glu Phe His Phe  
 65 70 75 80  
 Cys Ala Thr Gln Ser Ala Thr Ala Phe Ala Thr Ser Phe Pro His Ile  
 85 90 95  
 Phe Gly Thr Asp Arg Lys Lys Val Ser Ser Ile Pro Cys Leu Ile Pro  
 100 105 110  
 Cys Ala Ile Asp Gln Asp Pro Tyr Phe Arg Gln Cys Arg Glu His Ala  
 115 120 125  
 Glu Lys Met Lys Tyr Lys Lys Pro Ser Leu Ile His Ala Ile Phe Leu  
 130 135 140  
 Pro Ala Leu Gln Gly Pro Gly Ser Lys Met Ser Ala Ser Val Glu Thr  
 145 150 155 160  
 Ser Ala Ile Phe Met Asn Asp Ala Pro Asn Arg Ile Lys Asn Lys Ile  
 165 170 175  
 Asn Lys Tyr Ala Phe Ser Gly Gly Gln Asp Thr Ala Glu Leu Gln Arg  
 180 185 190  
 Gln Leu Gly Ala Asn Thr Lys Asp Asp Val Pro Phe Gln Tyr Leu Thr  
 195 200 205  
 Phe Phe Met Glu Asp Asp Glu Leu Glu Arg Ile Arg Val Ala Tyr  
 210 215 220  
 Glu Lys Gly Glu Met Leu Thr Gly Glu Val Lys Gln Lys Cys Ile Ala  
 225 230 235 240  
 Glu Leu Gln Ala Tyr Val Gln Ala Phe Gln Glu Arg Arg Ala Gln Val  
 245 250 255  
 Thr Asp Glu Ile Val Ala Glu Phe Met Arg Pro Arg Ser Leu Glu Trp  
 260 265 270  
 Lys Gly Asn Pro Asn Pro Ile Val Val Glu Lys Lys  
 275 280

<210> 42563  
 <211> 302  
 <212> PRT  
 <213> A.fumigatus

<400> 42563  
 Arg Ala Leu Ser Ile Pro Leu Ser Thr Ala Ser Ile Val His Leu Leu  
 1 5 10 15  
 Cys Val His Phe Val Met Thr Asp Ala Met Ala Thr Ile Thr Gln Ser  
 20 25 30  
 Gln Ala Ser Glu Ser Phe Gln Ile Ile Ser Ser Leu Arg Tyr Glu Pro  
 35 40 45



## 19079

Ala Leu Pro Glu Leu Leu Lys Ala Gln Cys Thr Asp Ala Tyr Pro Asp  
 50 55 60  
 Pro Leu Arg Ser Pro Tyr Tyr Leu Leu Pro Tyr His Gln Glu Arg Leu  
 65 70 75 80  
 Arg Lys Ala Ala Asp Cys Phe Gly Trp Arg Lys Ala Ala Thr Phe Leu  
 85 90 95  
 Gln Gln Asp Val Glu Ser Phe Val Glu His Leu Asn Ser Phe Ile Pro  
 100 105 110  
 Asp Arg Thr Lys Pro Trp Arg Leu Arg Ile Val Ile Asp Arg Asp Gly  
 115 120 125  
 Thr Cys Thr Val Glu Val Asn Ala Ala Leu Gln Met Asp Ala Leu Asn  
 130 135 140  
 Leu Leu Leu Pro Ser Lys Met Asn Gln Thr Asp Thr Pro Trp Arg Val  
 145 150 155 160  
 Thr Val Asp Ser Gln Arg Thr Val Pro Ser Phe Thr Thr His Lys  
 165 170 175  
 Thr Thr Ser Arg Asp Val Tyr Thr Ala Ala Arg Leu Arg Ala Lys Ile  
 180 185 190  
 Thr Ser Pro Gln Asp Pro Ala Glu Val Leu Ile Val Asn Pro Gln Gly  
 195 200 205  
 Glu Ile Met Glu Gly Ser Ile Thr Thr Pro Tyr Phe Arg Arg Arg Thr  
 210 215 220  
 Ser Ala Ser Thr Gln Ala Lys Ile Asp Gln Glu Asp Ser Gly Pro Ala  
 225 230 235 240  
 Trp Ile Thr Pro Pro Leu Ser Ser Gly Gly Asn Ala Gly Thr Thr Arg  
 245 250 255  
 Arg Tyr Ala Leu Ser Gln Gly Phe Cys Ser Glu Gln Ala Ile Thr Ile  
 260 265 270  
 Ala Glu Leu Ile Asp Gly Glu Glu Cys Trp Leu Ser Asn Gly Val Arg  
 275 280 285  
 Gly Phe Phe Arg Gly Arg Ile Leu Leu Asn Glu Ser Lys Pro  
 290 295 300

&lt;210&gt; 42564

&lt;211&gt; 318

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42564

Gln Glu Leu Leu Pro Thr Thr Asp Lys Ala Gln Gly Ser Asp Glu His  
 1 5 10 15  
 His Leu Pro Gln Thr Ser Gly Phe Ser Val Ala Thr Ser Ala Pro Ala  
 20 25 30  
 Ser Ser Ser Arg Phe Tyr Gly Leu Leu Tyr Ala Ser Ala Thr Met Lys  
 35 40 45  
 Phe Phe Glu Asn Val Phe Thr Tyr Asp Tyr Ser Phe Pro Ala Val Ser  
 50 55 60  
 Leu Ala Tyr Phe Leu Arg Tyr Pro Asn Pro Tyr Ser Arg His Val Leu  
 65 70 75 80  
 Thr Thr Asp Val Ile Asp Arg Tyr Val Asp Pro Lys Thr Glu Arg Leu  
 85 90 95  
 His Thr Val Arg Leu His Leu Lys Lys Ser Lys Val Pro Ser Gly Ile  
 100 105 110  
 Leu Lys Leu Leu Pro Lys Gly Ile Gly Gly Ser Asp Asn Ser Gly Gln  
 115 120 125  
 Ser Tyr Ile Leu Glu Thr Thr Val Val Asp Ile Lys Glu Gly Trp Met

## 19080

130		135		140
Glu Thr Glu Ser Arg Asn Met Glu Trp Thr Gly Ile Leu Ser Val Val				
145		150		155
Glu Lys Gln Leu Tyr Thr Arg Gln Pro Ile Glu Gly Ser Leu Glu Ser				160
	165		170	175
Leu Gln Gly Leu Ser Leu Asp Ala Gln Arg Asn Glu Gln Thr Gln Val				
	180		185	190
Lys Thr Thr Val Thr Phe Arg Ser Arg Leu Gly Gln Gly Lys Phe Leu				
	195		200	205
Gly Lys Lys Lys Thr Ile Pro Thr Ala Asp Gln Thr Ile Glu Phe Asp				
	210		215	220
Glu Glu Thr Pro Lys Lys Gly Phe Phe Ser Ser Leu Ser Thr Ala Gly				
225		230		235
Ile Gln Arg Thr Ile Glu Leu Ile Gly Val Ser Arg Thr Arg Asp Ala				240
	245		250	255
Val Leu Lys Ser Lys Glu Gly Met Asn Val Val Leu Glu Arg Leu Arg				
	260		265	270
Asn Gly Gly Ile Val Gly Val Leu Glu Gly Met Arg Gln Asp Arg Glu				
	275		280	285
Ala Ala Phe Gly Pro Asp Gly Pro Trp Lys Arg Val Trp Leu Arg Gly				
	290		295	300
Asn Gly Leu Lys Asp Arg Ala Phe Thr Asp Asp Asp Asp Asn				
305		310		315

&lt;210&gt; 42565

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42565

Lys Leu Ser Met Ser Leu Gln Leu Gly Ser Ala Ser Val Phe Arg Pro		
1	5	10
Gly Trp Ala Leu Ser Ile Leu Val Val Leu Ala Ala Leu Pro Ser Ala		
	20	25
Ile Ala Gln Phe Cys Thr Phe Trp Asp Gly Gly Cys Val Asp Pro Leu		
	35	40
Ala Gln Thr Ala Ile Asn Phe Asp Phe Pro Pro Leu Phe Leu Asp Asp		
	50	55
Leu Thr Leu Tyr Tyr Gly Phe Asp Ala Asn Pro Ser Gly Lys Gly Gln		
65	70	75
Glu Pro Met Val Lys Ala Ser Phe Trp Leu Ala Tyr Asp Pro His Arg		
	85	90
Ile Asp Ser Thr Val Ile Thr Ala Asn Arg Thr Ser Glu Ile Ala Phe		
	100	105
Arg Val Gly Asn Leu Thr Gly Thr Pro Ser Gly Pro Ser Asn Gly Cys		
	115	120
Asp Gly Val Trp Gly Pro Gln Cys Thr His Asp Leu Lys Glu Leu Leu		
	130	135
Val Phe Thr Arg Gln Trp Gln Ser Ser Ser Leu Glu Ile Asn Pro		
145	150	155

&lt;210&gt; 42566

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19081

&lt;400&gt; 42566

Arg Lys Phe Thr Asp Asp Leu Lys Gln Ala Ala Val Asp Val Glu Thr  
 1 5 10 15  
 Asp Ala Leu Leu Gln Arg Thr Leu Arg Ser Ser Val Phe Gln Glu Arg  
 20 25 30  
 Thr Ile Ile Thr Ile Ala His Arg Ile Asn Thr Ile Ile Asp Ser Asp  
 35 40 45  
 Arg Ile Val Val Leu Asp Lys Gly Arg Val Ala Glu Phe Asp Thr Pro  
 50 55 60  
 Ala Asn Leu Ile Lys Arg Gly Gly Lys Phe Tyr Glu Leu Val Lys Glu  
 65 70 75 80  
 Ala Gly Leu Leu Glu Ser Asp Gly Ala Ala Leu Val Gln  
 85 90

&lt;210&gt; 42567

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42567

Leu His Cys Cys Ala Gly Trp Met Cys Ile Tyr Asp Leu Ala Leu Thr  
 1 5 10 15  
 Tyr Asn Val Thr Glu Ser Ile Asn Gln Glu Ser Arg Ala Ile Cys Arg  
 20 25 30  
 Thr Cys Pro Ser Lys Arg Leu Pro Ser Leu His Met Arg Pro Asn Ser  
 35 40 45  
 Glu Tyr Gly Phe Ala Trp Asp Ser Pro Ala Ser Thr Lys Pro Ile Asn  
 50 55 60  
 Phe Tyr Asn Ser Ser Ser Pro Arg Arg Trp Ser Leu Arg  
 65 70 75

&lt;210&gt; 42568

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42568

Arg Gly Leu Leu Glu Ala Gly Phe Leu Leu Ala Asp Ala Ser Ala Ser  
 1 5 10 15  
 Ser Ala Ala Trp Asp Ile Leu Ala Cys Leu Leu Ser Lys Ala Glu Ser  
 20 25 30  
 Cys Ser Ser Ser Leu Ser Ser Ser Ser Ser Asp Asp Ser Glu Pro Asp  
 35 40 45  
 Ile Asp Ser Ser Lys Ser Pro Thr Ala Leu Ala Asn Cys Ala Ser Ser  
 50 55 60  
 Asn Val Gly Leu Pro Arg Asp Cys Ala Leu Thr Leu Asn Leu Trp Trp  
 65 70 75 80  
 Ser Asp Arg Thr Cys Ser Arg Cys Ser Cys Thr Phe Arg Lys Glu Thr  
 85 90 95  
 Leu Gln Ser Ala Gln Asp Val Glu Leu Ala Ile Thr Gly Ser Ser Val  
 100 105 110  
 Asp Gly Ser Ser Gly Ser Leu Glu Ser Ser Thr Val Ser Ser Thr Ala  
 115 120 125  
 Met Gly Trp Ser Ser Pro Leu Ala Val Lys Val Glu Arg Ser Ser  
 130 135 140

<210> 42569  
 <211> 964  
 <212> PRT  
 <213> A.fumigatus

<400> 42569  
 Ile Val Leu Gly Ala Leu Ile Phe Thr Thr Ala Leu Gln Ala Ala Ile  
 1 5 10 15  
 Gln Ala Glu Ser Ala Pro Arg Leu Phe Leu Ala Asp Phe Arg Phe Trp  
 20 25 30  
 Ser Ser Ile Leu Val Ile Ala Ser Leu Gly Val Ile Phe Ala Val Gln  
 35 40 45  
 Tyr Tyr Glu His Trp Arg Ser Arg Gln Pro Asn Gly Val Val Leu Phe  
 50 55 60  
 Tyr Trp Leu Phe Phe Thr Ile Ala Tyr Gly Val Lys Leu Arg Ser Leu  
 65 70 75 80  
 Val Ser Gln Lys Ala Tyr Gln Asp Gln Leu Pro Tyr Phe Val Cys Ile  
 85 90 95  
 Asn Val Ser Leu Gly Leu Ala Leu Leu Glu Phe Gly Leu Glu Tyr Leu  
 100 105 110  
 Val Pro Lys Lys Gln Ser Ala Tyr Asp Ala Leu Gly Asp Glu Asp Glu  
 115 120 125  
 Cys Pro Tyr Glu Tyr Ala Asp Ile Phe Ala Val Leu Thr Phe Ser Trp  
 130 135 140  
 Met Thr Pro Leu Met Lys Phe Gly Tyr Lys Asn Tyr Leu Thr Gln Asp  
 145 150 155 160  
 Asp Leu Trp Asn Leu Arg Gln Arg Asp Thr Thr Arg Val Thr Gly Ala  
 165 170 175  
 Ile Leu Glu Glu Lys Trp Ala Glu Glu Leu Arg Lys Ser Lys Pro Ser  
 180 185 190  
 Leu Trp Leu Ala Leu Met Lys Ser Phe Gly Ser Pro Tyr Leu Arg Gly  
 195 200 205  
 Ala Ile Ile Lys Cys Gly Ser Asp Val Leu Ala Phe Val Gln Pro Gln  
 210 215 220  
 Leu Leu Arg Leu Leu Ile Arg Phe Ile Lys Ser Tyr Gly Thr Asp Glu  
 225 230 235 240  
 Pro Gln Pro Val Ile Ser Gly Val Ala Ile Ala Leu Ala Met Phe Ser  
 245 250 255  
 Val Ser Val Thr Gln Thr Ile Cys Leu His Gln Tyr Phe Gln Arg Ala  
 260 265 270  
 Phe Asp Thr Gly Met Arg Val Lys Ser Ala Leu Thr Ala Met Ile Tyr  
 275 280 285  
 Thr Lys Ser Leu Arg Leu Ser Ser Glu Gly Arg Ala Ser Lys Thr Thr  
 290 295 300  
 Gly Asp Ile Val Asn His Met Ala Val Asp Gln Gln Arg Leu Ser Asp  
 305 310 315 320  
 Leu Thr Gln Phe Gly Met Gln Leu Trp Ser Ala Pro Phe Gln Ile Val  
 325 330 335  
 Leu Cys Met Leu Ser Leu Tyr Gln Leu Val Gly Leu Ser Met Phe Ala  
 340 345 350  
 Gly Ile Gly Val Met Ile Leu Met Ile Pro Leu Asn Gly Val Ile Ala  
 355 360 365  
 Arg Met Met Lys Lys Leu Gln Ile Val Gln Met Lys Asn Lys Asp Ser  
 370 375 380  
 Arg Ser Arg Leu Met Thr Glu Ile Leu Asn Asn Ile Lys Ser Ile Lys  
 385 390 395 400

Leu Tyr Ala Trp Asn Thr Ala Phe Met Asn Lys Leu Ser His Ile Arg  
 405 410 415  
 Asn Asp Leu Glu Leu Asn Thr Leu Arg Lys Ile Gly Ala Thr Gln Ser  
 420 425 430  
 Ile Ala Asn Phe Thr Trp Gln Ser Thr Pro Phe Leu Val Ser Cys Ser  
 435 440 445  
 Thr Phe Thr Val Tyr Val Leu Ile Ser Asp His Pro Leu Thr Thr Asp  
 450 455 460  
 Val Val Phe Pro Ala Leu Thr Leu Phe Asn Leu Leu Thr Phe Pro Leu  
 465 470 475 480  
 Ser Ile Leu Pro Met Val Ile Thr Ser Ile Ile Glu Ala Ser Val Ala  
 485 490 495  
 Val Arg Arg Leu Thr Asp Tyr Phe Thr Ala Glu Glu Leu Gln Thr Asp  
 500 505 510  
 Ala Val Thr Phe Glu Glu Pro Val Thr His Ala Gly Asp Glu Ser Val  
 515 520 525  
 Arg Ile Arg Asp Ala Ala Phe Thr Trp Asn Arg Tyr Gln Gly Glu Asn  
 530 535 540  
 Val Ile Glu Asn Ile Asp Phe Ser Ala Arg Lys Gly Glu Leu Ser Cys  
 545 550 555 560  
 Ile Val Gly Arg Val Gly Ala Gly Lys Ser Ser Phe Leu Leu Ser Met  
 565 570 575  
 Leu Gly Asp Leu Trp Lys Thr Glu Gly Glu Val Val Val Arg Gly Arg  
 580 585 590  
 Ile Ala Tyr Val Ala Gln Gln Pro Trp Val Met Asn Ala Ser Val Arg  
 595 600 605  
 Glu Asn Ile Val Phe Gly His Arg Trp Asp Pro Gln Phe Tyr Glu Leu  
 610 615 620  
 Thr Val Glu Ala Cys Ala Leu Val Asp Asp Phe Arg Asn Leu Pro Asp  
 625 630 635 640  
 Gly Asp Gln Thr Glu Val Gly Glu Arg Gly Ile Ser Leu Ser Gly Gly  
 645 650 655  
 Gln Lys Ala Arg Leu Thr Leu Ala Arg Ala Val Tyr Ala Arg Ala Asp  
 660 665 670  
 Ile Tyr Leu Leu Asp Asp Val Leu Ser Ala Val Asp Gln His Val Gly  
 675 680 685  
 Arg His Leu Ile Asn Lys Val Leu Gly Arg Asn Gly Leu Leu Ser Gly  
 690 695 700  
 Lys Thr Arg Ile Leu Ala Thr Asn Ala Ile Pro Val Leu Lys Glu Ala  
 705 710 715 720  
 Asp Phe Ile Ala Leu Leu Arg Asn Lys Thr Leu Ile Glu Lys Gly Thr  
 725 730 735  
 Tyr Glu Gln Leu Met Ala Met Lys Gly Glu Val Ser Asn Leu Val Arg  
 740 745 750  
 Ala Thr Met Asn Glu Ser Glu Asp Glu Ala Ser Ser Ser Asp Asp His  
 755 760 765  
 Asp Leu Ala Ser Pro Glu Gly Ser Glu Thr Thr Thr Val Leu Glu Asn  
 770 775 780  
 Ala Glu Ser Glu Pro Ser Asp Thr Glu Ala Glu Gln Gln Ile Gly Ser  
 785 790 795 800  
 Leu Leu Pro Leu Arg Ser Gly Ala Asp Thr Thr Arg Arg Arg Ser Ser  
 805 810 815  
 Thr Val Thr Leu Arg Arg Ala Ser Thr Ala Ser Trp His Gly Val Arg  
 820 825 830  
 Arg Lys Leu Gly Asp Glu Glu Asn Val Leu Lys Ser Lys Gln Thr Gln  
 835 840 845

## 19084

Glu Thr Ser Gln Gln Gly Lys Val Lys Trp Ser Val Tyr Gly Glu Tyr  
 850 855 860  
 Ala Lys Asn Ser Asn Ile Ile Ala Val Cys Phe Tyr Leu Leu Thr Leu  
 865 870 875 880  
 Leu Gly Ala Gln Thr Ala Gln Val Ala Gly Asn Phe Trp Leu Lys Lys  
 885 890 895  
 Trp Ser Asp Ala Ser Glu Val Gln Ala Gln Pro Lys Val Ala Lys Phe  
 900 905 910  
 Ile Gly Ile Tyr Leu Ala Trp Gly Leu Gly Ser Ser Ile Leu Val Ile  
 915 920 925  
 Leu Gln Asn Leu Ile Leu Trp Ile Phe Cys Ser Ile Glu Val Trp Pro  
 930 935 940  
 Glu Ser Tyr His Lys Val Lys Asn Tyr Ile Asn Thr Thr Ala Gly Phe  
 945 950 955 960  
 Ser Gln Thr Ala

&lt;210&gt; 42570

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42570

Ser Ala Cys Phe Gln Thr Val Ala Asp Thr Met Ala His Pro His Leu  
 1 5 10 15  
 Asp Ser Leu Gln His Ile Lys Val Ile Leu Arg Ser Val Thr Val Thr  
 20 25 30  
 Pro Val Gln Lys Val Asp Thr Arg Arg Gln Phe Gln Ser Ile Thr Ile  
 35 40 45  
 Thr Glu Glu Lys Ala Ala Ile Ser Leu Ser His Gly Ile Val Val Pro  
 50 55 60  
 Arg Cys Ala Val Gln Arg Asp Ile Leu Ser Ile Tyr  
 65 70 75

&lt;210&gt; 42571

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42571

Phe Ser Gly Phe Phe Ala Arg Leu Arg Tyr Gly Leu Asn Arg Ile Thr  
 1 5 10 15  
 Arg Leu Arg Thr Thr Leu Ile Arg Gln Gln Ala Ser Arg Lys Leu His  
 20 25 30  
 Glu Arg Met Ala Phe Ser Ile Phe Arg Ser Pro Met Ser Phe Phe Glu  
 35 40 45  
 Thr Thr Pro Ser Gly Arg Ile Leu Asn Arg Phe Ser Arg  
 50 55 60

&lt;210&gt; 42572

&lt;211&gt; 262

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42572

Leu Phe Asn Asn Ser Ala Lys Ala Ile Phe Thr Met Ile Val Ile Ala

## 19085

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1          5          10          15
Thr Ser Thr Pro Ala Phe Ile Leu Met Ile Phe Pro Leu Gly Tyr Val
          20          25          30
Tyr Leu Arg Tyr Gln Lys Tyr Tyr Leu Arg Thr Ser Arg Glu Leu Lys
          35          40          45
Arg Leu Asp Ser Val Thr Arg Ser Pro Ile Tyr Ala His Phe Gln Glu
          50          55          60
Ser Leu Gly Gly Ile Ser Thr Ile Arg Gly Tyr Arg Gln Glu Asn Arg
65          70          75          80
Phe Ala Leu Glu Asn Glu Trp Arg Met Asp Ala Asn Leu Arg Ala Tyr
          85          90          95
Phe Pro Ser Ile Ser Ala Asn Arg Trp Leu Ala Val Arg Leu Glu Phe
          100          105          110
Ile Gly Ser Val Ile Ile Leu Ala Ser Ala Val Leu Ala Ile Ile Ser
          115          120          125
Val Ala Ser Gly Ser Gly Leu Ser Ala Gly Met Val Gly Leu Ala Met
          130          135          140
Ser Tyr Ala Leu Gln Ile Thr Gln Ser Leu Asn Trp Ile Val Arg Gln
145          150          155          160
Thr Val Glu Val Glu Thr Asn Ile Val Ser Val Glu Arg Val Leu Glu
          165          170          175
Tyr Ala Asn Leu Pro Ser Glu Ala Pro Asp Val Ile Phe Lys Asn Arg
          180          185          190
Pro Ala Ile Gly Trp Pro Ala Gln Gly Ala Val Thr Phe Lys Asp Tyr
          195          200          205
Ser Thr Arg Tyr Arg Pro Gly Leu Asp Leu Val Leu Lys Asp Ile Asn
          210          215          220
Leu Asp Ile Lys Pro His Glu Lys Ile Gly Val Val Gly Arg Thr Gly
225          230          235          240
Ala Gly Lys Ser Ser Leu Thr Leu Ala Leu Phe Arg Ile Ile Glu Ala
          245          250          255
Ala Gly Gly Ser Ile Arg
          260

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&lt;210&gt; 42573

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42573

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Leu Pro Asp Leu Val Val Phe Ala Ile Ser Asn Val Phe Phe Ser Ile
1          5          10          15
Asp Gly Leu Asp Ile Ser Thr Ile Gly Leu Ser Asp Leu Arg Gly Arg
          20          25          30
Leu Ala Ile Ile Pro Gln Asp Pro Ala Met Phe Glu Gly Thr Leu Arg
          35          40          45
Asp Asn Leu Asp Pro Arg His Val His Asp Asp Thr Glu Leu Trp Ser
          50          55          60
Val Leu Gly Thr Leu Gly Leu Thr Arg Cys Met Pro Lys His
65          70          75

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&lt;210&gt; 42574

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (584)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42574

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Pro Ser Leu Val Tyr Asp Leu Pro Gln Glu Leu Leu Ser Thr Leu Thr
1          5          10          15
Ala Lys Gly Glu Asp Gln Pro Ile Ala Val Glu Asp Thr Val Glu Leu
20          25          30
Ser Ser Glu Pro Leu Asp Pro Ser Thr Leu Asp Pro Val Ile Ala Asn
35          40          45
Ser Thr Ser Cys Ala Leu Cys Lys Val Ser Phe Leu Asn Val Gln Glu
50          55          60
Gln Arg Glu His Val Arg Ser Asp His His Arg Phe Asn Val Lys Ala
65          70          75          80
Gln Ser Arg Gly Asn Pro Thr Leu Asp Glu Ala Gln Phe Ala Lys Ala
85          90          95
Val Gly Asp Leu Asp Glu Ser Ile Ser Gly Ser Glu Ser Ser Glu Glu
100         105         110
Glu Asp Asp Asn Glu Asp Glu Gln Leu Ser Ala Leu Leu Arg Arg Gln
115         120         125
Ala Arg Ile Ser Gln Ala Ala Glu Glu Ala Glu Ala Ser Ala Ser Lys
130         135         140
Lys Pro Ala Ser Arg Ser Pro Leu Tyr Trp Phe Ser Ser Ser Leu Leu
145         150         155         160
Pro Ser Asn Thr Ser Leu Gly Val Tyr Arg Ala Leu Phe Ser Asn Asp
165         170         175
Glu Gln Asp Glu Pro Lys His Leu Val Asp Ser Leu Arg Lys Lys Gln
180         185         190
Leu Ser Pro Leu Pro Thr Gln Arg Pro Asn Ala Gln Pro Gln Thr Asn
195         200         205
Gly Thr Thr Pro Ser Pro His Ile Phe Met Cys Met Ile Gly Gly Gly
210         215         220
His Phe Ala Ala Met Leu Val Ser Leu Thr Pro Gln Ile His Arg Lys
225         230         235         240
Gln Gly Gly Val Glu Glu Arg Gln Ala Cys Val Ile Ala His Lys Ser
245         250         255
Phe His Arg Tyr Thr Thr Arg Arg Lys Gln Gly Gly Ser Gln Ser Ala
260         265         270
Ser Asp Ala Ala Arg Gly Ala Ala His Ser Ala Gly Ser Ser Leu Arg
275         280         285
Arg Tyr Asn Glu Ala Ala Leu Glu Lys Glu Ile Arg Glu Leu Leu Arg
290         295         300
Asp Trp Lys Glu Met Ile Asp Ser Ala Gln Leu Leu Phe Ile Arg Ala
305         310         315         320
Thr Gly Asn Thr Asn Arg Lys Ile Leu Phe Gly Gln Tyr Glu Gly Gln
325         330         335
Phe Leu Lys Gln Asn Asp Pro Arg Ile Arg Gly Phe Pro Phe Ser Thr
340         345         350
Arg Arg Ala Thr Gln Asp Glu Leu Met Arg Cys Phe Lys Glu Leu Thr
355         360         365
Arg Val Lys Val Ser Gln Ile Asp Glu Ala Ala Leu Ala Ala Val Val
370         375         380
Ala Lys Gln Arg Ala Glu Ala Val Lys Pro Pro Thr Pro Arg Pro Gln
385         390         395         400

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## 19087

Gln Lys Pro Lys Val Ser Lys Glu Glu Glu Glu Ala Ile Leu His Thr  
                   405                  410                  415  
 Ser Gln Ile Gln Ala Leu Ile Arg Arg Ser Lys Val Pro Ala Leu Met  
                   420                  425                  430  
 Ser Tyr Leu Ser Lys Asn Ser Ile Pro Ser Ser Phe Ser Phe Arg Pro  
                   435                  440                  445  
 Pro Asp Ser Pro Gln Asn Phe Arg Cys Pro Thr Pro Leu His Phe Ala  
                   450                  455                  460  
 Ala Asn Leu Asn Ser Pro Ser Val Val Ser Ala Leu Leu Thr Lys Ala  
                   465                  470                  475                  480  
 Asp Ala Asp Pro Thr Ile Ala Asn Gly Glu Gly Arg Thr Ala Phe Glu  
                   485                  490                  495  
 Leu Ala Gly Asp Arg Ala Thr Arg Asp Ala Phe Arg Val Ala Arg His  
                   500                  505                  510  
 Glu Leu Gly Glu Ser Lys Trp Asn Trp Asp Ala Ala Lys Val Pro Ala  
                   515                  520                  525  
 Ala Val Ser Lys Glu Glu Val Asp Ser Arg Ala Lys Arg Glu Arg Lys  
                   530                  535                  540  
 Ile Ala Glu Glu Glu Glu Ala Lys Arg Arg Lys Thr Glu Leu Glu Arg  
                   545                  550                  555                  560  
 Leu Arg Lys Glu Glu Ala Ala Lys Ala Ala Ser Leu Gln Glu Thr Arg  
                   565                  570                  575  
 Lys Val Gly Gly Arg Ala Leu Xaa Ala Met Glu Lys Thr Ala Ser Glu  
                   580                  585                  590  
 Lys Arg Glu Glu Glu Met Arg Gly Met Thr Pro Glu Met Arg Met Arg  
                   595                  600                  605  
 Leu Glu Arg Glu Arg Arg Ala Arg Ala Ala Glu Glu Arg Ile Arg Lys  
                   610                  615                  620  
 Met Gln Gly Arg  
 625

<210> 42575  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 42575  
 Gln Thr His Arg Lys Gly Ala Leu Phe Ser Gly Asp Asp Gln Val Lys  
 1                  5                  10                  15  
 Thr Gln Ile Arg Phe Glu Leu Ser Tyr Gln Pro Ile Leu Pro Arg Leu  
                   20                  25                  30  
 Asn Thr Leu Leu Asp Glu Val Lys Glu Leu Leu Leu Ala Glu Asp Leu  
                   35                  40                  45  
 Ile Ser Asp Lys Tyr Ile Ser Val Ser Ser Thr Asn Pro His Ile Tyr  
                   50                  55                  60  
 Tyr Cys Thr Lys Phe Leu Tyr Ser Asp  
 65                  70

<210> 42576  
 <211> 131  
 <212> PRT  
 <213> A.fumigatus

<400> 42576  
 Val Phe Glu Asp Gln Tyr Pro Ile Thr Gln Arg Lys Leu Gly Ser Gly  
 1                  5                  10                  15

## 19088

Ala Tyr Gly Gln Val His Met Ala Phe Asn Lys Val Thr Gly Gln Gln  
 20 25 30  
 Leu Ala Cys Lys Ile Val Asp Leu Arg Thr Pro Lys Asp Arg Val Ile  
 35 40 45  
 Glu Asp Phe Glu Gly Gln Lys Ser Arg Phe Phe Gly Met Asp Thr Asp  
 50 55 60  
 Arg Ile Val Ala Ala Arg Ala His Asn Gly Tyr Ile Ala Arg Lys Ile  
 65 70 75 80  
 His Glu Lys Leu Glu Ile Tyr Asp Arg Glu Ala Arg Ile Leu Ala Arg  
 85 90 95  
 Leu Cys His Val Gly Leu Leu Glu Ser His Gln Asn Gly Thr Asn Gly  
 100 105 110  
 Gln Ser Lys Pro Asn Ile Ile Arg Val Glu Lys Val Leu Arg Ser Ser  
 115 120 125  
 Asn Thr Met  
 130

&lt;210&gt; 42577

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42577

Lys Asn Pro Leu Gln Ser Gly Ile Leu Lys Asn Ser Ser Gly Asn Val  
 1 5 10 15  
 Pro Gln Thr Ala His Ala Thr Glu Asn Phe Phe Ile Asn Pro Ala Arg  
 20 25 30  
 Met Asp Asn Val Asp Thr Lys Glu Ile Thr Leu Gln Asn Thr Leu Gln  
 35 40 45  
 Asn Ala Gly Arg Arg Arg Ser Ser Ser Asn Met Gly Ala Gly Ser Ser  
 50 55 60  
 Ser Arg Arg Gln Ser Leu Ala Ser Ile Arg Gly His Asp Glu Gln Ile  
 65 70 75 80  
 Ser Pro Arg Leu Lys Trp Asp Glu Ala Asn Leu Tyr Leu Thr Glu Gln  
 85 90 95  
 Glu Lys Thr Ala Lys Met Lys Ile Asp Glu Pro Lys Thr Pro Phe Ala  
 100 105 110  
 Pro His Tyr Asp Pro Ala Glu Asp Asp Glu Glu Leu Arg Leu Ala Glu  
 115 120 125  
 Ala Glu Glu Ser Leu Ile Asp Ala Gln Asp Val Val Val Asp Glu Leu  
 130 135 140  
 Asp Lys Thr Lys Lys Gly Thr Arg Lys Gly Ile Ser Val Asp Asp Ile  
 145 150 155 160  
 Pro Asp Leu Glu Leu Gly Glu Pro Glu Glu Pro Ser Tyr Met Val Gly  
 165 170 175  
 Ser Gly Glu Gly Asn Arg Ile Ile Arg Glu Arg Ser Leu Ser Asn Glu  
 180 185 190  
 Ser His Arg Ser Asp Lys His Val Val Val Gly Thr Gly Glu Glu Asn  
 195 200 205  
 Gly Val Gly Ala Asp Gly Asp His Leu Met Thr Thr Glu Glu Ala Lys  
 210 215 220  
 Glu Lys His Arg Gln Phe Glu Gln Met Arg Lys Lys His Tyr Glu Met  
 225 230 235 240  
 Arg Asn Ile Lys Lys Leu Leu Ala  
 245

<210> 42578  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 42578  
 Lys Gly Val Tyr Tyr Thr Leu Leu His Ser Tyr Leu Thr Glu Tyr Leu  
 1 5 10 15  
 Tyr Ser Val Gly Lys Asn Arg Thr Tyr Lys Val Asp Val Glu Gly Leu  
 20 25 30  
 Thr Glu Gly Arg Asp Asn Asn Asn Ser Gly Asp Arg Glu Ala Ser Tyr  
 35 40 45  
 Ser Leu Phe Phe Ile Phe Lys Thr Asp Ile Ile Thr Gln Ser Met Tyr  
 50 55 60  
 Ser Val Glu Gly Asn Arg Ser Arg  
 65 70

<210> 42579  
 <211> 1104  
 <212> PRT  
 <213> A.fumigatus

<400> 42579  
 Phe Ser Tyr Gln Lys Arg Cys Gln Arg Lys Ala Pro Trp Pro Gly Cys  
 1 5 10 15  
 Pro Ser Gly Ile Phe Ala Gly Leu Cys Tyr Ser Thr Leu Asn Val Ser  
 20 25 30  
 Pro Thr Ile Phe Gly Leu Ser Asp Glu Lys Arg Val Asn Cys Ser Asn  
 35 40 45  
 Ser Leu Ile Leu Pro Asp Arg His His Phe Ser Met Thr Arg Pro Ala  
 50 55 60  
 Val Arg Gln His Val Glu Asn Met Leu His Gln Phe Gln Thr Thr Asp  
 65 70 75 80  
 Asn Asp Asn Met Gln Phe Ala Gln Arg Ser Gln Pro Lys Ser His Gln  
 85 90 95  
 Glu Ser Pro Cys Ala Phe Leu Met Leu Ser Ala Thr Asp Val Leu Thr  
 100 105 110  
 Leu Leu Gly Ala Leu Phe Pro Thr Ala Thr Ser Pro Ala Cys Ser Ser  
 115 120 125  
 Pro Thr Pro Ser Ala Ala Ser Ser Ala Leu Ser Pro Ser Ser Leu Gln  
 130 135 140  
 Ser Phe Pro Asp Arg Arg Thr Asn Thr Val Pro Glu Pro Gly Phe Tyr  
 145 150 155 160  
 Arg Gly Asn Leu Ser Gly Gly Ser Ser Pro Gln Leu Ser Ser Thr Ala  
 165 170 175  
 Phe Pro Ser Ala Asp Ile His Phe Phe Thr Cys Ser Glu Asp His Leu  
 180 185 190  
 Ser Arg Asn Ala Asp Arg Ile Arg Phe Glu Leu Ser Ala Leu Val Glu  
 195 200 205  
 Pro Asp Gly Arg Pro Gly Leu Ala Tyr Pro Ser Thr Glu Glu Trp Ala  
 210 215 220  
 Ile Phe Ser Val Thr Asp Gly Gly His Arg Leu Val Trp Gly Leu Phe  
 225 230 235 240  
 Ala Asp Gly Gln Leu Ser Asp Ala Gly Asn Leu Ser Ala Asp Thr Cys  
 245 250 255  
 Pro Ser Thr Thr Leu Gly Met Glu Asp Asn Phe Glu Ala Leu His Thr

	260		265		270										
Ala	Ile	Ile	Lys	Leu	Val	Arg	Glu	Tyr	Pro	Thr	Gly	Asp	Arg	Ser	Asp
	275						280					285			
Tyr	Cys	Gly	Glu	Arg	Gly	Gln	Met	Ala	Pro	Ser	Gln	Ser	Ser	Ser	Leu
	290					295					300				
Gln	Ser	Arg	Phe	Asn	Gln	Val	Met	Ser	His	Cys	Tyr	His	Asn	Ser	Asp
305					310					315					320
Phe	Met	Gly	Ala	His	Tyr	Trp	Trp	Asn	Ala	Ser	Arg	Gln	Leu	Arg	Arg
				325					330					335	
Ser	Ile	Ala	Asp	Val	Pro	Ser	Arg	Leu	Gly	Asp	Asp	Ser	Trp	Ile	Leu
			340					345					350		
Glu	Pro	Met	His	Thr	Ala	Cys	Ser	Arg	Ser	Leu	Arg	Val	Ala	His	Ser
		355					360					365			
Val	Ile	Glu	Arg	Cys	Glu	Ala	Asp	Phe	Val	Ala	Leu	Asp	Arg	Ser	Leu
	370					375					380				
Trp	Gln	Leu	Gln	Gly	Thr	Val	Lys	Glu	Met	Val	Lys	Thr	Ile	Thr	Lys
385						390				395					400
Leu	Arg	Asn	Lys	Met	Trp	Tyr	Met	Thr	Asp	Val	Lys	Asn	Ser	Met	Arg
			405						410					415	
Tyr	Glu	Asp	Ala	Arg	Asn	Val	Pro	Leu	Ala	Leu	Lys	Thr	Met	Val	Tyr
			420					425					430		
Ser	Ala	Arg	Leu	His	Gln	Pro	Ile	Ser	Thr	Ser	Asp	Arg	Arg	Thr	Arg
	435						440					445			
Ser	Ser	Pro	Arg	Ala	Leu	Gly	Gly	Ser	Val	Leu	Gln	Lys	Pro	Glu	Leu
	450					455					460				
Gln	Val	Met	Asn	Val	Met	Lys	Ala	Pro	Ser	Ser	Gln	Gly	Gly	Pro	Asn
465					470					475					480
Lys	Leu	Ser	Asp	Glu	Gln	Val	Glu	Leu	Thr	Arg	Lys	Trp	Leu	Ala	Gln
			485						490					495	
Asn	Asn	Ile	Asp	Asn	Phe	Cys	Lys	Gly	Glu	Glu	Arg	Ile	His	Arg	Phe
		500						505					510		
Cys	Tyr	Glu	Val	Lys	Val	Ser	Ile	Asn	Arg	Leu	Val	Gly	Asp	Thr	Met
	515						520					525			
Ala	Glu	Ala	Pro	Val	Leu	Trp	Ala	Ser	Glu	Leu	Phe	Gln	Lys	Glu	Arg
	530					535					540				
Val	Lys	Phe	Glu	Gly	Ser	Ser	Asn	Arg	Ser	Phe	Leu	Gly	Leu	Ser	Ser
545					550					555					560
Ser	Ser	Leu	Arg	Pro	Met	Ser	Thr	Ala	Gly	Glu	Glu	Leu	Ser	Phe	Ala
			565					570						575	
Ser	Gln	Ser	Ser	Gly	Gly	Ser	Leu	Arg	Ser	Ser	Asp	Cys	Phe	Ser	Ile
		580					585					590			
Tyr	Thr	Gln	Tyr	Leu	Pro	Pro	Leu	Asn	Arg	Lys	Ser	Ser	Phe	Gln	Ser
	595						600					605			
Ser	Ile	Ser	Asp	Lys	Trp	Arg	Met	Pro	Arg	Asp	Pro	Ser	Pro	Ala	Asp
	610					615				620					
Gly	Leu	Ser	Ile	Gly	Asp	Ser	Pro	Ser	Lys	Ala	Thr	Ser	Glu	Ser	Thr
625					630					635					640
Ala	Asp	Thr	Tyr	Ser	Thr	Phe	Trp	Ser	Val	Pro	His	Gln	Asn	Ala	Pro
			645					650						655	
Tyr	Ala	Ala	Ser	Ala	Ser	Ser	Phe	Tyr	Ser	Arg	Pro	Pro	Ser	Met	Leu
		660					665					670			
Ser	Glu	Thr	Val	Val	Gln	Pro	Ala	Pro	Gln	Lys	Asp	Phe	Lys	Gly	Gln
	675					680					685				
Gly	Lys	Ala	Ala	Phe	Leu	Asp	Glu	Leu	Lys	Gln	Ala	Leu	Thr	Ser	Leu
	690					695				700					
Leu	Leu	Ser	Asp	Leu	Gly	Ser	Pro	Val	Trp	Ser	Cys	Gly	Ser	Glu	Thr

## 19091

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705              710              715              720
Asp Ala Trp Phe Gly Asn Ala Leu Asp Gln Glu Arg Ile Arg Val Gln
              725              730              735
Met Lys Lys Arg Glu Lys Ile Gln Cys Phe Tyr Ala Glu Cys Asn Ala
              740              745              750
Arg Thr Val Arg Gln Ile Pro Arg His Tyr Gln Ser Arg Gly Arg Arg
              755              760              765
Ser Arg Ser Leu Gly Pro Pro Leu Ser Gly Arg Ala Gln Glu Ser Asp
              770              775              780
Asp Thr Thr Ser Val Pro Met Ser Glu Ser Ala Arg Ala Ala Glu Asp
785              790              795              800
Gln Ser Pro Phe Ser Tyr Gly Val Val Phe Arg Gln Leu Ile Glu Ile
              805              810              815
Phe Ser Arg His Gly Asn Pro Phe Val Lys Leu Asn Ala Leu Arg Asp
              820              825              830
Leu Arg Ala Leu Val Ile Ala Ser Leu Asn Val Asp Asn Asp Lys Ala
              835              840              845
Tyr Ala His Ala Val Gln Glu Arg Thr His Ser Arg Glu Leu Gly Leu
              850              855              860
His Gly Lys Arg Ala Ala Arg His Ser Phe Ser Glu Val Gly Thr Leu
865              870              875              880
Arg Gly Ala Glu Lys Gly Phe Leu Gln Thr Pro Thr Ser Pro Ala Ala
              885              890              895
Glu Ser Val Thr Leu Asp Ser Arg Pro Ser Glu Tyr Ser Ala Pro Thr
              900              905              910
Glu Asn Gln Ile Val Asp Ala Leu Arg Ser Leu Leu Leu Glu Val Lys
              915              920              925
Pro Lys Thr Leu Phe Arg Asp Leu Gln Phe Ile Ser Ala Phe Val Pro
              930              935              940
Ser Glu Thr Leu Asn Lys Thr Asp Ser Gly Thr Ala Phe Leu Gln Phe
945              950              955              960
Gly Leu Ala Ala Leu Ser Leu Lys Glu Glu Val Cys Asn Ser Met Val
              965              970              975
Glu Ile Ala Asp Arg Ile Val Ser Gln Glu Leu Ser Arg Arg His Val
              980              985              990
Pro Gln Pro Phe Gly Phe Asn Ala Arg Pro Ser His Ala Ile Glu Asp
              995              1000              1005
Ala Ala Gly Met Trp Ile Ile Thr Ala Lys Glu Gly Asn Pro Val Ala
              1010              1015              1020
Gln Arg Glu Leu Ala Ile Leu Tyr Leu Thr His Pro Glu Leu Leu Pro
1025              1030              1035              1040
Arg Val Thr Leu Pro Leu Thr Ser Pro Arg Asp Thr Phe Lys Ala Glu
              1045              1050              1055
Met Met Tyr Arg Arg Asp Lys Asp Ser Lys Ser Asp Pro Gln Ser Met
              1060              1065              1070
Cys Leu Ala Leu His Trp Met Gln Leu Ser Ala Asn Gly Gly Asp Gln
              1075              1080              1085
Leu Ala Arg Asn Arg Leu Arg Glu Arg Glu Glu Phe Asp Ser Ile Ala
              1090              1095              1100

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&lt;210&gt; 42580

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42580

## 19092

Pro Ser Tyr Tyr Phe Met Ser Val Thr Met Ala Asp Gln Gln Pro Glu  
 1 5 10 15  
 Lys Thr Thr Ala Pro Ala Ser Asp Val Ala Asp Ser Gln Pro Ala Val  
 20 25 30  
 Val Ser Asn Thr Asp Thr Arg Lys Glu Thr Thr Glu Thr Ala Glu Pro  
 35 40 45  
 Gln Ser Glu Asp Lys Thr Ala Thr Thr Thr Ala Gln Pro Ala Val Glu  
 50 55 60  
 Thr Thr Ala Thr Gln Ser Gly Thr Ala Glu Thr Pro Ala Glu Ala Asp  
 65 70 75 80  
 Lys Ala Pro Ala Glu Val Gln Gln Pro Pro Gln Ala Glu Glu Glu Lys  
 85 90 95  
 Pro Val Ala Gln Gln Pro Glu Gln Pro Ala Tyr Leu Ala Lys Asn Pro  
 100 105 110  
 Ala Leu Ser Gln Phe Phe Glu Arg Leu Pro Ala Ile Val Ser Ser Ser  
 115 120 125  
 Gly His Ala Glu Met Trp Gly Val Pro Leu Lys Asp Ser Asn Asp Ala  
 130 135 140  
 Pro Thr Val Asn Val Leu Ile Lys Phe Leu Arg Ala Asn Glu Gly Asn  
 145 150 155 160  
 Val Lys Leu Ala Glu Glu Gln Leu Thr Lys Ala Leu Lys Trp Arg Lys  
 165 170 175  
 Glu Thr Asn Pro Ser Ala Leu Ala Glu Ser Thr Ser Tyr Ser Ala Thr  
 180 185 190  
 Lys Phe Gly Gly Leu Gly Tyr Leu Thr Thr Tyr Lys Glu Ala Asn Gly  
 195 200 205  
 Ala Glu Thr Val Val Thr Trp Asn Ile Tyr Gly Gly Val Lys Asp Ile  
 210 215 220  
 Asn Thr Thr Phe Gly Asp Met Asn Glu  
 225 230

&lt;210&gt; 42581

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42581

Ser Leu Phe Tyr Thr Cys Arg Phe Val Lys Trp Arg Val Ala Leu Met  
 1 5 10 15  
 Glu Leu Ala Val Lys Glu Leu Lys Met Ala Glu Ala Thr Ser Val Ile  
 20 25 30  
 Asp Tyr Asp Gly Glu Asp Pro Tyr Gln Met Ile Gln Val His Asp Tyr  
 35 40 45  
 Gln Asn Val Ser Phe Leu Arg Leu Asn Pro Ala Ile Lys Ala Ala Thr  
 50 55 60  
 Lys Lys Thr Ile Glu Val Phe Thr Thr Ala Tyr Pro Glu Leu Leu Arg  
 65 70 75 80  
 Glu Lys Phe Phe Val Asn Val Pro Ala Ile Met Gly Trp Met Phe Ala  
 85 90 95  
 Ala Met Lys Val Phe Leu Ser Lys Asn Thr Thr Arg Lys Phe His Pro  
 100 105 110  
 Ile Ser Asn Gly Ala Asn Leu Ala Arg Glu Phe Pro Ser Leu Lys Asp  
 115 120 125  
 Gln Phe Pro Lys Val Tyr Gly Gly Ser Ala Pro Ala Leu Gln Glu Gly  
 130 135 140  
 Ala Arg Thr Val Ser Leu Ile Gln Asp Glu Ser Ala Pro Ala Ala Thr

[illegible]

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<210> 42582
<211> 60
<212> PRT
<213> A.fumigatus
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Leu	Ser	Ala	Tyr	Phe	Pro	Tyr	Asp	Gly	Ser	Ser	Leu	Ser	Leu	Ile	Asp
1				5					10					15	
Ser	Phe	Thr	Leu	Phe	Leu	Asp	Ser	Cys	Ile	Thr	Leu	Ala	Gln	Arg	Leu
			20					25					30		
Ser	Asp	His	His	Ser	Ser	Tyr	Asn	Arg	Asp	Lys	Ile	Pro	Lys	Leu	Pro
		35					40					45			
Arg	Val	His	Arg	Phe	Val	Leu	Leu	Ala	Ala	Phe	Ala				
	50					55					60				

<400> 42583

His	Ala	Lys	Val	Ser	Pro	Leu	Val	Gln	Thr	Leu	Pro	Leu	Ile	Ile	Val
1				5					10					15	
Phe	Phe	Leu	Phe	Tyr	Phe	Glu	Ala	Leu	Ile	Ser	Asp	Phe	Asp	Leu	Thr
			20					25					30		
Asn	Ile	Pro	Ile	Ser	Asp	Leu	Leu	Pro	Leu	Ser	Ser	Gln	Ala	Thr	Ala
		35				40						45			
Thr	Cys	Asn	Thr	Ala	Ser	Arg	Ala	Gln	Asp	Ser	Pro	Ser	Val	Pro	Gln
	50					55					60				
Pro	Ser	Thr	Ala	Pro	Thr	Pro	Ser	Met	Ser	Pro	Met	Leu	Leu	Val	Pro
65				70						75					80
Asp	Asp	Gly	Ser	Val	Asp	Arg	Ser	Ser	Val	Ser	Gln	Val	Asp	Leu	Thr
				85					90					95	
Ile	Gly	Glu	Ser	Glu	Asp	Ser	Gly	Arg	Ser	Ser	Ala	Gln	Phe	Ile	Ala
			100					105					110		
Ala	Pro	Met	Arg	Ser	Asp	Ser	Arg	Gln	Ala	Met	Asp	Leu	Pro	Pro	Pro
		115					120					125			
Pro	Thr	Thr	Thr	Pro	Thr	Leu	Pro	Ser	Ile	Ser	Thr	Glu	Pro	Pro	Lys
	130					135					140				
Val	Ser	Phe	Glu	Asp	Phe	Ala	Ile	Arg	Tyr	Arg	Gln	Asn	Gln	His	Lys
145				150						155					160
Gln	Ala	Arg	Arg	Ile	Thr	Leu	Glu	Asn	Arg	Leu	His	Ala	Thr	Lys	Ile
				165					170					175	
Ser	Ile	Gly	Ile	Ser	Thr	Arg	Leu	Val	Arg	Val	Gly	Gly	Val	Val	Gln
			180					185					190		
Arg	Gly	Leu	Val	Glu	Ser	Leu	Lys	His	Glu	Asp	Lys	Ala	Asn	Phe	Leu
		195				200						205			
Ala	Leu	Tyr	His	Thr	Phe	Leu	Asp	Leu	Gln	Asp	Ser	His	Asp	Leu	Ala

## 19094

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      210                      215                      220
Met Arg His His Phe Tyr Arg Gln Asp Pro Ser Glu Asp Trp Ser Ser
225                      230                      235                      240
Ala Gln Glu Ser Thr Val Glu Arg Ser Pro Asp Phe Phe Leu Gln Leu
      245                      250                      255
Ser Pro Gln Ser Arg Ser Asp Leu Leu Arg Ile Leu Gln Leu Val Arg
      260                      265                      270
Thr Asn Pro Gln Phe Leu Cys Asp Arg Leu Cys Ser Leu Thr Ser Ala
      275                      280                      285
Gln Leu Asn Ala Leu Leu Ser Thr Ser Thr Thr Ser Leu Asp Ser Gly
      290                      295                      300
Asp His Thr Phe Leu Pro Ala Ala Arg Ser Arg Asn Gln Tyr Ser Leu
305                      310                      315                      320
Pro Lys Arg Ala Ser Ala Ala Ser Val Pro Phe Arg Asp His Ala Val
      325                      330                      335
Asn Phe Glu Arg Thr Asp Ala Ile Ser Asn Leu Val Phe Asn Val Phe
      340                      345                      350
Ala Thr Pro Leu Asp Ser Asp Thr Pro Glu Ala Arg Leu Arg Leu Asp
      355                      360                      365
Val Trp Ser Ser Val Cys Ser Glu Leu Ile Thr Gln Gly Gly Asn Arg
      370                      375                      380
Phe Tyr Pro Leu Ile Gly His Ile Leu Ser Ser Trp Thr Met Gly Ser
385                      390                      395                      400
Ala Trp Gln Ala Arg Pro Lys Phe Glu Leu Tyr Leu Met Asp Ile Leu
      405                      410                      415
Gln Thr Gly Ala Phe Leu Leu Glu His Ile Glu Thr Pro Ala Gly Leu
      420                      425                      430
Gly Phe Asp Ala Gly Ser Leu Asp Pro Leu Lys Thr Asp Val Ala Glu
      435                      440                      445
Glu Tyr Phe Ala Ser Ala Val Asp Ala Leu Phe Lys Leu Leu Asp Asp
      450                      455                      460
Pro Asp Ala Ser Phe Pro His Thr Val Phe Lys Phe Ala Arg Ala Ile
465                      470                      475                      480
Leu Gln Lys Leu Gly Ser Pro Asp Ser Arg Ala Arg Phe Leu Glu Tyr
      485                      490                      495
Leu Leu Leu Gln Trp Phe Phe Pro Lys Phe Leu Ser Gly Ala Leu Ala
      500                      505                      510
Tyr Pro Glu Val Cys Ser Ser Pro Ser Ser Asn Val Met Ile Ser Gly
      515                      520                      525
Leu Gly Glu Gly Asn
530

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&lt;210&gt; 42584

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42584

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Ile Gly Asn Leu Ser His Leu Tyr Leu Pro Ser Arg Asp Ala Ala Cys
1                      5                      10                      15
Asp Ser Cys Leu Ser Ser Cys Ile Asn Leu Arg Ile Ser Leu Ser Phe
      20                      25                      30
Ser Pro Thr His Gln Pro Lys Gly Ser Leu Leu Glu Gln Asp Ile Leu
      35                      40                      45
Ser Ile Val Ile Leu Ala Leu Pro Asp Leu Pro Ile Ile Ser Cys Gln
50                      55                      60

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## 19095

Ser Pro Trp Pro Thr Asn Ser Pro Lys Arg Leu Leu Leu Leu Leu Leu  
65 70 75 80  
Met Ser Gln Thr Arg Ser Leu Pro Ser Phe Pro Thr Leu Thr Pro Ala  
85 90 95  
Arg Arg Gln Pro Arg Leu Arg Ser His Asn Gln Arg Thr Arg Pro Gln  
100 105 110  
Pro Gln Pro Arg Asn Leu Pro Leu Lys Pro Leu Pro Pro Asn Pro Ala  
115 120 125  
Pro Gln Arg Leu Pro Leu Arg Pro Thr Arg Leu Pro Pro Lys Cys Ser  
130 135 140  
Asn Arg Pro Arg Pro Lys Arg Arg Ser Leu Ser Leu Ser Ser Arg Asn  
145 150 155 160  
Ser Gln Pro Ile Leu Pro Lys Thr Leu Pro Ser His Ser Ser Ser Ser  
165 170 175  
Val Ser Leu Pro Leu Ser Pro Ala Ala Met Gln Lys Cys Gly Val  
180 185 190  
Ser Pro Ser Arg Thr Arg Thr Met Leu Pro Leu Ser Thr Phe  
195 200 205

&lt;210&gt; 42585

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42585

Leu Phe Arg Glu Thr Ile Lys Trp Gly Leu Trp Cys Ile Lys Asp Ala  
1 5 10 15  
Arg Asp Val Pro Glu Ser Trp Pro Phe Glu Pro Ile Glu Phe Ser Leu  
20 25 30  
Trp Ile Leu Tyr Asp Lys Val Ser Thr Thr Tyr Ser Tyr Met Asn Asp  
35 40 45  
Val Leu Arg Ile Thr Ile Ser Glu Asp Asn Tyr Ile Tyr Asn Ile Ile  
50 55 60  
Met Ser Ile Ile Ile Phe Leu Gln  
65 70

&lt;210&gt; 42586

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42586

Phe Ile Thr Ser Asn Met Ile Cys Ala Val Ala Gly Met Thr Ala Asp  
1 5 10 15  
Ala Asn Ile Leu Ile Asn Tyr Ala Arg Gln Ala Ala Gln Arg Tyr Leu  
20 25 30  
Leu Thr Tyr Gly Glu Glu Ile Pro Cys Glu Gln Leu Val Arg Arg Leu  
35 40 45  
Cys Asp Leu Lys Gln Gly Tyr Thr Gln His Gly Gly Leu Arg Pro Phe  
50 55 60  
Gly Val Ser Phe Ile Tyr Ala Gly Tyr Asp Pro Leu Arg Glu Phe Gln  
65 70 75 80  
Leu Tyr Gln Ser Asn Pro Ser Gly Asn Tyr Gly Gly Trp Asn Ala Thr  
85 90 95  
Ser Val Arg Ala Asn Asn Ala Ser Ala Gln Ser Leu Leu Lys Gln Asp  
100 105 110

## 19096

Tyr Lys Glu Asp Cys Asp Leu Lys Glu Ala Cys Ala His Ala Pro Ser  
           115                                  120                  125  
 Gly Leu Lys Ala Gly Gln Trp Asp Pro Thr Lys Leu Glu Pro  
           130                                  135                  140

&lt;210&gt; 42587

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42587

Ile Ile Gly Gln Ser Thr Asn Leu Arg Phe Ser Leu Lys Gln Ala Asp  
 1                  5                  10                  15  
 Gly Asn Leu Leu Thr Ala Asp Gln Leu Ile Gly Thr Gly Gly Ser  
           20                  25                  30  
 Arg Asn Ala Gln Leu Gln Ile Thr Asp Pro Lys Val Cys Arg Ser Tyr  
           35                  40                  45  
 Leu Val Gly Thr Cys Pro His Asp Leu Phe Thr Asn Thr Lys Gln Asp  
           50                  55                  60  
 Leu Gly Pro Cys Pro Lys Val His Ser Glu Gly Leu Lys Thr Glu Tyr  
 65                  70                  75                  80  
 Glu Thr Ala Ser Ala Ala Glu Lys Ala Lys Trp Gly Phe Glu Phe Asp  
                   85                  90                  95  
 Tyr Met Arg Asp Met Gln Lys Tyr Ile Asp Asp Cys Asp Arg Arg Ile  
                   100                  105                  110  
 Asp Ser Ala Gln Arg Arg Leu Glu Lys Thr Pro Asp Glu Ile Arg Gln  
                   115                  120                  125  
 Thr Asn Asn Leu Val Arg Ala Lys His Phe His Arg Ala Ile Gly Arg  
                   130                  135                  140  
 Ile Phe Ala Asp Ser His Thr Ala Glu Thr Asn Leu Arg Pro His Lys  
 145                  150                  155                  160  
 Asp Tyr Gln Tyr Trp Ser Pro  
                   165

&lt;210&gt; 42588

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42588

Gln Asn Phe Val Asp Leu Thr Glu Ala Leu Pro Gly Phe Tyr Cys Thr  
 1                  5                  10                  15  
 His Phe Pro Leu Val Ser Leu Ser Ile Gly Met Ala Asp Val Arg Ser  
           20                  25                  30  
 Leu Leu Arg Ser Glu Leu Ala Ala Arg Lys Gly Ala Pro Gln Ala Gly  
           35                  40                  45  
 Thr Thr Gly Asn Arg Val Thr Lys Lys Arg Lys Val Asp Ile Thr Asp  
           50                  55                  60  
 Asp Leu Thr Arg Lys Lys Ile Lys Pro Gly Glu Lys Ser Ala Asp Pro  
 65                  70                  75                  80  
 Leu Ser Pro Thr Val His Thr Val Gln Pro Pro Ser Ala Gln Ala Ile  
                   85                  90                  95  
 Asp Gly Val Asp Asp Val Glu Gln Arg Ala Arg Glu Thr Ala Ser Leu  
                   100                  105                  110  
 Glu Leu Pro Pro Asp Ser Lys Ala Ser Gln Lys Gln Thr Gln Ala Gln  
                   115                  120                  125

## 19097

Ser Glu Pro Leu Leu Glu Ser Asn Thr Pro Gln Ala Ile Asp Glu Asp  
 130 135 140  
 Glu Trp Ala Ala Phe Glu Arg Asp Val Val Ala Pro Thr Arg Val Pro  
 145 150 155 160  
 Gln Ala Pro Ala Ala Val Ala Ala Ala Thr Ile Ser Ala Ala Pro  
 165 170 175  
 Met Ser Ala Glu Gln Leu Ala Ala Gln Gln Glu Ala Glu Lys Gly Thr  
 180 185 190  
 Ser Ile Gln Ala Arg Glu Ala Glu Ile Glu Gly Glu Arg Glu Asp Ala  
 195 200 205  
 Ala Arg Phe Leu Glu Asp Glu Phe Asp Glu Met Glu Gln Leu Glu Glu  
 210 215 220  
 Arg Ile Arg Arg Leu Lys His Lys Arg Glu Glu Leu Arg Arg Lys Arg  
 225 230 235 240  
 Ala Lys Glu Ala Ser Glu Ile Pro Gln Ala Glu Gly Ser Ser Gly Lys  
 245 250 255  
 Thr Gln Gly Glu Gln Gln Ile Asp Glu Thr Arg Gln Ser Asp Glu Glu  
 260 265 270  
 Glu Asn Asp Asp Asp Asp Asp Ala Asp Asp Asp Asp Trp Asp  
 275 280 285  
 Asn Trp Arg Phe Arg  
 290

&lt;210&gt; 42589

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42589

Ser Ser Ser Ser Ser Leu Ser Val Thr Ser Thr Ser Ser Tyr Ser Ser  
 1 5 10 15  
 Leu Ser Ser Ile Ala Cys Ala Ala Val Pro Gly Ser Cys Thr Leu Pro  
 20 25 30  
 Gly Ser Ser Glu Gly Arg Thr Ser Ser Asn Ile Ser Leu Leu Phe Ser  
 35 40 45  
 Pro Asp Phe Ser Ala Ser Ser Glu Arg Ala Phe Cys Ser Leu Phe Ser  
 50 55 60  
 Leu Ser Lys Arg Ser Tyr Ser Thr Thr Pro Phe Ile Thr Ala Gly Gly  
 65 70 75 80  
 Asn Phe Gln Lys Leu Ser Phe Val Ser Gly Leu Trp Thr Asn Leu Leu  
 85 90 95  
 Pro Ser Leu Val Phe Thr Ser Thr His Gly Ser His Pro Gly Ile Ala  
 100 105 110  
 Cys Phe Asp Phe Gly Leu Ser Ser Gly Pro Arg Leu Leu Arg Ser Arg  
 115 120 125  
 Asn Pro Phe Pro Pro Arg Asn Pro Pro Leu Glu  
 130 135

&lt;210&gt; 42590

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42590

Gly Arg Ser Thr Ser Ile Glu Leu Ser Val Glu Tyr Ser Leu Thr Leu  
 1 5 10 15

## 19098

Thr Gln Leu Lys Gln Ile Ser Asp Leu Thr Lys Thr Ile Asn Thr Gly  
 20 25 30  
 Leu Leu Glu Val Ser Val Leu Gly Glu Thr Gly Ala Val Ala Gln Ala  
 35 40 45  
 Leu Asn Glu Leu His Lys Ile Arg Thr Ala Lys His Gln Lys Glu Thr  
 50 55 60  
 Cys Glu Arg Glu Leu Lys Asn Leu Gln Asp Thr Ser Gly Pro Ser Gly  
 65 70 75 80  
 His Gln Lys Leu Gln Val Cys Asp Val Cys Gly Ala Tyr Leu Ser Arg  
 85 90 95  
 Leu Asp Asn Asp Arg Arg Leu Ala Asp His Phe Phe Gly Lys Met His  
 100 105 110  
 Met Gly Tyr Ser Asp Met Arg Lys Thr Tyr Lys Lys Leu Ser Glu Glu  
 115 120 125  
 Leu Lys Gly Arg Pro Pro Pro Val Arg His His Asp Asp Asp Glu Gly  
 130 135 140  
 Gly Trp Gly Gly Arg Ser Gly Gly Gly Arg Gly Pro Arg Tyr Gly Gly  
 145 150 155 160  
 Gly Gly Gly Gly Tyr Arg Lys Arg Gly Gly Arg Trp  
 165 170

<210> 42591  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<400> 42591  
 Lys Leu Leu Gln Asp Pro His Asn Leu Thr Thr Thr Leu Ser Asn Lys  
 1 5 10 15  
 Thr Leu Leu Ile Leu Leu Lys His Ser Gln Asp Phe Ile Val Leu Thr  
 20 25 30  
 Phe Leu Leu Leu Val Tyr Pro Leu Glu Trp Gln Met Phe Ala Arg Tyr  
 35 40 45  
 Phe Glu Val Ser Leu Leu Leu Gly Arg Ala His Arg Lys Gln Glu Leu  
 50 55 60  
 Pro Val Ile Glu Leu Pro Arg Ser Gly Arg Ser Ile Ser Arg Met Thr  
 65 70 75 80

<210> 42592  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 42592  
 Thr Thr Ile Phe Ser Pro Glu Gly Arg Leu Tyr Gln Val Glu Tyr Ala  
 1 5 10 15  
 Leu Glu Ala Ile Ser His Ala Gly Thr Ala Leu Gly Ile Leu Ala Lys  
 20 25 30  
 Asp Gly Ile Val Leu Ala Ala Glu Lys Lys Val Thr Ser Lys Leu Leu  
 35 40 45  
 Glu Gln Asp Thr Ser Ala Glu Lys Leu Tyr Thr Leu Asn Glu Tyr Ala  
 50 55 60  
 Phe Pro Asn Gly Glu Lys Leu Leu Ile Ser Phe Thr Pro Leu Leu Ile  
 65 70 75 80  
 His His

&lt;210&gt; 42593

&lt;211&gt; 594

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (102)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42593

Trp	Ser	Glu	Cys	Ser	Asn	Leu	Pro	Thr	Leu	Pro	Leu	Leu	His	Tyr	His
1				5					10					15	
Arg	Gly	Gly	Gln	Asn	Ile	Glu	Leu	Leu	Gln	Val	Ser	Phe	Leu	Thr	Ala
			20					25					30		
Ile	Phe	Arg	Ala	Gln	Val	Thr	Asp	Tyr	Glu	Thr	Gly	His	Leu	Tyr	Tyr
	35					40						45			
Tyr	Asn	Ala	Glu	Thr	Lys	Gln	Ser	Thr	Tyr	Thr	Arg	Pro	Gln	Pro	Leu
	50					55					60				
Pro	Val	Gln	Ser	Gln	Pro	Ala	Ala	Pro	Thr	Gln	Ile	Pro	Phe	Val	Thr
65					70					75					80
Pro	Asp	Thr	Leu	Pro	Pro	Phe	Ser	Ser	Thr	Pro	Tyr	Ala	Pro	Glu	Gly
			85						90					95	
Phe	Ser	Phe	Ser	Asp	Xaa	Ala	Arg	Gly	Leu	Pro	His	His	Gly	His	Ser
			100					105					110		
Arg	Gly	Gly	Phe	Arg	Gly	Gly	Lys	Gly	Phe	Arg	Asp	Arg	Asn	Asn	Arg
	115						120					125			
Gly	Pro	Glu	Asp	Arg	Pro	Lys	Ser	Lys	His	Ala	Ile	Pro	Gly	Cys	Glu
	130					135					140				
Pro	Trp	Val	Leu	Val	Lys	Thr	Arg	Leu	Gly	Arg	Arg	Phe	Val	His	Asn
145					150					155					160
Pro	Glu	Thr	Asn	Glu	Ser	Phe	Trp	Lys	Phe	Pro	Pro	Ala	Val	Met	Lys
			165						170					175	
Gly	Val	Val	Glu	Tyr	Asp	Arg	Leu	Glu	Arg	Glu	Lys	Arg	Glu	Gln	Lys
			180				185						190		
Ala	Arg	Ser	Glu	Glu	Ala	Glu	Lys	Ser	Gly	Glu	Asn	Arg	Arg	Glu	Ile
		195					200					205			
Leu	Asp	Glu	Val	Arg	Pro	Ser	Glu	Glu	Pro	Gly	Ser	Val	Gln	Asp	Pro
	210					215					220				
Gly	Thr	Ala	Ala	His	Ala	Met	Glu	Asp	Ser	Asp	Glu	Tyr	Glu	Glu	Val
225					230					235					240
Glu	Val	Thr	Asp	Ser	Glu	Asp	Glu	Asp	Asp	Gln	Pro	Ser	Lys	Arg	Pro
			245						250					255	
Lys	Thr	Glu	Asp	Thr	Asn	Asp	Gln	Gln	Gln	Pro	Leu	Glu	Phe	Thr	Glu
		260				265							270		
Glu	Asp	Ile	Glu	Tyr	Gln	Leu	Ala	Ala	Met	Gly	Glu	Glu	Tyr	Gly	Leu
	275					280						285			
Asp	Pro	Gly	Glu	Tyr	Gly	Glu	Pro	Gly	Gln	Glu	Gly	Trp	Glu	Glu	Gly
	290					295					300				
Ala	Glu	Gly	Leu	Pro	Leu	Thr	Glu	Glu	Asp	Ala	Thr	Ala	Leu	Phe	Arg
305					310					315					320
Asp	Leu	Leu	Asp	Asp	Tyr	His	Ile	Asn	Pro	Tyr	Phe	Thr	Trp	Glu	Lys
			325						330					335	
Ile	Ile	Glu	Glu	Gly	Arg	Ile	Ile	Glu	Asp	Ser	Arg	Tyr	Thr	Val	Leu
			340					345						350	

19100

Pro Asn Met Lys Ala Arg Arg Glu Ala Trp Ser Ser Trp Ser Arg Asp  
 355 360 365  
 Arg Ile Gln Gln Leu Lys Glu Gln Lys Glu Lys Gln Glu Lys Lys Asp  
 370 375 380  
 Pro Arg Ile Arg Tyr Leu Ala Phe Leu Gln Glu His Ala Thr Pro Lys  
 385 390 395 400  
 Leu Tyr Trp Pro Glu Phe Lys Arg Lys Tyr Arg Lys Glu Pro Glu Met  
 405 410 415  
 Lys Asp Ser Gln Leu Ser Asp Lys Asp Arg Glu Lys Leu Tyr Arg Asp  
 420 425 430  
 Leu Ala Ser Arg Leu Lys Leu Pro Glu Ser Thr Arg Lys Ser Asp Phe  
 435 440 445  
 Ser Ala Leu Leu Lys Ser Val Pro Leu Gln Glu Leu Asn Arg Ser Ser  
 450 455 460  
 Asn Leu Glu Ala Leu Pro Ser Ser Ile Ile Thr Asp Leu Arg Tyr Ile  
 465 470 475 480  
 Ser Leu Pro Pro Lys Val Arg Asp Pro Leu Leu Glu Ala Tyr Ile Ser  
 485 490 495  
 Thr Leu Pro Pro Ala Pro Glu Gln Asp Met Thr Ala Asp Gln Leu Glu  
 500 505 510  
 Ala Leu Asn Arg Asn Arg Leu Glu Arg Glu Lys Arg Glu Arg Ala Leu  
 515 520 525  
 Ala Glu Arg Glu Lys Arg Val Gln Glu Glu Lys Arg Lys Gln Gln Ser  
 530 535 540  
 Asp Leu Val Arg Gly Arg His Leu Leu Arg Glu Gly Glu Ala Glu Ile  
 545 550 555 560  
 Gln Glu Ala Met Arg Val Arg Lys Glu Gly Ile Arg Ser Tyr Leu Glu  
 565 570 575  
 Ala Glu Asn Gln Asp Ser Val Lys Val Ser Gln Glu Lys Ser Pro Glu  
 580 585 590  
 Ala Ser

<210> 42594

<211> 142

<212> PRT

<213> A.fumigatus

<400> 42594

Ser Arg Ser Asn Leu Thr Arg Ala Trp Ala Pro Arg Asp Glu Pro Val  
 1 5 10 15  
 Leu Ser Ala Glu Arg Thr Ile Val Gly His Gly Gln Glu Arg Gly Gly  
 20 25 30  
 Met Arg Ile Ile Phe Gly Asn Pro Ser Asp Ala His Pro Val Asp Phe  
 35 40 45  
 Ile Tyr Phe Glu Thr Leu Pro Trp Phe Leu Arg Pro Tyr Val His Thr  
 50 55 60  
 Leu Arg Ala Thr Ile Thr Gly Arg Asn Gly Thr Thr Arg Ser Val Pro  
 65 70 75 80  
 Val Ser His Ile Val Lys Glu Thr Phe Tyr Arg Pro Ala Ile Asp Arg  
 85 90 95  
 Glu Arg Gly Thr Gln Leu Glu Leu Ala Leu Ser Val Pro Ala Ala Ser  
 100 105 110  
 Ile Val Thr Leu Thr Tyr Asp Phe Glu Lys Pro Ile Leu Arg Leu Leu  
 115 120 125  
 Pro Gln Gly Gly Arg Gly Ile Arg Ala Met Leu Met Arg Lys

## 19101

130

135

140

&lt;210&gt; 42595

&lt;211&gt; 907

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42595

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Leu Leu Arg Ser Glu Glu Pro Arg Arg Ser Gly Arg Ser Thr Lys Gly
1      5      10      15
Gln His Lys Asn Leu Asp Met Val Thr Glu Thr Pro Ala Lys Lys Ser
      20      25      30
Lys Ala Lys Ala Gln Ser Lys Asp Lys Ser Glu Lys Pro Pro Lys Pro
      35      40      45
Ser Val Glu Pro Thr Pro Ala Val Ser Glu Glu Glu Glu Ile Ile Arg
      50      55      60
Cys Ile Cys Gly Glu Tyr Glu Glu Glu Glu Asp Ile Glu Arg Asp Met
65      70      75      80
Ile Cys Cys Asp Gln Cys Ser Ala Trp Gln His Asn Asp Cys Met Gly
      85      90      95
Leu Thr Phe Ala Lys Gly Glu Glu Pro Asp Glu Tyr Phe Cys Glu Leu
      100      105      110
Cys Arg Pro Glu Asn His Lys Val Leu Leu Asp Lys Ile Ala Arg Gly
      115      120      125
Glu Lys Pro Trp Glu Glu Ala Ala Glu Lys Arg Arg Gln Gln Ala Glu
      130      135      140
Glu Lys Lys Ala Ala Arg Arg Arg Lys Gly Arg Lys Gly Gly Arg Lys
145      150      155      160
Gly Arg Pro Ser Glu Pro Lys Pro Asp Thr Gly Thr Pro Ala Arg Asn
      165      170      175
Lys Ala Ala Ser Ala Thr Pro Ala Gln Thr Pro Val Pro Leu Ala Pro
      180      185      190
Pro Pro Val Val Thr Pro Val Pro Glu Lys Asn Gly Asp Val Ser Asp
      195      200      205
Ala His Pro Ser Ser Thr Gln Lys Arg Lys Phe Glu Val His Gln Glu
      210      215      220
Ala Pro Ala Ser Asp Thr Val Arg Leu Asp Tyr Tyr Cys Leu Lys Ile
225      230      235      240
Gly Thr Ala Ala His Val Tyr Gln Gln Gly Pro Lys Pro Lys Gln Ile
      245      250      255
Lys Met Thr Ser Pro Ala Asp Ser Val Thr Pro Leu Asn Asp Lys Pro
      260      265      270
Ala Gln Ala Lys Glu Asp Ser Thr Ala Pro Pro Ser Arg Gln Ser Ser
      275      280      285
Val Ser Glu Lys Thr Thr Thr Gln Glu Ser Gly Thr Leu Asp Glu Ile
      290      295      300
Ser Asn Pro Ala Arg Arg Ser Ala Ala Ser Ala Leu Val Lys Leu Phe
305      310      315      320
Val Asp Gln Ile Ser Asp Ala Gln Lys Gln Gly Ser Phe Lys Leu Pro
      325      330      335
Glu Gly Arg Ser Ala Lys Glu Ile Ala Gln Gln Leu Gly Phe Ser Ile
      340      345      350
Glu Lys Ala Met Tyr Gln Asn Ile Cys Gly Gly Ser Gly Glu Pro Thr
      355      360      365
Glu Pro Tyr Lys Leu Gln Leu Arg Thr Ile Leu Phe Asn Val Lys Lys
      370      375      380

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Asn Pro Ser Leu Arg Asp Arg Leu Leu Val Gly Ser Leu Leu Pro Asp  
 385 390 395 400  
 Ala Leu Ser Lys Met Ser Ser Gln Asp Met Ala Ser Glu Glu Leu Leu  
 405 410 415  
 Gln Lys Asp Ala Glu Ile Arg Arg Glu Ala Glu Arg Gln His Ile Ile  
 420 425 430  
 Val Glu Glu Gln Gly Pro Arg Ile Arg Arg Thr His Lys Gly Glu Glu  
 435 440 445  
 Phe Ile Glu Asp Glu Asn Gln Thr Val Ala Ser Glu Pro Val Phe Ser  
 450 455 460  
 Val Val Pro Thr Arg Arg Ser Leu Ala Asp Val Asp Ala Ser Pro Ser  
 465 470 475 480  
 Asn Gln Ser Pro Ala Ser Pro Gln Ala His Gln Gln Pro Asp Asp Ser  
 485 490 495  
 Ala Pro Arg Ala Ala Lys Pro Leu Pro Ile Asp Thr Lys Ala Lys Asp  
 500 505 510  
 Thr Lys Ala Arg Asn Gly Pro Thr Val His Ser Pro Gly Ala Ala Asp  
 515 520 525  
 His Asp Gln Val Phe Pro Glu Val Ser Thr His Ile His Glu Met Leu  
 530 535 540  
 Pro Thr Gly Lys Ala Gln Ala Asp Ala Glu Ile Asp Lys Leu Leu Lys  
 545 550 555 560  
 Asp Val Glu Pro Glu Ser Pro Pro Tyr Ser Pro Lys Asp Phe Asn Asp  
 565 570 575  
 Glu Ala Ile Ile Trp Arg Gly Lys Val Val Met Asn Pro Val Ala Glu  
 580 585 590  
 Phe Ser Ser Leu Ala Lys His Val Gly Gly Ala Glu Leu Ser Asp Lys  
 595 600 605  
 Ile Pro Trp Ser Gln Leu Ala Pro Ser Thr Leu Val Val Asp Gly Arg  
 610 615 620  
 Ile Asp Ile Gln Leu Ala Ser Asn Tyr Leu Cys Gly Leu Arg Phe Ser  
 625 630 635 640  
 Ser Ser Thr Asp Val Ser Val Ile Ser Ile Ser Arg Pro Glu Ser Pro  
 645 650 655  
 Lys Asp Gln Lys Gly Phe Asp Lys Leu Phe Asn Tyr Phe Gln Asp Arg  
 660 665 670  
 Lys Arg Tyr Gly Val Val Gly Lys His Pro Leu Pro Ala Val Lys Asp  
 675 680 685  
 Thr Tyr Val Ile Pro Ile Glu Ala Gly Ser Thr Lys Lys Pro Glu Phe  
 690 695 700  
 Ile Glu Leu Leu Glu Asn Asn Thr Leu Glu Asp Pro Thr Pro Glu Arg  
 705 710 715 720  
 Val Leu Leu Val Val Phe Ala Val Lys Thr Gly Glu Ser Asn Pro Pro  
 725 730 735  
 Ser Val Gln Leu Ser Ser His His Pro Ser Gln Glu Pro Ala Ser Phe  
 740 745 750  
 Ala Ser Pro Val Thr Val Ala Ala Thr Pro Gln Gln Gln Phe Leu  
 755 760 765  
 Thr Pro Gly Pro Arg Gln Met Ser Gln Met Ser Pro Thr Thr Pro Pro  
 770 775 780  
 Ser Ala Ile Ser Gly Ile Ile Pro Thr Leu Asn Ser Phe Ala Ser Gln  
 785 790 795 800  
 Pro Pro Gln Ser Leu Gln Pro Gln Gln Pro Gln Leu Pro Thr Gln Pro  
 805 810 815  
 Ala Ser Gln Ser Gln Gly Tyr Gln Pro Pro Gln Pro His Ser Gln Met  
 820 825 830



## 19103

Ala	Val	Thr	Gly	Met	Ala	Ala	Ala	Val	Lys	Val	Leu	Gly	Ala	Gln	Ala	
835				840				845								
Asn	Ala	Pro	Ala	Ile	Gln	Gln	Leu	Leu	Gln	Gln	Ala	Pro	Asn	Ala	Asp	
850				855				860								
Val	Ser	Gln	Leu	Gly	Val	Val	His	Gly	Ile	Ile	Ser	Arg	Gln	Pro	Glu	
865				870				875				880				
Ala	Ala	Ser	Asn	Tyr	Glu	Met	Leu	Met	Gln	Ala	Leu	Tyr	Gln	Ala	Thr	
885				890				895								
Thr	Asn	Gly	His	Gly	Pro	Gln	Gln	Asn	Ala	Ser						
900				905												

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<210> 42596
<211> 63
<212> PRT
<213> A.fumigatus
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<400> 42596
Ile Thr His Val His Leu Ala Glu Glu Val Ile Gly Gln Ala Ala Ile
1          5          10          15
Val Ile Lys Thr Thr Gln Ile Gly Ser Ala Asp Val Ala Asn Leu Gln
          20          25          30
Leu Leu Met Thr Gly Trp Thr Gly Gly Ile Leu Glu Ile Leu Glu Phe
          35          40          45
Ala Leu Thr Gly Leu Phe Leu Val Phe Gly Gly Thr Asn Leu Val
          50          55          60

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<210> 42597
<211> 143
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (91)
<223> Identity of amino acid sequences at the above locations are unknown.
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<400>	42597														
Glu	Arg	Ser	Arg	Ser	Tyr	Arg	Asn	Arg	Asn	Ser	Lys	Leu	Leu	Asp	Cys
1				5					10					15	
Lys	Asn	Asp	Val	Met	Val	Val	Arg	Ser	Phe	Phe	Pro	Leu	Leu	Ser	Leu
			20					25						30	
Leu	Ile	Ala	Leu	Ala	Thr	Phe	Thr	Ser	Ala	Ser	Ser	Asp	Tyr	His	Glu
		35					40					45			
Ala	Phe	Val	Leu	Gln	Pro	Leu	Pro	Gln	Ser	Ser	Leu	Leu	Ala	Ser	Phe
	50					55					60				
Asn	Phe	Arg	Gly	Asn	Thr	Ser	Gln	Glu	Ala	Phe	Asn	Gln	Arg	His	Phe
65					70					75					80
Arg	Tyr	Phe	Pro	Arg	Ala	Leu	Gly	Gln	Ile	Xaa	Gln	His	Thr	His	Thr
				85					90					95	
Lys	Glu	Leu	His	Ile	Arg	Phe	Thr	Thr	Gly	Arg	Trp	Asp	Ala	Glu	Ser
			100					105					110		
Trp	Gly	Thr	Arg	Pro	Trp	Asn	Gly	Thr	Lys	Glu	Gly	Asn	Thr	Gly	Val
		115					120					125			
Glu	Leu	Trp	Ala	Trp	Ile	Asp	Ala	Pro	Asp	Ser	Glu	Arg	Trp	Val	
	130					135					140				

&lt;210&gt; 42598

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42598

Phe Ser Ser Ser Ala Phe Ala Arg Trp Ile Ser Leu Thr Gln Ser Leu  
 1 5 10 15  
 Ser Gly Leu Phe Cys Ala Ser Leu Asn Phe Ile Asp Ser Thr Arg Thr  
 20 25 30  
 Thr Arg Pro Val Val Ser Phe Glu Pro Thr Gly Asn His Tyr Pro Ser  
 35 40 45  
 Ser Asp Leu His Leu Leu His Gly Thr Leu Pro Gly Glu Val Val Cys  
 50 55 60  
 Thr Glu Asn Leu Thr Pro Phe Leu Lys Leu Leu Pro Cys Lys Gly Asn  
 65 70 75 80  
 Ala Gly Val Ser Ser Leu Leu Asp Gly His Lys Leu Phe Asp Ala Ser  
 85 90 95  
 Trp Gln Ser Met Ser Val Asp Val Arg Pro Val Cys Pro Gln Gly Gly  
 100 105 110  
 Lys Cys Leu Met Gln Ile Glu Gln Thr Val Asp Ile Val Leu Asp Ile  
 115 120 125  
 Glu Arg Ser Lys Arg Pro Arg Gly Glu Leu Ser Lys  
 130 135 140

&lt;210&gt; 42599

&lt;211&gt; 316

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42599

Leu Ile Leu Leu Arg Gln Leu Val Arg Tyr Leu His Asp Leu His Asp  
 1 5 10 15  
 Gly Pro Ala Met Asn Cys Pro Ser Arg Thr Asp Asp Thr Leu Lys His  
 20 25 30  
 Pro Gly Trp Asn Gln Asn Pro Pro Ala Leu Asn Ala Asp Met Thr Thr  
 35 40 45  
 Arg Asn Asp Leu Asn Gly Ile Ala Asn Ser Lys Val His Arg Arg His  
 50 55 60  
 Ala Ser Gly Met Gly Gly Val Ser Gly Glu Gly Ile Met Glu Thr Asp  
 65 70 75 80  
 Ser Gln Ser His Asn Gln Asp Cys Thr Glu Ser Glu Ile Val Glu Thr  
 85 90 95  
 Lys Thr Leu Gly Gly Val Ile Ala Ala Ser Gly Tyr Glu Asn Pro  
 100 105 110  
 Gln Ser His Arg Glu Ser Pro Arg Arg Tyr Thr Asn Leu Thr Thr Ile  
 115 120 125  
 Ile Thr Ser His Ile Ile His Val Arg Gln Ser Leu Ala Lys Phe Ala  
 130 135 140  
 Arg Phe Val Gly Pro Gly Phe Leu Ile Ala Val Ala Tyr Ile Asp Pro  
 145 150 155 160  
 Gly Asn Tyr Ala Thr Asp Val Ala Ala Gly Ala Glu Phe Arg Tyr Ala  
 165 170 175  
 Leu Leu Phe Ile Val Leu Leu Ser Asn Leu Phe Ala Ile Phe Leu Gln  
 180 185 190  
 Ser Leu Cys Ile Lys Leu Gly Ser Val Thr Gly Leu Asn Leu Ala Glu

## 19105

195	200	205
Asn Cys Arg Glu His Leu Pro Lys Trp Leu Val Tyr Ile Leu Tyr Phe		
210	215	220
Leu Ser Glu Ala Ala Ile Val Ala Thr Asp Ile Ala Glu Val Trp Pro		
225	230	235
Ala Tyr Ser Thr Val Leu Ser Phe Pro Phe Arg Ala Leu Thr Asp Leu		
	245	250
Thr Ser Arg Ser Trp Val Gln Leu Leu Leu Ser Thr Ser Phe Leu Lys		
	260	265
Ser Arg Trp Leu Leu Asp Val Pro Ser Arg Ser Pro Met Phe Ser Ser		
	275	280
Phe Ser Phe Ser Ile Asp Pro Thr Asp Pro Ser Gly Gly Cys Asp Phe		
	290	295
Leu Asn Thr Leu Leu Trp His Trp Ser Trp Gly Trp		
305	310	315

&lt;210&gt; 42600

&lt;211&gt; 297

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42600

Tyr Ser Pro Lys Gly Glu Trp Ile Pro Val Gln Ala Met Leu Arg Pro		
1	5	10
Met Val Leu Thr Glu Ala Ile Phe Gln Ser Ser Leu Tyr Gln Ser Cys		
	20	25
Gly Ile Leu Gly Ala Thr Val Met Pro His Ser Ile Phe Leu Gly Ser		
	35	40
Gly Val Val Gln Pro Arg Leu Lys Glu Phe Asp Val Thr Lys Gly Tyr		
	50	55
Val Asp Pro Ala Val Cys Leu Gly Ser Thr Asp Gly Lys Val Glu Tyr		
	65	70
Arg Pro Ser Ile His Ala Ile Arg Gly Cys Met Lys Tyr Ser Ile Ile		
	85	90
Glu Leu Ser Leu Ser Leu Phe Thr Phe Ala Leu Phe Val Asn Ser Ser		
	100	105
Ile Leu Ile Val Ala Gly Ala Ser Leu Tyr Gly Ser Ser Gly Ala Asp		
	115	120
Asn Ala Asp Leu Trp Gly Ile His Asp Leu Leu Ser Ser Ser Ile Ala		
	130	135
Pro Val Ala Gly Leu Ile Phe Ala Leu Ala Leu Leu Leu Ser Gly Ile		
	145	150
Ser Ala Gly Ile Val Cys Thr Met Ala Gly Gln Met Val Ser Glu Gly		
	165	170
Met Leu Lys Trp Thr Ile Arg Pro Trp Leu Arg Arg Leu Ile Thr Arg		
	180	185
Ser Ile Ser Ile Ile Pro Ser Ile Ile Ile Ala Ala Ala Val Gly Lys		
	195	200
Asp Gly Leu Asp Lys Thr Leu Thr Ala Ser Gln Val Val Leu Ser Val		
	210	215
Ile Leu Pro Phe Val Thr Ala Pro Leu Ile Tyr Phe Thr Cys Arg Asn		
	225	230
Arg Tyr Met Thr Val Pro Ala Asp Arg Val Gly Gly Glu Glu Ala Asp		
	245	250
Asn Leu Ser Glu Gly Val Lys Met Arg Asn Asn Phe Leu Val Ser Ala		
	260	265
		270

## 19106

Leu Ala Leu Leu Ile Trp Leu Val Ile Ala Val Met Asn Val Ala Leu  
 275 280 285  
 Leu Val Leu Val Gly Leu Gly Lys Ala  
 290 295

<210> 42601  
 <211> 476  
 <212> PRT  
 <213> A.fumigatus

<400> 42601  
 His Pro Ser Gln Trp Leu Lys Thr Gln Asn Leu Ile Pro Ile Leu Leu  
 1 5 10 15  
 Ser Phe Leu Thr Pro Glu His Pro Ala Ser Val Gln Thr Ser Ala Gly  
 20 25 30  
 Asp Phe Leu Lys Ala Ile Ile Thr Ile Ser Ala Asn Ala Thr Gln Asn  
 35 40 45  
 Asp Gln Ser Cys Ile Gly Pro Asn Ser Leu Thr Arg Gln Leu Val Ser  
 50 55 60  
 Ala Gln Cys Val Glu Thr Leu Ile Thr Ala Met Leu Gln Gly Gly Asn  
 65 70 75 80  
 Pro Leu Thr Val Gly Val Gly Ile Val Ile Glu Val Ile Arg Lys Asn  
 85 90 95  
 Asn Ser Asp Tyr Asp Pro Glu Thr Ile Gly Gly Pro Asp Ser Pro Pro  
 100 105 110  
 Thr Thr Tyr Asp Pro Ile Tyr Leu Gly Asn Leu Leu Arg Ile Phe Ala  
 115 120 125  
 Lys His Ile Pro Asp Phe Met Ala Leu Ile Arg Ser Ser Lys His Thr  
 130 135 140  
 Ile Ser Asp Asn Gly Lys Val Arg Ser Val Glu Arg Gly Gln Leu Ser  
 145 150 155 160  
 Ser Ala Trp Gly Ala Lys Ile Glu Pro Leu Gly Phe Asp Arg Phe Lys  
 165 170 175  
 Thr Cys Glu Leu Met Ala Glu Leu Leu His Cys Ser Asn Met Gly Leu  
 180 185 190  
 Leu Asn Glu Pro Gly Ser Asp Glu Tyr Val Arg Gln Arg Asp Ala Glu  
 195 200 205  
 Arg Glu Arg Leu Phe Arg Glu Gly Ala Phe Asn Pro His Lys Glu Leu  
 210 215 220  
 Ser Ala Leu Glu Gly Asn Asp Ser Thr Thr Asp Phe Ile Asn Gly Ser  
 225 230 235 240  
 Val Ile Asp Cys Gly Ser Pro Glu Asp Ser Arg Val Ile Glu Ile Leu  
 245 250 255  
 Asn Ala Gly Glu Asp Gly Phe Glu Asp Val Asp Ser Ser Gly Val Leu  
 260 265 270  
 Val Asp Lys Glu Lys Leu Ala Glu Arg Lys Glu Ser Asp Ser Gln Gln  
 275 280 285  
 Thr Glu Pro Val Val Gly Asp Lys Ser Arg Thr Ser Ala Thr Thr Glu  
 290 295 300  
 Asp Asp Val Lys His Ala Gly Glu Ala Asn Asp His Glu Glu Ala Lys  
 305 310 315 320  
 Met Asp Thr Lys Glu Glu Asp Ser Ser Asp Lys Asp Leu Pro Ser Thr  
 325 330 335  
 Val Ser Asp Leu Thr Asp Gln Leu Tyr Ala Met Asp Leu Gly Asp Gln  
 340 345 350  
 Trp Ala Ser Lys Gly Ala Thr Ala Gln Glu Asp Ile Gly Lys Ser Glu

355 360 365  
 Thr Leu Pro Ser Asn Asp Ser Asn Thr Pro Ser Ala Thr Gln Met Pro  
 370 375 380  
 Ser Asn Pro Glu Ala Val Pro Glu Pro Leu Phe Ser Lys Thr Gln Gln  
 385 390 395 400  
 Gln Lys Glu Pro Val Thr Ser Thr Pro Asp Pro Ala Asp Gln Ala Gly  
 405 410 415  
 Asn Ala Gln Asp Ser Thr Asp His Gly Ser Thr Ser Val Pro Ser Asn  
 420 425 430  
 Thr Asp Ala Glu Asp Leu Arg Ala His Ile Asn Ser Tyr Val Gln Leu  
 435 440 445  
 Asp Pro Asn Gly Gln Pro Val Val Gly Asp Tyr Leu Lys Ile Met Phe  
 450 455 460  
 Val Lys Asn Gln Val Val Pro Thr Ile Leu Val Ser  
 465 470 475

&lt;210&gt; 42602

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42602

Leu Gly Thr Leu Leu Leu Cys Gly His Gln Gly His Ser Val Ala Met  
 1 5 10 15  
 His Ser Phe Cys Gly Val Ile Leu Asp Leu Glu Ala Asn Met Leu Cys  
 20 25 30  
 Leu Thr Ser Leu Gln Leu Ile Ser Glu Ile Lys Ala Ser Gly Leu Arg  
 35 40 45  
 Gly Arg Gly Gly Ala Gly Phe Pro Ser Gly Leu Lys Tyr Val Ser Phe  
 50 55 60  
 Pro Pro Cys Glu Ile Arg  
 65 70

&lt;210&gt; 42603

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42603

Ser Phe Met Asn Phe Lys Asp Trp Asp Lys Asp Pro Arg Pro Arg Tyr  
 1 5 10 15  
 Leu Val Val Asn Ala Asp Glu Gly Glu Pro Gly Thr Cys Lys Asp Arg  
 20 25 30  
 Glu Ile Met Arg Lys Asp Pro His Lys Leu Ile Glu Gly Cys Leu Val  
 35 40 45  
 Val Gly Arg Ala Met Asn Ala Thr Ala Tyr Ile Tyr Ile Arg Gly  
 50 55 60  
 Glu Phe Tyr His Glu Ala Thr Val Leu Gln Arg Ala Ile Asn Glu Ala  
 65 70 75 80  
 Tyr Gln Ala Gly Leu Ile Gly Lys Asn Ala Cys Gly Thr Gly Tyr Asp  
 85 90 95  
 Phe Asp Val Tyr Ile His Arg Gly Met Gly Ala Tyr Ile Cys Gly Glu  
 100 105 110  
 Glu Thr Ser Leu Ile Glu Ser Ile Glu Gly Lys Ala Gly Lys Pro Arg  
 115 120 125  
 Leu Lys Pro Pro Phe Pro Ala Ala Val Gly Leu Phe Gly Cys Pro Ser

## 19108

130		135		140
Thr Val Thr Asn Val Glu Thr Val Ala Val Cys Pro Thr Ile Met Arg				
145		150		155
Arg Gly Ala Ser Trp Phe Ser Ser Phe Gly Ala Glu Arg Asn Ser Gly				160
	165		170	175
Thr Lys Leu Phe Cys Ile Ser Gly His Val Asn Asn Pro Cys Thr Val				
	180		185	190
Glu Glu Glu Met Ser Ile Pro Leu Arg Glu Leu Ile Asp Arg His Cys				
	195		200	205
Gly Gly Val Arg Gly Gly Trp Asp Asn Leu Leu Ala Val Ile Pro Gly				
	210		215	220
Gly Ser Ser Thr Pro Val Ile Pro Lys Ser Val Cys Asp Asn Gln Ile				
225		230		235
Met Asp Phe Asp Ser Leu Lys Asp Ser Gln Ser Gly Leu Gly Thr Ala				
	245		250	255
Ala Val Ile Val Met Asp Lys Ser Thr Asp Ile Val Arg Ala Ile Ser				
	260		265	270
Arg Leu Ser Lys Phe Tyr Lys His Glu Ser Cys Gly Gln Val Phe				
	275		280	285

&lt;210&gt; 42604

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42604

Phe Met Met Phe Trp Arg Phe Gly Gly Tyr Ala Ser Val Ser Thr Ile				
1		5		10
Asp Thr Leu Leu Asp Lys Pro Asp Val Ser Leu Glu Glu Leu Leu Asp				
	20		25	30
Glu Ser Glu Leu Ile Gln Glu Leu Lys Gln His Asn Thr Lys Leu Ile				
	35		40	45
Glu Tyr Leu Arg Glu Asp Asn Val Leu Lys Arg Leu Met Asp Tyr Val				
	50		55	60
Ile Ala Pro Ser Leu Val Asn Glu Asp Asp Asp Asp Glu Asp Asp				
65		70		75
Ser Asn Asp Ser Asn Ala Pro Gln Thr Asn Gln Asp Ala Ser Thr Gly				
	85		90	95
Gly Glu Lys Lys Val Asp Pro Leu Lys Glu Ile Leu Asp Pro Glu Asp				
	100		105	110
Leu Asp Arg Ala Glu Lys Asn Arg Leu Lys His Ala Tyr Ile Ala Cys				
	115		120	125
Glu Ile Leu Ser Ser Glu Thr Trp Ser Ile Leu Glu Ser Ile Met Ala				
	130		135	140
Asn Arg Ser Tyr Leu Arg Asp Phe Trp Gly Phe Val Arg Arg Arg Pro				
145		150		155
Ser Leu Asp Pro Ile Gln Ala Gly Tyr Phe Thr Lys Val Asn Glu Thr				
	165		170	175
Leu Phe Asp Arg Lys Thr Ser Glu Met Leu Glu Phe Phe Lys Ser Leu				
	180		185	190
Glu Gly Ile Val Pro Ala Ile Leu Gln His Val Asp Asn Pro Met Val				
	195		200	205
Met Asp Leu Leu Leu Lys Ile Ile Ser Leu Glu Lys Ala Glu Gly Gly				
	210		215	220
Gln Gly Ile Val Asp Val Cys Ser Ser Glu Asn Asn Pro Leu Leu Ser				
225		230		235
				240

## 19109

Met Val Gln Thr Asp Thr His His Ser Gly  
245 250

<210> 42605  
<211> 239  
<212> PRT  
<213> A.fumigatus

<400> 42605  
Asp Phe Phe Phe Arg Phe Pro Trp Asn Asn Phe Leu His Asn Val Val  
1 5 10 15  
Tyr Asp Val Val Gln Gln Val Phe Asn Gly Pro Met Glu Arg Gly Tyr  
20 25 30  
Asn Arg Cys Leu Ala Ile Asp Leu Phe Glu Thr Gly Arg Ile Thr Gln  
35 40 45  
Ala Ile Val Ala Gly Gln Lys Arg Ser Asp Glu Ala Gln Arg Thr Gln  
50 55 60  
Arg Ile Arg Leu Gly Tyr Met Gly His Leu Thr Leu Ile Ala Glu Glu  
65 70 75 80  
Val Val Lys Phe Ser Glu Arg His Pro Pro Glu Leu Leu Ser Pro Thr  
85 90 95  
Val Met Glu Ser Val Leu Asn Pro Glu Trp Ile Asp Tyr Val Glu Gln  
100 105 110  
Thr Leu Ser Glu Thr Arg Glu Arg Asp Asn Ala Ile Leu Gly Gly Val  
115 120 125  
Arg Pro Asp Met Ala Ile Gly His Arg Gln Gly Leu Leu Asn Gln Gly  
130 135 140  
Gln Ser Met Asn Thr Ser Ser Ala Leu Ala Glu Ala Gly Leu Asn Gly  
145 150 155 160  
Gly Ile Ser Asn Ser Gly Phe Gln Asn Phe Asp Met Asn Gln Gly Ser  
165 170 175  
Val Ser Gly Gly Ala Phe Gly Leu Gly Ser Gly Ser Ser Ser Leu Leu  
180 185 190  
Ser Gly Phe Gly Ser Ser Ser Asp Asp Glu Asp Glu Glu Met Asp Glu  
195 200 205  
Gln Asp Asp Lys Asn Leu Thr Glu Gln Ser Ala Glu Gly Gly Ser Glu  
210 215 220  
Asn Val Ser Asp Asp Leu Phe Thr Asp Val Asp Met Asp Asp Ala  
225 230 235

<210> 42606  
<211> 90  
<212> PRT  
<213> A.fumigatus

<400> 42606  
Val Thr Gln Leu Ser Gly His Cys Ser Ser Pro Asp Asp Leu Thr His  
1 5 10 15  
Ala Asp Pro Leu Ala Pro Arg Ile Phe Ile Val Asp Ser Ile Ser Phe  
20 25 30  
Ala Val Thr Gln Ala Thr Ala His Ala Asp Val Phe Met Asn Leu Gly  
35 40 45  
Ile Tyr Glu Leu Asn Glu Ser Thr Tyr Thr Asn Ser Ser Ser Thr Ser  
50 55 60  
Cys Ser Pro Gln Pro Arg Thr Ile Ser Arg Thr Thr Ala Thr Gly Ser  
65 70 75 80

## 19110

Thr Ala Cys Arg Ser Glu Thr Ala Ser Cys  
85 90

<210> 42607

<211> 152

<212> PRT

<213> A.fumigatus

<400> 42607

Ser Ser Thr Thr Val Ile Ile Pro Gln Leu Thr Phe His Leu Ser Pro  
1 5 10 15  
Arg Asp Asn Pro Ser Ile Pro Arg Gln Phe Pro Ala Thr Gly Pro Ser  
20 25 30  
Thr Thr Met Ile Ser Arg Ala Ala Ala Pro Ser Pro Ser Ser Ile Ala  
35 40 45  
Asn Leu Ser Ser Arg Ser Leu Arg Ile Gln Gly Ser Ala Ala Arg Ser  
50 55 60  
Phe Ala Ser Val Gln Asp Thr Thr His Pro Val Arg Gln His Gly Gly  
65 70 75 80  
Leu Arg Asp Gln Asp Arg Ile Phe Thr Asn Leu Tyr Gly His His Gly  
85 90 95  
Thr Asp Leu Lys Ser Ala Met Lys Phe Gly Asp Trp His Arg Thr Lys  
100 105 110  
Asp Ile Val Leu Lys Gly His Asp Trp Val Arg Phe Ser Phe Ala Ala  
115 120 125  
Thr Lys Asp Ile Leu Trp Pro Cys Thr Arg Phe Ala Gly Leu Tyr Trp  
130 135 140  
Thr Leu Arg Leu Ile Cys Cys Ala  
145 150

<210> 42608

<211> 73

<212> PRT

<213> A.fumigatus

<400> 42608

Ser Pro Pro Ser Pro Pro Pro Leu Val Cys Ser Ala Ala Pro Ala Pro  
1 5 10 15  
Ser Pro Met Leu Arg Pro Ser Pro Ser Ala Leu Pro Ser Cys Ala Val  
20 25 30  
Glu Pro Ala Gly Ser Pro Arg Ser Ala Pro Ser Ala Thr Leu Val Gln  
35 40 45  
Ser Cys Ser Val Phe Pro Val Thr Ser Thr Ile Pro Ala Arg Ser Arg  
50 55 60  
Arg Arg Cys Pro Ser Leu Cys Val Ser  
65 70

<210> 42609

<211> 91

<212> PRT

<213> A.fumigatus

<400> 42609

Val Val Gly Ser Ala Ile Ala Leu Asn Leu Leu Leu Lys Ile Pro Leu  
1 5 10 15  
Val Ala Gly Cys Ala Ile Thr Leu Ala Asp Val Leu Phe Leu Leu Ile



[illegible]

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<210> 42610
<211> 172
<212> PRT
<213> A.fumigatus
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<210> 42611
<211> 78
<212> PRT
<213> A.fumigatus
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<400> 42611															
Pro	Val	Ser	Ile	Ile	Ala	Ser	Ala	Thr	Leu	Ser	Ala	Phe	Leu	Phe	Ser
1				5					10					15	
Val	Phe	Val	Asp	Ser	Leu	Gln	Ser	Ser	Val	Ser	Pro	Leu	Tyr	Trp	Thr
			20					25					30		
Leu	Tyr	Asp	Asn	Ser	Ala	Glu	Ile	Asn	Ser	Leu	Leu	Phe	Phe	Phe	
		35					40					45			
Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Ala	Arg	Ser	Ile	Leu	Ser
	50					55					60				
Lys	Phe	Asp	Ile	Pro	Arg	Leu	Thr	Ala	Leu	Gly	Leu	Lys	Ser		
65					70					75					

<210> 42612  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 42612  
 Cys Val Asn Lys Thr Asn Asp Arg Asp Leu Tyr Leu Trp Ser Ser Ser  
 1 5 10 15  
 Ile Leu Val Ser Arg Ala Phe Ser Ala Lys Val Leu Ala Glu Pro Val  
 20 25 30  
 Thr Asp Val Glu Leu Pro Glu Asp Gly Val Ser Val Leu Leu Pro Cys  
 35 40 45  
 Ile Asp Leu Met Asn His Arg Pro Leu Ala Lys Val Glu Trp Arg Ala  
 50 55 60  
 Gly Lys Gln Asp Val Ala Phe Val Val Leu Glu Asp Val Ala Ser Gly  
 65 70 75 80  
 Gln Glu Ile Ser Asn Asn Tyr Gly Pro Arg Asn Asn Glu Gln Cys Lys  
 85 90 95  
 Ser Gln Val Glu  
 100

<210> 42613  
 <211> 293  
 <212> PRT  
 <213> A.fumigatus

<400> 42613  
 Glu Asp Leu Ala Ala Thr Leu Met Leu Val Glu Leu Gly Gln Thr Gly  
 1 5 10 15  
 Asp Gly Ala Asp Asp Val Gly Gly Leu Val His Asp Asp Asn Gly Gly  
 20 25 30  
 Ser Pro Gln Thr Gly Leu Gly Val Leu Glu Gly Val Glu Ile His Asp  
 35 40 45  
 Leu Val Ile Ala Asp Gly Leu Gly Asp Asp Gly Ser Gly Gly Ala Thr  
 50 55 60  
 Gly Asp Asp Gly Glu Glu Val Val Pro Ala Ala Thr His Thr Thr Ala  
 65 70 75 80  
 Val Thr Val Asp Gln Leu Thr Gln Arg Asp Gly His Leu Leu Leu Asp  
 85 90 95  
 Arg Ala Gly Ile Val Asp Val Thr Gly Asn Thr Glu Gln Leu Cys Thr  
 100 105 110  
 Arg Val Ala Leu Gly Ala Glu Arg Gly Glu Pro Ala Gly Ser Thr Ala  
 115 120 125  
 His Asp Gly Arg Ala Asp Gly Asp Gly Leu Asn Ile Gly Asp Gly Ala  
 130 135 140  
 Gly Ala Ala Glu Gln Thr Asn Gly Gly Gly Glu Gly Gly Leu Gln Ala  
 145 150 155 160  
 Arg Leu Ala Gly Leu Ala Leu Asp Arg Leu Asp Glu Arg Gly Leu Leu  
 165 170 175  
 Thr Thr Asp Ile Gly Thr His Ser Ala Val Asp Val Asn Ile Glu Val  
 180 185 190  
 Val Ala Cys Ala Ala Gly Val Leu Thr Asp Glu Thr Ser Leu Val Gly  
 195 200 205  
 Phe Val Asp Gly Pro Leu Glu Asp Gly Cys Phe Val Val Glu Phe Thr  
 210 215 220  
 Thr Asp Val Asn Val Gly Gly Gly Gly Val His Arg Thr Thr Asp Asn

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85																

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<210> 42614
<211> 76
<212> PRT
<213> A.fumigatus
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<210> 42615
<211> 60
<212> PRT
<213> A.fumigatus
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<210> 42616
<211> 200
<212> PRT
<213> A.fumigatus
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<400> 42616  
His Pro Ala Ile Thr Lys Val Asp Asn Arg Ile Ala Ser Ile Asp Val  
1 5 10 15  
Lys Leu Ala Ser Leu Asn Ala Glu Leu Ser Thr Tyr Gln Ala Lys Ile  
20 25 30  
Ala Lys Met Arg Asp Gly Pro Gly Lys Asn Ala Leu Arg Gln Lys Ala  
35 40 45  
Leu Lys Val Leu Gln Arg Arg Lys Gln Tyr Glu Ala Gln Arg Asp Gln  
50 55 60

## 19114

Leu Ser Gln Gln Ser Trp Asn Met Glu Gln Ala Gly Met Met Gln Asp  
 65 70 75 80  
 Asn Leu Lys Asn Val Met Thr Thr Val Asp Ala Met Lys Thr Thr Thr  
 85 90 95  
 Lys Glu Leu Lys Lys Gln Tyr Gly Lys Val Asp Ile Asp Lys Ile Glu  
 100 105 110  
 Arg Met Gln Asp Glu Met Ala Asp Leu Met Asp Ile Gly Asn Glu Ile  
 115 120 125  
 Gln Glu Ser Ile Ser Arg Ala Tyr Asp Ile Pro Glu Asp Val Asp Glu  
 130 135 140  
 Ala Glu Leu Asp Ala Glu Leu Glu Ala Leu Gly Glu Glu Ser Met Phe  
 145 150 155 160  
 Glu Ser Ala Met Gly Glu Ser Ser Leu Pro Ser Phe Met Gln Asp Glu  
 165 170 175  
 Val Ala Pro Pro Gln Phe Ile Asp Glu Pro Pro Glu Gln Ala Lys Val  
 180 185 190  
 Lys Glu Pro Ala Gly Gly Leu Gly  
 195 200

&lt;210&gt; 42617

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42617

Leu Asp Thr Ile Lys Leu Ser Glu Ile Asn Ala Gly Arg Cys Pro Lys  
 1 5 10 15  
 Leu Leu His Gln Leu Thr Val Cys Ser Thr Asp Ser Gly Arg Val Leu  
 20 25 30  
 Ile Lys Leu Glu Met Asn His Ala Ile Ile Asp Gly Gly Ser Val Asp  
 35 40 45  
 Leu Leu Leu Arg Asp Leu Ala Met Ala Tyr Lys His Gln Leu Pro Glu  
 50 55 60  
 Gly Ser Gly Pro His Phe Ser Asp Tyr Ile Lys Phe Val Arg Gly Lys  
 65 70 75 80  
 Ser Gln Ser Gln Ala Leu Ser His Trp Arg Gln Tyr Leu Ser Asp Ala  
 85 90 95  
 His Pro Cys His Leu Thr Phe Ser Glu Gly Thr Gly Gly Ser Arg Gln  
 100 105 110  
 Leu Gly Ser Val Met Val Pro Phe Ser Arg Tyr Ser Glu Leu Gln Gln  
 115 120 125  
 Phe Cys Glu Lys Asn Ser Val Thr Leu Ala Asn Leu Thr Leu Ala Ala  
 130 135 140  
 Trp Ala Ile Val Leu Gln Ser Phe Thr Gly Ser Asn Asp Val Cys Phe  
 145 150 155 160  
 Gly Tyr Pro Ser Ala Gly Arg Asp Ala Pro Val Pro Gly Ile Gln Asp  
 165 170 175  
 Ala Val Gly Ile Phe Leu Asn Met Leu Cys Cys Arg Val Arg Val Leu  
 180 185 190  
 Thr Arg Gly Arg Leu Cys Trp Arg Phe Gln Arg Gln Cys Lys Met Thr  
 195 200 205  
 Ile Ser Arg Thr Phe His Thr Arg Ile Val Pro Ser Gln Val Phe Ser  
 210 215 220  
 Met Asn Leu Gly Lys Arg Ser Cys Leu Thr Arg Gln Ser Arg Phe Lys  
 225 230 235 240  
 Thr Thr Thr Leu Ser Gln Lys Asn Leu Glu Met Thr Cys Ser Leu Leu

## 19115

Met Tyr Arg Arg Arg Met Thr Arg Gln Arg

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<210> 42618
<211> 676
<212> PRT
<213> A.fumigatus
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<220>  
<221> UNSURE  
<222> (54)

<223> Identity of amino acid sequences at the above locations are unknown.

<400>	42618															
Arg 1	Cys	Ser	Ala	Leu 5	Arg	Ala	Lys	Thr	Gly 10	Leu	Thr	Leu	Thr	Met 15	Ala	
Asp	Val	Ile	Lys 20	Ile	Pro	Val	Leu	Glu 25	Asp	Met	Leu	Ala	Ala 30	Ile	Ser	
Ala	Ser	His 35	Ser	Ser	Ser	Val	Leu 40	Glu	Pro	Asp	Phe	Pro 45	Ala	Asp	Ser	
Asn 50	Asn	Glu	Arg	Leu	Xaa 55	Glu	Leu	Pro	Arg	Leu	Val 60	Glu	Leu	Glu	Arg	
Asn 65	Pro	Pro	Pro	Pro	Glu 70	Ile	Ser	Leu	Leu	Lys 75	Thr	Val	Pro	Leu	Asn 80	
Asp	Ser	Ala	Leu	Gln 85	Asp	Gly	Ile	Cys	Pro 90	Lys	Ile	Gly	Val	Phe 95	Lys	
Gly	Gly	Ile	Ala 100	Asp	Val	Leu	Pro	Val 105	Thr	Asp	Phe	Gln	Ala 110	Met	Ser	
Ile	Thr	Ala 115	Thr	Leu	Phe	Lys	Ser	Arg 120	Trp	Met	Leu	Asn 125	Tyr	Phe	Phe	
Phe	Asp	Gly	Arg	Gly	Ser	Leu	Asp 135	Leu	Arg	Arg	Leu	Arg 140	Glu	Ser	Leu	
Leu 145	Arg	Val	Val	Asp	Ala 150	Phe	Asp	Ile	Leu	Arg	Thr	Val	Phe	Val	Cys 160	
Phe	Asn	Gly	Gln	Phe 165	Phe	Gln	Val	Val 170	Leu	Arg	Lys	Ile	Arg	Pro 175	Asn	
Ile	Phe	Val	His 180	Glu	Thr	Glu	Lys	Asn 185	Leu	Asp	Glu	Tyr	Thr	Glu	Tyr	
Leu	Gln	Gln	Gln 195	Asp	Arg	Glu	Gln	Glu 200	Ala	Arg	Gln	Gly	Glu	Gln	Tyr	
Val	Lys	Phe	Tyr	Ile	Val	Lys 215	Lys	Lys	Gly	Ser	Asn 220	His	His	Arg	Ile	
Leu 225	Ile	Arg	Met	Ser	His 230	Ala	Gln	Phe	Asp	Gly	Leu	Cys	Leu	Pro	Thr	
Ile	Met	Ser	Ala	Ile	Lys 245	Leu	Gly	Tyr	Glu	Gly	Ser	Thr	Leu	Pro 255	Pro	
Ala	Pro	Ser	Phe 260	Ala	Asn	Tyr	Met	Arg 265	Met	Leu	Ser	Gly	Ala	Ile	Thr	
Pro	Asp	His 275	Tyr	Gln	His	Trp	Thr	Asn 280	Leu	Leu	Lys	Gly	Ser	Lys	Met	
Thr	Gln	Val	Ile	Arg	Arg	Thr	Glu	Glu 295	Asn	Thr	Tyr	Arg	Tyr	Ile	Gly	
Ala 305	Phe	Arg	Glu	Gln	Arg	Lys	Thr	Leu	Glu	Ile	Gln	Pro	Ser	Val	Leu	
Glu	Asn	Val	Thr	Ile	Ala	Thr	Val	Met	Gln	Ala	Ala	Trp	Ala	Val	Thr	

## 19116

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          325          330          335
Leu Ala Lys Leu Ser Ala Gln Ser Asp Val Val Phe Gly Leu Thr Ile
          340          345          350
Ser Gly Arg Asn Thr Ser Ile Pro Gly Ile Glu Asn Thr Val Gly Pro
          355          360          365
Cys Leu Asn Val Ile Pro Ile Arg Val Thr Phe Lys Glu Gly Trp Thr
          370          375          380
Gly Val Asp Leu Phe Arg Tyr Leu Gln Asp Gln Gln Ile Ala Asn Met
385          390          395          400
Pro Phe Glu Ala Leu Gly Phe Thr Glu Ile Ile Arg Arg Cys Thr Asp
          405          410          415
Trp Pro Ser Ser Thr Tyr Phe Thr Thr Ser Val Phe His Gln Asn Val
          420          425          430
Glu Tyr Glu Gly Gln Met Gln Leu Asp Asn Thr Thr Tyr Arg Met Gly
          435          440          445
Gly Ala Gly Val Val Asp Asn Phe Thr Asp Met Thr Leu Phe Ser Lys
          450          455          460
Ser Ser Ser Asp Gly Lys Leu Gly Val Ser Leu Gly Tyr Ser Asp Lys
465          470          475          480
Gly Pro Ile Gly Pro Lys Phe Ala Ala Lys Val Leu Ser Met Val Cys
          485          490          495
Asp Thr Val Gln Ser Leu Leu Ala Asn Ser Arg Val Gly Leu Pro Ser
          500          505          510
Pro Ser Met Leu Arg Ser Leu Pro Cys Gln Ser Val His Asp Val Pro
          515          520          525
Gly Met Thr Asp Glu Met Phe Leu Ser Thr His Leu Lys Asp Arg Ser
          530          535          540
Ile Ser Asp Ile Leu Val His Ser Asp Val Val Thr Gln Ala Trp Gln
545          550          555          560
Gln Val Leu Pro Arg Asn Asn Ala Asp Glu Pro Gln Ser Ser Phe Gln
          565          570          575
Leu Asp Ser Ser Phe Phe Glu Leu Gly Gly Asp Val Phe Asp Met Ala
          580          585          590
Gln Val Val Trp Leu Leu Glu Gln Glu Gly Leu Gln Val His Ile Glu
          595          600          605
Asp Leu Leu Glu His Pro Thr Phe Leu Gly Gln Met Ala Val Leu Thr
610          615          620
Leu His Asn Ser Arg Thr Ser Asp Ser Met Glu Glu Ile Val Pro Val
625          630          635          640
Asp Glu Ile Pro Leu Pro Ala Ala Arg Thr Gly Thr Ser Ser Ser Leu
          645          650          655
Gly Lys Ala Leu Thr Leu Ala Lys Lys Val Thr Arg Trp Ser Ala Leu
          660          665          670
Ser Ala Arg Gly
          675

```

&lt;210&gt; 42619

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42619

```

Ser Leu Val Leu Ile Ile Phe Leu Tyr Tyr Phe Gly Val His Ile Leu
1          5          10          15
Trp Ser Tyr Thr Phe Ser Leu Ser Trp Ile Phe Tyr Ser His Ala Arg
          20          25          30

```

## 19117

Asp Gly Phe Gly His Ser Val Tyr Ile Gly Gly Leu Ala Ala Gly Leu  
           35                          40                          45  
 Asn Phe Ile Leu Phe Thr Cys Phe Ala Asn Met His Cys Leu Met Asn  
           50                          55                          60  
 Leu Val Cys Asn Tyr Ile Tyr  
       65                          70

&lt;210&gt; 42620

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42620

Pro Asp Tyr Leu Ser Leu Cys Leu Ile Phe Ile Gly Phe Phe Ser Arg  
 1                          5                          10                          15  
 Gln Gly Asn Thr Ser Thr Gln Ser Leu Ser Pro Asn Arg Phe His Ser  
           20                          25                          30  
 Ser Ser His Asn Ala Ala Met Ser Asn Thr Thr Gln Thr Lys Asp Lys  
           35                          40                          45  
 Pro Glu Thr Ser Glu Gln Ser Thr Gln Gln Lys Pro Thr Val Leu Glu  
       50                          55                          60  
 Glu Asp Asp Glu Phe Glu Asp Phe Pro Val Glu Gly Glu His Leu Ser  
       65                          70                          75                          80  
 Asn Pro Ala His Gly Glu Ala Gly His Ser Pro Asn Ile Ile Thr Ser  
                           85                          90                          95  
 Tyr Phe

&lt;210&gt; 42621

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42621

Phe Asp Ser Gly Gln Tyr Ser Val Val Tyr Leu Leu Asp Arg Ala Ala  
 1                          5                          10                          15  
 Thr Ser Gly Ser Ser Leu His Ser Arg Ser Ser Ser Glu Ala Pro Pro  
           20                          25                          30  
 Pro Val Glu Thr Trp Leu Ser Phe Ser Ser Ala Pro Tyr Leu Ala Ala  
           35                          40                          45  
 Thr Val Ala Val Ser Pro Pro Pro Met Ile Thr Met Ala Pro Phe Leu  
       50                          55                          60  
 Ala Ala Ser Thr Ala Ala Ser Arg Val Cys Leu Val Pro Leu Ala Lys  
       65                          70                          75                          80  
 Gly Ser Ile Ser Lys Thr Pro Gly Gly Pro Phe Gln Glu Asp Val Phe  
                           85                          90                          95  
 Ser Pro Ala Gly Trp Lys Ile Arg Val  
                           100                          105

&lt;210&gt; 42622

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42622

Gly Lys Ser Cys Ser His Gly Gly Val Ala Asp Glu Pro Thr Asn Pro

## 19118

```

1           5           10           15
Leu Ile Gln Cys Val Asp Leu Asn Ser Trp Ser Arg Ser Leu Tyr Tyr
      20           25           30
Tyr Ile Ala Gly Ser Cys His Leu Ser Leu Tyr Arg Asp Val Lys Glu
      35           40           45
Thr Asp Ser Ala Lys Ala Ala Lys His Ala Glu Leu Ala Glu Lys Tyr
      50           55           60
Phe Arg Met Ala Pro Thr Val Ala Gly Lys Lys Arg Phe Met Ala Arg
      65           70           75           80
Gln Leu Pro Phe Asp Val Phe Val Ala Arg Lys Phe Ala Lys Trp Glu
      85           90           95
Ala Arg Ala Lys Glu Trp Lys Val Ser Leu Val Asp Ala Val Gly Val
      100           105           110
Asp Pro Ile Glu Glu Met Ile Phe Phe Trp Asn Gly His Ser Arg Met
      115           120           125
Thr Asp Glu Gln Leu Gln Glu Ser Leu Gln Lys Leu Ala Trp Ser Glu
      130           135           140
Ser Ser Ala Asn Thr Thr Trp Ser Arg Glu Gly Pro Glu
      145           150           155

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&lt;210&gt; 42623

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42623

```

Ile Gly His Leu Ala Val Ala Ile Ala Cys Cys Phe Tyr Glu Val Met
1           5           10           15
Thr Asp Asn Asp His Phe Ser Arg Thr Ser Ser Thr Ser Thr Thr Gly
      20           25           30
Ser Asp Ile Asp Ser Gln Ser Glu Gln Asn Gly Phe Asp Gln Gly His
      35           40           45
Arg Glu Pro Asn Asn Ser Ala Leu Glu Lys Gln Thr Thr Ala Ala Ser
      50           55           60
Gly Leu Ser Val Leu Glu Gln Arg Ala Gln Ser Val Ile Ser Arg Ile
      65           70           75           80
Arg Ser Arg Glu Pro Gly Gln Thr Ala Arg Phe Thr His Pro Leu Ser
      85           90           95
His Ser Lys Thr Ser Glu Asp Val Ile Val Asp Phe Asp Gly Pro Asp
      100           105           110
Asp Pro Tyr Arg Pro Leu Asn Trp Gly Phe Arg Lys Lys Ala Val Thr
      115           120           125
Thr Val Leu Tyr Gly Leu Thr Thr Met Gly Met Arg Arg Pro Leu Ser
      130           135           140
Glu Met Gln Thr Thr Arg Glu Gly
      145           150

```

&lt;210&gt; 42624

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42624

```

Arg Gln Leu Phe His Gly His His Ser Ser Phe Gln Ala Phe Arg Arg
1           5           10           15
Trp Arg Gly Ser Trp His Thr Trp Asp Asn Leu Thr Thr Ile Trp Phe

```



## 19119

20 25 30  
 Trp Tyr Val Ile Val Thr Ala Ile Tyr Glu Asp Gly Lys Val Cys Leu  
 35 40 45  
 Leu Ala Phe Pro Gly Leu Gly Pro Leu Val Phe Ala Pro Leu Ser Glu  
 50 55 60  
 Val Tyr Gly Arg Lys Ser Ala Val Leu Ile Pro Tyr Phe Ile Ala Ala  
 65 70 75 80  
 Ile Phe Ser Phe Gly Thr Ala Thr Ala Lys Asp Leu Gln Thr Val Met  
 85 90 95  
 Ile Thr Arg Phe Phe Thr Gly Phe Phe Gly Ser Ala Pro Val Thr Asn  
 100 105 110  
 Thr Gly Gly Val Leu Gly Asp Ile Trp Ser Ala Glu Gln Arg Gly Ala  
 115 120 125  
 Ala Ile Val Gly Tyr Ala Met Ala Val Val Gly Gly Pro Val Leu Gly  
 130 135 140  
 Pro Ile Val Gly Gly Ala Ile Ile Gln Ser Tyr Leu Gly Trp Arg Trp  
 145 150 155 160  
 Thr Gln Tyr Val Ser Glu Ala His Thr Ala Trp  
 165 170

&lt;210&gt; 42625

&lt;211&gt; 298

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42625

Ala Thr Ala Asn Thr Gly Val Gln Ser Lys Ile Thr Gly Ile Met Met  
 1 5 10 15  
 Met Phe Phe Leu Val Met Asp Val Ile Phe Leu Asp Glu Ser Tyr Ala  
 20 25 30  
 Pro Val Leu Leu Val Tyr Lys Ala Arg Arg Leu Arg Tyr Glu Thr Gly  
 35 40 45  
 Asn Trp Ala Leu His Ala Arg His Glu Glu Trp Asp Val Thr Leu Lys  
 50 55 60  
 Glu Leu Gly Asn Lys Tyr Leu Val Arg Pro Phe Gln Leu Leu Ala Thr  
 65 70 75 80  
 Pro Ile Cys Phe Leu Val Ala Leu Tyr Ala Ser Phe Val Tyr Gly Ile  
 85 90 95  
 Leu Tyr Leu Ser Leu Ala Ser Phe Pro Val Glu Phe Gln Glu Val Arg  
 100 105 110  
 Gly Trp Ser Pro Val Val Gly Ala Leu Pro Phe Leu Ala Tyr Leu Ile  
 115 120 125  
 Gly Ile Leu Phe Gly Ala Ala Leu Asn Leu Phe Asn Gln Arg Phe Tyr  
 130 135 140  
 Ile Glu Arg Phe Lys Ala Asn Asn Asn Phe Pro Val Pro Glu Ala Arg  
 145 150 155 160  
 Leu Pro Pro Met Met Val Gly Ser Val Phe Phe Ala Ala Gly Leu Phe  
 165 170 175  
 Ile Phe Gly Trp Thr Gly Ala Lys Asn Ile His Trp Ile Gly Pro Asn  
 180 185 190  
 Ala Gly Ala Val Ser Met Gly Phe Gly Phe Phe Thr Ile Phe Gln Ala  
 195 200 205  
 Ala Leu Asn Tyr Leu Ile Asp Thr Phe Gln Gln Tyr Ala Ala Ser Ala  
 210 215 220  
 Val Ala Ala Asn Thr Phe Leu Arg Ser Leu Phe Ala Gly Cys Phe Pro  
 225 230 235 240

## 19120

Leu Phe Ala Gly Ile Met Phe Arg Lys Met Gly Val Asn Trp Ala Ala  
                   245                  250                  255  
 Ser Thr Leu Gly Phe Val Ala Val Ala Leu Ile Pro Ile Pro Tyr Leu  
                   260                  265                  270  
 Phe Tyr Ile Tyr Gly Arg Arg Ile Arg Ala Arg Gly Lys Trp Ser Gln  
                   275                  280                  285  
 Ala Ser Val Tyr Gly Pro Val Arg Gly Arg  
                   290                  295

&lt;210&gt; 42626

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42626

Ser Leu Ser Pro Val Leu Asp Cys Ser Gln Leu Gln Ser Gly Leu Ser  
 1                  5                  10                  15  
 Ile Thr Asp Ala Leu Val Ala Ser Glu Arg Leu Asn Glu Ala Glu Thr  
                   20                  25                  30  
 Ser Ala Ser Val Asp Gln His Arg Ala Gln His Asn Ser Tyr Ala Pro  
                   35                  40                  45  
 Asn Thr Tyr His Ser Pro Met Tyr Leu Pro Gly Thr Glu Phe Ala Leu  
                   50                  55                  60  
 Cys Gln Ala Ile Ala Gln Leu Met Ser Ala Ile Val Gly Val Leu Asn  
 65                  70                  75                  80  
 Glu Ser Leu Thr Glu Ser Ile Lys Ala Phe Tyr Arg Leu Arg Lys Ala  
                   85                  90                  95  
 Tyr Ile Thr Leu Asp Ala Ile Leu Lys Met Glu Gln Lys Tyr Met Glu  
                   100                  105                  110  
 Glu Ser Arg Ala Ala Thr Leu Val Glu Ser Thr Thr Ser Gly Ser Val  
                   115                  120                  125  
 Pro Ser Ser Leu Arg His Ser Ser Ser Asn Leu His Ser Ser Ser Ser  
                   130                  135                  140  
 Ser Ile Ser Ser Ala Lys Gly Lys Glu Ala Ala Asp Thr Leu Ala  
 145                  150                  155                  160  
 Ala Pro Ser Asn Asp Thr Asp Val Gln Glu Arg Leu Ala Asp Leu Ser  
                   165                  170                  175  
 Leu Ser Gly Glu Pro Ala Val Ala Glu Asp Pro Gly Gln Thr Pro Thr  
                   180                  185                  190  
 Pro Ile Asn Thr Asp Ile Leu Asp His Asp Pro Asp Ser Asp Ile Phe  
                   195                  200                  205  
 Gln Asn Gln Ile Asp Val Phe Val His Ser Gly Ser Asn Phe Cys Phe  
                   210                  215                  220  
 Gly Val Leu Leu Leu Leu Ile Ser Met Val Pro Pro Ser Phe Ser Lys  
 225                  230                  235                  240  
 Leu Leu Ser Ile Ile Gly Phe His Gly Asp Lys Glu Arg Gly Leu Lys  
                   245                  250                  255  
 Met Leu Trp Gln Ala Ser Lys Phe His Asn Leu Ile Gly Gly Ile Ala  
                   260                  265                  270  
 Ala Phe Ala Ile Leu Gly Tyr Tyr Asn Gly Phe Val Arg Tyr Cys Asp  
                   275                  280                  285  
 Ile Met Pro Asp Ser Ile Pro Gly Lys Asp Gly Asp Val Gln Gly Tyr  
                   290                  295                  300  
 Pro Gln Lys Arg Leu Glu Leu Leu Leu Ala Asn Met Thr Glu Arg Phe  
 305                  310                  315                  320  
 Pro Lys Ser Gln Leu Trp Leu Leu Glu Glu Ser Arg Met Ser Gly Ala

[illegible]

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<210> 42627
<211> 89
<212> PRT
<213> A.fumigatus
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<210> 42628
<211> 95
<212> PRT
<213> A.fumigatus
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<210> 42629
<211> 185
<212> PRT
<213> A.fumigatus
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Lys Leu Ser His Thr Leu Leu Ser Arg Tyr Glu Asp Ser Glu Val Gly  
 1 5 10 15  
 Glu Ser Glu Glu Glu Gly Ser Glu Glu Glu Glu Glu Phe Glu Glu Asp  
 20 25 30  
 Glu Gly Glu Gly Glu Glu Glu Glu Glu Glu Glu Glu Pro Ser Lys  
 35 40 45  
 Asp Lys Gly Ile Ser Ile Ser Ile Ser Thr Leu Leu Cys Pro Tyr Ser  
 50 55 60  
 Ile Leu Phe Ala Thr Asn Val Leu His His Gln Leu Leu Pro Pro Ser  
 65 70 75 80  
 Glu Glu Arg Gln Pro Leu Arg Ala Arg Pro Arg Arg Met Ala Thr Val  
 85 90 95  
 Phe Leu Pro Lys Thr Arg Met Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 100 105 110  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Thr Glu Lys Ala  
 115 120 125  
 Ser Gln Arg Met Lys Ser Leu Arg Thr Pro Pro Lys Pro Ala Leu Leu  
 130 135 140  
 Leu Gln Gln Arg Pro Arg Leu Arg Gly Ala Leu Val Pro Arg Arg Pro  
 145 150 155 160  
 Arg Leu Lys Leu Gly Arg Arg Met Arg Ser Asn Leu Leu Ser Phe Cys  
 165 170 175  
 Cys Asn Arg Leu Leu Val Ser Arg Tyr  
 180 185

&lt;210&gt; 42630

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42630

Pro Met Lys Thr Lys Gln Tyr Ile Gln Val Tyr Ser Val Ala Trp Leu  
 1 5 10 15  
 Leu Asp Phe Leu Val Pro Thr Leu Phe Gly Thr Met Leu Val Leu Val  
 20 25 30  
 Val Trp Pro Gln Ser Arg Lys Val Leu Phe Pro Pro Ala Pro Leu Ala  
 35 40 45  
 Leu Val Asp Lys Ser Thr Gly Gly Val Gln Lys Pro Lys Ala Gly Val  
 50 55 60  
 Leu Gly Ser His Asp Ser Val Thr Gly Ala Pro Glu Lys Tyr Lys Gly  
 65 70 75 80  
 Glu Ala Ala Glu Gln Glu Ala Ser Asn Leu Ile Ala Ser Val Ala Thr  
 85 90 95  
 Val Ala Val Gly Ser Ala Ala Gly Lys His Asp Gln Gly Thr Pro Glu  
 100 105 110  
 Asn Ala Pro Met Glu Ser Ser Val Pro Asp Ala Met Asp Ile Val Ser  
 115 120 125  
 Lys Thr Ala Asp Ala Gln Ala Ala Gly Gly Glu Val Pro Ala Asp  
 130 135 140  
 Thr His Asp Lys Thr Arg Gln Pro Met Lys Glu Thr Val Leu Asn Gly  
 145 150 155 160  
 Ala Asn Leu Ala Met Arg Val Leu Ser Asp Ile Ile Asp Thr Tyr Glu  
 165 170 175  
 Arg Phe Gly Lys  
 180

<210> 42631  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

<400> 42631  
 Pro Gln Leu Gly Arg Gly Arg Ile Phe Val Pro Pro Thr Ser Pro Ile  
 1 5 10 15  
 Ile Pro Pro Arg Pro Phe Thr Arg Thr Ser Ser Thr His Leu Leu Phe  
 20 25 30  
 Phe Met Leu Met Gln Asn Leu Asn Val Asn Asn Ser Arg Ile Ile Asp  
 35 40 45  
 His His Thr His Ala His Arg Ser Pro His Phe Arg Gln Leu Ile Ala  
 50 55 60  
 Gly Leu Gln Ile Ala Ser Gln Arg Arg Leu Val Ala Leu Leu Ala  
 65 70 75

<210> 42632  
 <211> 259  
 <212> PRT  
 <213> A.fumigatus

<400> 42632  
 Gly Phe Thr Thr Leu Arg Leu Ile Ser Gly Val Ser Ser Gly Asn His  
 1 5 10 15  
 Asp Gln Val Ser Gln Tyr Ala Ile Ser Pro Arg Ala Leu Ser Asn His  
 20 25 30  
 Arg Gly Ala Ala Asp Ser Pro Tyr Val Arg Thr Tyr Pro Ser Lys Gly  
 35 40 45  
 Val Val Leu His Tyr His Phe Ala Lys Phe Gln Leu Asn Ser Leu Ser  
 50 55 60  
 Leu Arg Ala Leu Ser Pro Ser Asn Thr Pro Val Phe Ser Met Asp Arg  
 65 70 75 80  
 Lys Glu Ser Ala Asn Ile Ala Ile Ser Ser Ala Met Ala Cys Leu Asn  
 85 90 95  
 Met Val Leu Glu Glu Gln Asp Ile Arg Asp Ala Ile Val Gly Val Pro  
 100 105 110  
 Ile Phe Thr His Thr Met Val Thr Phe Ser Ala Val Phe Leu Leu Lys  
 115 120 125  
 Val Ala Val Asn Trp Asn Ser Ala Tyr Leu Ser Ile Asp Gly Arg Gln  
 130 135 140  
 Val Arg Arg Leu Val Glu Arg Val Ile Glu Leu Leu Asn Cys Val Ser  
 145 150 155 160  
 Ala Gly Glu Arg His Leu Thr Arg His Ile Ala Arg Gly Leu Ser Lys  
 165 170 175  
 Met Leu Glu Arg Phe Asp Ser Trp Glu Thr Ala Trp Gln Ala Gly Arg  
 180 185 190  
 Pro Ala Asn Ala Gly Gly Leu Pro Val Gly Gly Thr Gly Ala Val Asp  
 195 200 205  
 Arg Pro Glu Gly Glu Val Pro Gly Gly Ala Asn Ala Met Ala Gln Gly  
 210 215 220  
 Phe Pro Pro Pro Asp Leu Ile Tyr Asp Met Val Gly Thr Tyr Gly Phe  
 225 230 235 240  
 Gly Leu Asp Glu Asn Leu Leu Asp Pro Ser Met Ala Asn Phe Glu Phe  
 245 250 255  
 Leu Ala Gln

<210> 42633  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 42633  
 Arg Ser Ser Pro Pro Ala Pro Pro Ser Lys Arg Arg Lys Thr Ala Pro  
 1 5 10 15  
 Glu Gly Glu Ala Lys Glu Asn Gly Asn Gly Val Pro Ala Lys Asp Glu  
 20 25 30  
 Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu  
 35 40 45  
 Glu Glu Glu Glu Glu Glu Asp Gly Glu Gly Glu Pro Glu Asp Glu Glu  
 50 55 60  
 Pro Ala Asp Thr Ala Lys Thr Ser Thr Pro Ala Ala Ala Thr Lys  
 65 70 75 80  
 Ala Lys Gly Ser Ala Gly Pro Ala Glu Ala Glu Val Glu Val Gly Glu  
 85 90 95  
 Glu Asn Glu Lys  
 100

<210> 42634  
 <211> 326  
 <212> PRT  
 <213> A.fumigatus

<400> 42634  
 Leu Asp Gln Thr Ser Ser Leu Asn Met Gln Ile Leu Ile Thr Gly Ala  
 1 5 10 15  
 Ala Gly Phe Ile Gly Gln Leu Leu Ala Lys Glu Leu Leu Asn Asp Pro  
 20 25 30  
 Ser Tyr His Leu Thr Leu Thr Asp Ile His Glu Pro Pro Ile Pro Lys  
 35 40 45  
 Gly Val Lys Tyr Pro Gln Asn Val Lys Ile Ile Lys Ala Asp Leu Leu  
 50 55 60  
 Ala Gly Ala Glu Ser Val Val Asp Lys Ser Leu Asp Ala Val Phe Ala  
 65 70 75 80  
 Phe His Gly Ile Met Ser Ser Gly Ser Glu Ala Asn Phe Asp Leu Gly  
 85 90 95  
 Met Ser Val Asn Val Asp Ala Thr Arg Thr Leu Leu Glu Ala Leu Arg  
 100 105 110  
 Arg Thr Cys Pro Gly Val Arg Phe Ile Tyr Ser Ser Ser Gln Ala Val  
 115 120 125  
 Tyr Gly Arg Pro Leu Pro Asp Val Val Asp Asp Ser Val Thr Pro Thr  
 130 135 140  
 Pro Gln Gly Ser Tyr Gly Ala Glu Lys Leu Ile Cys Glu Thr Leu Val  
 145 150 155 160  
 Asn Glu Tyr Thr Arg Arg Gly Phe Ile Thr Gly Phe Thr Leu Arg Phe  
 165 170 175  
 Pro Thr Ile Ser Val Arg Pro Gly Gln Pro Thr Ala Ala Ala Ser Ser  
 180 185 190  
 Phe Leu Ser Gly Met Ile Arg Glu Pro Leu Ala Gly Lys Glu Cys Val  
 195 200 205  
 Ile Pro Val Glu Asp Arg Ser Phe Lys Ser Trp Leu Cys Ser Pro Arg

## 19125

210		215		220
Thr Leu Ala Gln Asn Leu Val Leu Thr Leu Ser Leu Pro Ser Asp Ala				
225		230		235
Leu Pro Pro His Ile Arg Ser Ile Asn Val Pro Gly Ile Cys Val Thr				
	245		250	255
Val Gln Glu Met Met Asp Ala Leu Glu Lys Val Gly Gly Lys Asp Lys				
	260		265	270
Leu Ala Leu Leu Lys Glu Lys Glu Asp Pro Thr Leu Arg Pro Ile Leu				
	275		280	285
Asp Ser Trp Pro Thr Arg Phe Asp Asn Ser Gln Ala Ile Ala Leu Gly				
	290		295	300
Phe Lys Arg Asp Ser Ser Phe Glu Gln Ala Val Gln Asp Tyr Tyr Glu				
305		310	315	320
Gln Glu Val Leu Gly Arg				
	325			

&lt;210&gt; 42635

&lt;211&gt; 405

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42635

His Ser Arg Leu Gln Lys Ile Lys Arg Asp Ser Cys Tyr Ser Ala Leu				
1	5		10	15
Phe Ser Asp Lys Ile Ser Gly Ile Asn Ser Pro Leu Phe Ser Cys Phe				
	20		25	30
Cys Ser Pro Phe Ser Leu Ser Leu Leu Thr Leu Leu His Ile Asn Asn				
	35		40	45
Leu Leu Phe Leu Val Arg Ile Phe Ser Leu Ser Ser Ile Asn Asn Ile				
	50		55	60
Phe Ala His Thr Ser Leu Leu Val Thr Thr Cys Gln Ala Ser Val Thr				
65	70		75	80
Met Lys Phe Ser Thr Phe Ala Leu Gly Met Phe Ala Gly Met Ala Ala				
	85		90	95
Ser Ala Ala Ile Pro Ala Ser Val Val Asp Gly Met Asn Leu Ser Asp				
	100		105	110
Asn Gly Leu Gly Thr Phe Leu Pro Leu Ala Phe Cys Leu Ile Pro Ile				
	115		120	125
Glu Ser Leu Ser Ser Ser Phe Gln Pro Ser Asn Gln Ser Ser His Pro				
	130		135	140
Thr Asn Ile Phe Phe Ser Pro Thr Ser Ile Gly Leu Val Asn Ala Gly				
145	150		155	160
Asp Pro Val Cys His Lys Asn Ser Asp Cys Gly Pro Gly Ile Gly Tyr				
	165		170	175
Cys Tyr Lys Gly Ile Cys Val Ala Asp Pro Pro Lys Val Glu Arg Asp				
	180		185	190
Asp Pro Ile Cys His Lys Asn Ser Asp Cys Gly Pro Gly Val Gly Tyr				
	195		200	205
Cys Tyr Lys Gly Ile Cys Val Ala Asp Pro Pro Lys Leu Thr Arg Asp				
	210		215	220
Asp Ala Ser Ile Val Thr Cys His Thr Asn Lys Asp Cys Phe Asn Gly				
225	230		235	240
Leu Cys Ile Ala Gly Ile Cys His Trp Gly Ile Gly Glu Ser Ser Ala				
	245		250	255
Ser Asn Thr Ala Asn Gln Asn Ser Ala Ser Leu Val Gln Thr Ser Glu				
	260		265	270

## 19126

Pro Ala Asp Pro Val Cys His Lys Asn Ser Asp Cys Gly Pro Gly Val  
 275 280 285  
 Gly Tyr Cys Tyr His Gly Ile Cys Leu Ala Asp Pro Pro Lys Leu Thr  
 290 295 300  
 Ser Arg Asp Asp Pro Ile Cys His Lys Asn Ser Asp Cys Gly Pro Gly  
 305 310 315 320  
 Val Gly Tyr Cys Tyr His Gly Ile Cys Val Ala Asp Pro Pro Lys Asp  
 325 330 335  
 Ala Arg Glu Val Ser Ala Asp Pro Val Cys His Lys Asn Ser Asp Cys  
 340 345 350  
 Gly Pro Gly Val Gly Tyr Cys Tyr His Gly Ile Cys Val Ala Gly Pro  
 355 360 365  
 Pro Val Val Pro Arg Gly Glu Glu Ala Asp Pro Val Cys His Lys Asp  
 370 375 380  
 Ser Asp Cys Gly Pro Gly Val Gly Tyr Cys Tyr His Gly Ile Cys Leu  
 385 390 395 400  
 Ala Glu Pro Pro Lys  
 405

&lt;210&gt; 42636

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42636

Glu Glu Leu Thr Arg Cys Thr Val Met Tyr Leu Pro Leu Arg Ile Leu  
 1 5 10 15  
 Trp Lys Thr Lys Met Asn Leu His Gln Lys Leu Gly Leu Ala Thr Val  
 20 25 30  
 Phe Cys Leu Gly Phe Val Ile Ile Ala Ala Ala Ile Ile Arg Ala Val  
 35 40 45  
 Ala Ile Thr Gly Lys Ala Tyr Ser Asp Gln Ala Ala Leu Ala Ile Trp  
 50 55 60  
 Gly Ile Ala Glu Ser Ser Ile Cys Met Tyr Tyr Ile Gln Arg Arg Leu  
 65 70 75 80  
 Val Gln Pro Thr Leu Thr Cys Lys Ala Met Ile Val Gly Cys Leu Pro  
 85 90 95  
 Pro Phe Lys Ser Phe Ile Thr Ser Gly Ser Ser Ser Ala Asn Tyr Asn  
 100 105 110  
 Tyr Asn Tyr Asn Tyr Asn Ser Ser Gln Arg Ala Ala Asn His Tyr Asn  
 115 120 125  
 Arg Ser Ala Ser Ser Ala Arg Ile Lys Lys Arg Ser Ile Thr Thr Thr  
 130 135 140  
 Ser Trp Ser Gly Leu Pro Ile Pro Leu Gln Glu Arg Asn Leu Asn Ala  
 145 150 155 160  
 Tyr Gln Asn Leu Glu Tyr Glu Ser Gln Gly Lys His Asp Val His Ile  
 165 170 175  
 Ala Gly Gly Val Asn Thr Arg Ala Ala Pro Pro Pro Glu Pro Ser Arg  
 180 185 190  
 Leu Ser Leu Ser Glu Asp Asp Ala Gly His Gly Glu Ile Arg Met Val  
 195 200 205  
 Lys Glu Phe Val Arg Ile Phe Leu Phe Ser Phe  
 210 215

&lt;210&gt; 42637

&lt;211&gt; 275



19127

<212> PRT

<213> A.fumigatus

<400> 42637

Ala	Leu	Ser	Thr	Leu	Val	Ile	Leu	Phe	Ala	Thr	Lys	Ile	Leu	Thr	Ala
1				5					10					15	
Val	Pro	Ala	Leu	Val	Thr	Val	Thr	Arg	Ala	Ser	Val	Leu	Pro	Thr	Pro
			20					25					30		
Pro	Arg	Leu	Asn	Ala	Thr	Ile	Pro	Ser	Ala	Thr	Arg	Thr	Pro	Thr	Ala
		35					40					45			
Val	Leu	Val	Trp	Val	Thr	Ala	Thr	Arg	Glu	Ser	Val	Ser	Pro	Thr	Leu
	50					55					60				
Pro	Ser	Ser	Leu	Glu	Met	Met	Leu	Leu	Ser	Leu	Leu	Ala	Ile	Leu	Thr
65					70					75				80	
Lys	Ile	Ala	Ser	Thr	Val	Phe	Ala	Leu	Leu	Val	Phe	Ala	Ile	Gly	Ala
				85					90					95	
Leu	Glu	Arg	Val	Pro	Pro	Gln	Thr	Leu	Arg	Thr	Arg	Ile	Leu	Pro	Pro
			100					105					110		
Leu	Phe	Arg	Leu	Leu	Asn	Leu	Arg	Ile	Pro	Phe	Ala	Thr	Arg	Thr	Pro
		115					120					125			
Thr	Val	Val	Leu	Ala	Leu	Val	Thr	Ala	Ile	Met	Ala	Phe	Val	Leu	Arg
	130					135					140				
Thr	Leu	Pro	Ser	Ser	Pro	Leu	Val	Thr	Thr	Pro	Ser	Ala	Thr	Arg	Thr
145					150					155				160	
Pro	Thr	Ala	Val	Gln	Val	Leu	Val	Thr	Val	Thr	Met	Ala	Ser	Val	Ser
				165					170					175	
Leu	Thr	Leu	Pro	Arg	Met	Leu	Val	Lys	Cys	Arg	Pro	Thr	Pro	Ser	Ala
			180					185					190		
Thr	Arg	Thr	Pro	Thr	Val	Val	Pro	Val	Trp	Val	Thr	Ala	Ile	Met	Ala
	195						200					205			
Ser	Val	Ser	Leu	Val	Leu	Pro	Leu	Phe	Leu	Ala	Ala	Lys	Lys	Pro	Ile
	210					215					220				
Leu	Cys	Ala	Thr	Arg	Thr	Pro	Ile	Ala	Val	Gln	Val	Leu	Ala	Thr	Ala
225					230					235				240	
Thr	Met	Ala	Phe	Ala	Leu	Leu	Ser	Leu	Pro	Ser	Glu	Glu	Phe	Cys	Trp
			245						250					255	
Leu	Thr	Gly	Ser	Lys	Trp	Leu	Leu	Leu	Val	Ser	Phe	Leu	Leu	Phe	Ser
			260					265					270		
Ser	Leu	Thr													
		275													

<210> 42638

<211> 61

<212> PRT

<213> A.fumigatus

<400> 42638

Leu	Ser	Val	Ile	Ser	Leu	Ile	Ser	Tyr	Leu	Thr	Ile	Asn	Gly	Lys	Asp
1				5					10					15	
Ser	Ile	Ser	Leu	Leu	Phe	Cys	Asp	Asn	Arg	Leu	Ile	Val	Leu	Thr	Ile
			20					25					30		
Lys	Ile	Met	Ile	Cys	Ala	Val	Ser	Ser	Lys	Thr	Asn	Val	Lys	Ile	Gln
		35					40					45			
Met	Ala	Ser	Ser	Leu	His	Gly	Gly	Gln	Leu	Gln	His	Arg			
	50					55					60				

## 19128

<210> 42639  
 <211> 95  
 <212> PRT  
 <213> A.fumigatus

<400> 42639  
 Met Arg Arg Pro Met Thr Trp His Asp Leu Gln Trp Gly Asn Cys Gly  
 1 5 10 15  
 Leu Ser Thr Ala Pro Ser Met Leu Ala Ser Ser Lys Arg Ser Arg Phe  
 20 25 30  
 Lys Thr Ala Pro Pro Ser Gln Phe Ser Leu Pro Leu Ser Leu Leu Ile  
 35 40 45  
 Ile Thr Tyr Thr His Thr Phe Val Leu Thr Gln Trp Ile Lys Ser Ala  
 50 55 60  
 Thr Met Val Val Lys Thr Phe Phe Asp Ile Thr Ile Asp Gly Arg Lys  
 65 70 75 80  
 Phe Pro Cys Gly Ser Ile Leu Ser Val Arg Val Arg Asp Met Leu  
 85 90 95

<210> 42640  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 42640  
 Tyr Pro Gly Lys Val Cys Val Cys Ser Arg Cys Ala Ser Ala Glu Thr  
 1 5 10 15  
 Ala Asp Glu Thr Arg Ser Glu Gly Tyr Gly Ala Leu Gln Ile Trp Ile  
 20 25 30  
 Lys Tyr Ile Gln Lys Gly Ile Thr Tyr Gln Glu Ser Tyr Lys Ala Ser  
 35 40 45  
 Asp Gly Cys Gly Lys Ser His Trp Val Gly Ala Ala Phe Thr Val Ala  
 50 55 60  
 Gly Gly Tyr Val Trp Gln Asp Val Tyr Ala Glu Val Phe Lys Arg Asn  
 65 70 75 80  
 Leu Thr Ile Val Gly Gly Gly Asp Pro Val Arg Arg Ser Gly Phe His  
 85 90 95  
 Leu Ser Ser Val  
 100

<210> 42641  
 <211> 102  
 <212> PRT  
 <213> A.fumigatus

<400> 42641  
 Gly Thr Cys Cys Asp Ser Asn His Ser Leu Glu Pro Ala Gly Arg Ile  
 1 5 10 15  
 Thr Phe Lys Leu Phe Asp Glu Val Val Pro Lys Thr Val Glu Asn Phe  
 20 25 30  
 Arg Ala Leu Cys Thr Gly Glu Lys Gly Phe Gly Tyr Lys Gly Ser Ser  
 35 40 45  
 Phe His Arg Ile Ile Pro Gln Phe Met Leu Gln Gly Gly Asp Phe Thr  
 50 55 60  
 Lys Gly Asn Val Ser Ser Ile Val Lys Pro Thr Leu Ala Pro Leu Gln  
 65 70 75 80

## 19129

Arg Glu Asn Pro Leu Trp Ser Ile Leu Ile Cys Thr Leu Gly His Trp  
                   85                  90                  95  
 Trp Gln Val His Leu Arg  
                   100

<210> 42642  
 <211> 212  
 <212> PRT  
 <213> A.fumigatus

<400> 42642  
 Ala Asp Leu Ser Lys Ala Pro Gly Asp Ser Cys Trp Pro Ser Ile Asp  
 1                  5                  10                  15  
 Thr Trp Asn Ala Leu Asn Ser Ser Val Ser Gly Lys Leu Ile Leu Asp  
                   20                  25                  30  
 Thr Pro Pro Ala Ile Ser Cys Tyr Pro Gly Pro Tyr Gln Asn Ala Glu  
                   35                  40                  45  
 Gln Cys Ala Tyr Val Asn Ser Gln Trp Tyr Asn Ser Thr Phe Gln Ser  
                   50                  55                  60  
 Leu Ser Pro Val Gly Tyr Val Tyr Pro Thr Asp Asp Ser Cys Pro Pro  
 65                  70                  75                  80  
 Val Asp Leu Ser Ser Gly Glu Thr Pro Gly Lys Cys Thr Leu Gly Gln  
                   85                  90                  95  
 Ala Pro Val Tyr Thr Ile Asn Ala Thr Glu Pro Glu Glu Leu Ala Thr  
                   100                  105                  110  
 Gly Ile Ala Phe Ala Lys Lys Asn Asn Val Arg Leu Val Val Arg Asn  
                   115                  120                  125  
 Thr Gly His Asp Ile Leu Gly Lys Tyr Val Ser Val Pro Ala Ala Pro  
                   130                  135                  140  
 Leu Arg Lys Arg Leu Thr Lys Gln Gly Arg Arg Asp Met Glu Leu Ser  
 145                  150                  155                  160  
 Lys Ser Gly Ser Ser Thr Phe Arg Arg Val Ser Arg Thr Arg Lys Ala  
                   165                  170                  175  
 Thr Lys Arg Arg Met Gly Val Ala Arg Val Thr Gly Leu Val Leu Pro  
                   180                  185                  190  
 Leu Pro Ser Leu Glu Val Thr Ser Gly Lys Thr Cys Met Pro Lys Ser  
                   195                  200                  205  
 Ser Ser Ala Thr  
                   210

<210> 42643  
 <211> 314  
 <212> PRT  
 <213> A.fumigatus

<400> 42643  
 Thr Val Gly Val Ile Gly Gly Tyr Ala Gln Gly Gly Gly His Ser Pro  
 1                  5                  10                  15  
 Ala Ser Arg Asp Tyr Gly Leu Gly Ala Asp Gln Ile Leu Glu Ala Gln  
                   20                  25                  30  
 Val Val Leu Ala Asp Gly Ser Ile Val Thr Ala Asn Ala Cys Gln Asn  
                   35                  40                  45  
 Ser Asp Leu Tyr Phe Ala Ile Arg Gly Gly Gly Gly Gly Thr Tyr Gly  
                   50                  55                  60  
 Val Ala Ile Ser Met Thr Leu Lys Ala Tyr Pro Thr Leu Pro Val Val  
 65                  70                  75                  80

## 19130

Ala Gln Ser Leu Thr Ile Thr Pro Leu Thr Ser Asn Thr Asp Pro Leu  
                                   85                                  90                                  95  
 Leu Asp Ala Ile Thr Asp Ile Tyr Gly Gln Tyr Pro Ala Leu Ser Asp  
                                   100                                  105                                  110  
 Ala Gly Tyr Ser Gly Tyr Gly Thr Trp Ser Ile Asn Gly Pro Met Ala  
                                   115                                  120                                  125  
 Leu Phe Gly Asn Gln Thr Ile Gly Tyr Val His Ala Ile Ala Thr Met  
                                   130                                  135                                  140  
 Gly Lys Ser Leu Ser Ala Ser Gln Ala Ala Phe Ala Pro Leu Leu Ser  
 145                                  150                                  155                                  160  
 Lys Leu Gln Lys Tyr Asn Gly Thr Ser Leu Phe Ile Thr Val Asn Tyr  
                                   165                                  170                                  175  
 Tyr Gln Phe Pro Ser Tyr Ala Ala Tyr Tyr Thr Ala Met Ser Gly Met  
                                   180                                  185                                  190  
 His Gln Pro Val Gly Ser Ala Asn Ser Ala Leu Thr Ser Arg Met Phe  
                                   195                                  200                                  205  
 Asp Lys Ser Ala Leu Thr Val Asn Pro Ser Ile Leu Arg Ser Met Ile  
 210                                  215                                  220  
 Gly Ala Ile Ala Gly Lys Pro Glu Glu Tyr Thr Ile Asn Ser Leu Glu  
 225                                  230                                  235                                  240  
 Met Val Gly Gly Gly Lys Val Leu Thr Asp Gly Ser Asp Pro Tyr Ser  
                                   245                                  250                                  255  
 Gly Val Asn Pro Ala Trp Arg Ser Thr Tyr Ile Val Asn Val Val Ala  
                                   260                                  265                                  270  
 Arg Gly Trp Pro Glu Gly Ala Asp Ala Ala Thr Ala Gln Ala Val Lys  
                                   275                                  280                                  285  
 Asp Asp Ile Thr Tyr Ile Lys Gly Gly Ala Met Arg Leu Leu Thr Pro  
 290                                  295                                  300  
 Phe Leu Gly Ser Tyr Met Asn Glu Val Arg  
 305                                  310

&lt;210&gt; 42644

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42644

Gln Ala Asp Arg Asn Asp Pro Leu Trp Ala Thr Asp Phe Phe Gly Thr  
 1                                  5                                  10                                  15  
 Asn Tyr Ile Arg Leu Ala Leu Ile Lys Lys Lys Tyr Asp Pro Glu Gly  
                                   20                                  25                                  30  
 Val Phe Tyr Cys Pro Lys Cys Val Gly Ser Met Thr Tyr Tyr Gln Lys  
                                   35                                  40                                  45  
 Asn Leu Asp Gly Leu Asp Tyr Gly Pro Leu Cys Ser Ile Gly Phe  
 50                                  55                                  60

&lt;210&gt; 42645

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42645

His Asn Ser Asn Gly Ser Gln Phe Phe Ile Thr Thr Val Val Thr Ser  
 1                                  5                                  10                                  15  
 Trp Leu Asp Gly Ala His Val Val Phe Gly Glu Val Glu Asp Gly Met  
                                   20                                  25                                  30

## 19131

Asp Leu Val Lys Lys Ile Glu Ser Tyr Gly Ser Ala Ser Gly Thr Pro  
 35 40 45  
 Lys Lys Lys Ile Thr Ile Ala Asp Cys Gly Gln Leu  
 50 55 60

<210> 42646  
 <211> 263  
 <212> PRT  
 <213> A.fumigatus

<400> 42646  
 Ser Leu Ser Asp Ala Ile Leu Pro Val Arg Ser Val His Ser His Gln  
 1 5 10 15  
 His Ser Val Arg Ala Ile Ala Ala His Gly Asp Thr Leu Val Ser Gly  
 20 25 30  
 Ser Tyr Asp Cys Thr Val Arg Val Trp Lys Ile Ser Thr Gly Glu Thr  
 35 40 45  
 Ile His Arg Leu Gln Gly His Thr Leu Lys Val Tyr Ser Val Val Leu  
 50 55 60  
 Asp His Lys Arg Asn Arg Cys Ile Ser Gly Ser Met Asp Asn Thr Val  
 65 70 75 80  
 Lys Val Trp Ser Leu Asp Thr Gly Ser Ile Ile Tyr Asn Leu Glu Gly  
 85 90 95  
 His Ser Ser Leu Val Gly Leu Leu Asp Leu Lys Cys Asp Arg Leu Val  
 100 105 110  
 Ser Ala Ala Ala Asp Ser Thr Leu Arg Ile Trp Asp Pro Glu Thr Gly  
 115 120 125  
 Gln Cys Lys Ser Arg Leu Ser Ala His Thr Gly Ala Ile Thr Cys Phe  
 130 135 140  
 Gln His Asp Gly Gln Lys Val Ile Ser Gly Ser Asp Arg Thr Leu Lys  
 145 150 155 160  
 Met Trp Asp Val Arg Asn Gly Glu Cys Val Arg Asp Leu Leu Thr Asp  
 165 170 175  
 Leu Ser Gly Val Trp Gln Val Lys Phe Asn Asp Arg Arg Cys Val Ala  
 180 185 190  
 Ala Val Gln Arg Asp Ala Leu Thr Tyr Ile Glu Val Ser Arg Gly Ser  
 195 200 205  
 Val Cys Gln Ser Ala Thr Ile Ile Ile Asn His Leu Gln Val Leu Asp  
 210 215 220  
 Phe Gly Ala Ser Arg Asp Gly Val Pro Glu Asp Gln Leu Gly Arg Arg  
 225 230 235 240  
 Ile Val Val Asn Arg Trp Gly Gln Glu Ile Gly Asp Asn Ala Asp Glu  
 245 250 255  
 Asp Tyr Asp Leu Ser Asp Gly  
 260

<210> 42647  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 42647  
 Pro Phe Thr Leu Phe Trp Phe Leu Ile Pro Glu Glu Gly Glu Asn Ser  
 1 5 10 15  
 Phe Arg Ile Ala Pro Asn Met Ile Asn Ala Val Leu Val Phe Asn Asn  
 20 25 30

## 19132

Asn Gly Gln Pro Arg Leu Thr Lys Phe Tyr Thr Gln Ile Val Ser Gly  
           35                  40                  45  
 Leu Asp Val Ala Val Pro Arg Glu Ile Gly Arg Lys  
       50                  55                  60

<210> 42648  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

<400> 42648  
 Gln Thr Pro Glu Pro Ser His Arg Ala Pro Pro Pro Gln Leu Arg Tyr  
 1                  5                  10                  15  
 Trp Pro Gly Arg Pro Ala Gln Ala Gln Pro Leu Pro Leu Arg Gln Val  
           20                  25                  30  
 Ala Arg Val Cys Pro Pro Ser Ala Pro Glu Glu Asp Ser Glu Pro Pro  
       35                  40                  45  
 Pro Glu Gly Pro Pro Cys His Cys Ser Val Pro Glu His Ser Gly Pro  
       50                  55                  60  
 Gln His Arg Cys Pro Asp Leu Gln Ala Pro Gln Gln Val Pro Pro  
 65                  70                  75

<210> 42649  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 42649  
 Asn Val Leu His Arg His Lys Ser Ile Ile Ala Tyr Leu Ala Ser Val  
 1                  5                  10                  15  
 Asn Leu Thr Glu Ser Ser Ala Ala Leu Arg Ala Glu Leu Gly Asp Ser  
           20                  25                  30  
 Val Ser Ile Asp Asp Ala Thr Leu Lys Lys Tyr Glu Gly Leu Leu Glu  
       35                  40                  45  
 Lys Lys Trp Ile Phe Thr Thr Glu Ala Gly Arg Tyr Arg Ala  
       50                  55                  60

<210> 42650  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 42650  
 Leu Ser Thr Asp Gly Asp Arg Arg Ser Val Thr Met Leu Thr Lys Ile  
 1                  5                  10                  15  
 Thr Ile Tyr Leu Thr Ala Asp Ala Ile Asp Ser Asp Tyr Trp Ala Arg  
           20                  25                  30  
 Gln Cys Phe Ala Ser Trp His Gly Ser Glu His Phe Gly His Gln Ile  
       35                  40                  45  
 Ser Asn Val Cys His Phe Tyr Ser Phe His Leu Pro Tyr Phe Leu Phe  
       50                  55                  60  
 Leu Ser Ala Pro Gln Ala Met Lys Cys Leu Asp Thr Leu Tyr Pro Gln  
 65                  70                  75                  80  
 Thr Cys Tyr Leu Ser Arg Gly Phe Ala  
                   85

19133

<210> 42651  
 <211> 162  
 <212> PRT  
 <213> A.fumigatus

<400> 42651  
 Asp Thr Gln Thr Lys Gln Ser Leu Ile Ala Gln Ile Tyr Asp Leu Val  
 1 5 10 15  
 Ala Gln Arg Pro Pro Ser Ala Cys Asn Phe Leu Pro Leu Pro Pro Leu  
 20 25 30  
 Leu Ser Gln Gly Ala Arg Ser Ser Ala Ala Asn Gly Pro Ser Asp Ala  
 35 40 45  
 Pro Thr Gln Val Thr Tyr Arg Thr Tyr Ala Thr Leu Ser Phe Ile Met  
 50 55 60  
 Ile Ser Thr Ser Thr Glu Ser Pro Leu Ala Leu Ile Asp Leu Ile Gln  
 65 70 75 80  
 Val Phe Val Glu Ala Leu Asp Arg Ile Phe Glu Asn Val Cys Glu Leu  
 85 90 95  
 Asp Leu Ile Phe Gly Phe Glu Thr Met His Ala Val Leu Ser Glu Met  
 100 105 110  
 Ile Val Gly Gly Val Val Val Glu Thr Asn Ile Asp Lys Ile Val Ala  
 115 120 125  
 Gly Val Arg Glu Gln Glu Gly Asn Leu Gly Lys Lys Lys Ala Ile Gln  
 130 135 140  
 Ala Ala Ser Ser Gly Leu Gly Arg Gly Gly Leu Ser Gly Leu Gly Ala  
 145 150 155 160  
 Trp Arg

<210> 42652  
 <211> 191  
 <212> PRT  
 <213> A.fumigatus

<400> 42652  
 Gly Met Gln Ser Phe Leu Lys Phe Leu Glu Arg Ile Gly Phe Ala Asn  
 1 5 10 15  
 Lys Leu Gln Asn Pro Leu Ile Glu Arg Arg Pro Arg Asn Phe Gly Ile  
 20 25 30  
 Gly Gln Asp Val Gln Pro Lys Arg Asn Leu Ser Arg Phe Val Lys Trp  
 35 40 45  
 Pro Glu Tyr Val Arg Leu Gln Arg Gln Lys Lys Ile Leu Asn Leu Arg  
 50 55 60  
 Leu Lys Val Pro Pro Ala Ile Ala Gln Phe Gln Asn Thr Leu Asp Arg  
 65 70 75 80  
 Asn Thr Ala Ala Gln Thr Phe Lys Leu Leu Asn Lys Tyr Arg Pro Glu  
 85 90 95  
 Thr Lys Ala Glu Lys Lys Glu Arg Leu His Ala Glu Ala Thr Ala Val  
 100 105 110  
 Ala Glu Gly Lys Lys Lys Glu Asp Val Ser Lys Lys Pro Tyr His Val  
 115 120 125  
 Lys Tyr Gly Leu Asn His Val Val Gly Leu Val Glu Asn Lys Lys Ala  
 130 135 140  
 Ser Leu Val Leu Ile Ala His Asp Val Asp Pro Ile Glu Leu Val Val  
 145 150 155 160  
 Phe Leu Pro Ala Leu Cys Arg Lys Met Gly Val Pro Tyr Ala Ile Val

## 19134

			165					170				175		
Lys	Gly	Lys	Ala	Arg	Leu	Gly	Thr	Val	Val	His	Lys	Lys	Val	Arg
			180					185					190	

&lt;210&gt; 42653

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42653

Arg	Thr	Leu	Met	Ser	His	Phe	Gln	Thr	Ala	Ala	Val	Leu	Ala	Leu	Thr
1				5					10					15	
Glu	Val	Arg	Ala	Glu	Asp	Lys	Ala	Glu	Phe	Ser	Lys	Leu	Leu	Ser	Thr
			20					25					30		
Ile	Lys	Glu	Gly	Tyr	Thr	Asp	Lys	Tyr	Glu	Glu	Ser	Arg	Arg	His	Trp
		35					40					45			
Gly	Gly	Gly	Ile	Met	Gly	Ser	Lys	Ala	Val	Ala	Arg	Met	Glu	Lys	Lys
	50					55					60				
Arg	Lys	Ala	Ala	Glu	Ala	Ala	Val	Arg	Val						
65					70										

&lt;210&gt; 42654

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42654

Gly	Phe	Ile	Ala	Arg	Ser	Pro	Ile	Ile	Phe	Ile	Lys	Val	Pro	Lys	Ile
1				5					10					15	
Ser	Ala	Pro	Pro	Ala	Arg	Leu	Thr	Ser	Val	Asp	Ser	Val	Ser	Asn	Phe
			20					25					30		
Val	Ala	Ala	Ser	Ala	Met	Ala	Phe	Thr	Ser	Ala	Phe	Asp	Gly	Thr	Ser
		35					40					45			
Leu	Val	Val	Arg	Arg	Gln	Arg	Ile	Arg	Asn	Phe	Arg	Val	Ser	Cys	Phe
	50					55					60				
Thr	Cys	Gly	Phe	Leu	Cys	Leu	Arg	Asn	Ser	Arg	Ile	Ser	Ser	Arg	Gln
65					70					75					80
Ser	Asp	Lys	Phe	Val	Asp	Ala	Lys	Thr	Ala	Ser	Lys	Ala	Cys	Pro	Arg
			85						90					95	
Ala	Ser	Ala	Thr	Val	Cys	Phe	Phe	Ser	Phe	Asn	Arg	Ser	Met	Ile	Gly
			100					105					110		
Gly	Met	Met	Val	Asp	Arg	Cys	Phe	Ala	Asn	Ala	Pro	Arg	Arg	Pro	Phe
		115					120					125			
Ala	Arg	Arg	Ser	Ile	Gln	Leu	Ala	Ala	Thr	Val	Thr	Thr	Ala	Thr	Phe
	130					135					140				
Ala	Ser	Phe	Met	Asp	Phe	Ala	Arg	Leu	Arg	Thr	Ile	Ser	Ser	Asn	Gly
145					150					155					160
Pro	Ser	Leu	Ile	Arg	Gly	Thr	Phe	Ser	Ala	Val	Tyr	Arg	Ala	Ser	Ser
			165						170					175	
Val	Ser	Phe	Leu	Ser	Phe	His	Phe	Asp	Asp	Ala	Ser	Cys	Ser	Leu	Lys
			180					185					190		
Ser	Phe	Gly	Ile	Leu	Gly	Lys	Thr	Ser	Thr	Gly	Ser	Ala	Arg	Ser	Asn
		195					200					205			
Ala	Ser	Thr	Ser	Pro	Ser	Ser	Ser	Ser	Ala						
210							215								



<210> 42655  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

<400> 42655  
 Ser Ile Phe Lys Asp Gly Ala Ser Glu Ser Leu Leu Phe Ile Asp Asp  
 1 5 10 15  
 Gly Gln Leu Val Leu Thr Leu Ala Ala Ala Cys Arg Leu Arg Arg Ala  
 20 25 30  
 Phe Ile Leu Ile Asp Ser Leu His Gly Ile Lys Lys Thr Asp Glu Asp  
 35 40 45  
 Ile Leu Met Leu Phe Arg Lys Tyr Ala Ile Pro His Gln Ile Ile Leu  
 50 55 60  
 Ser Lys Val Asp Lys Val Leu Ala Lys Arg Lys Lys Gln Val Lys Ser  
 65 70 75 80  
 Gly Ala Ser Val Ala Asn Val Ala Ala Leu Arg Ser Leu Leu Gln Asp  
 85 90 95  
 Leu Arg Pro Ile Val Gln Pro Asp Gly Arg Asp Glu Gly Pro Gly Ala  
 100 105 110  
 Leu Gly Glu Ile Leu Thr Cys Ser Ala Glu Thr Pro Thr Gly Pro Gly  
 115 120 125  
 Gln Phe Leu Gly Ile Ser Ala Ile Arg Trp Ala Ile Leu Ser Ala Ala  
 130 135 140  
 Gly Phe Asp Gly Thr Val Glu Val Lys Ala Glu Ser Ile Pro Ser Ser  
 145 150 155 160  
 Ser Ser Ile Arg Gly Ala Ser Ala Ala Pro Pro  
 165 170

<210> 42656  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 42656  
 Asn Trp Lys Val Arg Lys Glu Gly Tyr Glu Asp Ala Lys Gln Gln Phe  
 1 5 10 15  
 Glu Lys Thr Pro Asp Glu Ser Asp Pro Val Phe Val Pro Phe Leu Gln  
 20 25 30  
 Asp Pro Gly Leu Trp Lys Gly Ala Val Ser Asp Ser Asn Val Ala Ala  
 35 40 45  
 Gln Gln Glu Gly Leu Ala Ser Tyr Cys Ser Phe Leu Lys Tyr Gly Gly  
 50 55 60  
 Val Gln Ala Cys Thr Arg Tyr Val Tyr Pro  
 65 70

<210> 42657  
 <211> 831  
 <212> PRT  
 <213> A.fumigatus

<400> 42657  
 Gln Gly Leu Arg Arg Thr Arg Gly Ser Thr Ile Gly Pro Ile Val Glu  
 1 5 10 15  
 Lys Gly Leu Pro Ser Thr Arg Pro Ala Ala Lys Ala Asn Ala Leu Glu  
 20 25 30

Ala Leu Leu Leu Cys Val Glu Leu Asp Lys Ala Asp Pro Ile Ile Glu  
 35 40 45  
 Glu Ile Val Pro Ile Leu Ser His Lys Val Pro Lys Val Ile Ala Ala  
 50 55 60  
 Ala Leu Ser Gly Leu Lys Ala Ile Tyr His Ser Phe Gly Cys Lys Ile  
 65 70 75 80  
 Val Asp Pro Lys Pro Val Leu Lys Ala Leu Pro Lys Val Phe Gly His  
 85 90 95  
 Ala Asp Lys Asn Val Arg Val Glu Ala Gln Asn Leu Thr Val Glu Leu  
 100 105 110  
 Tyr Arg Trp Leu Lys Glu Ala Ile Lys Pro Leu Phe Trp Gly Glu Leu  
 115 120 125  
 Lys Pro Val Gln Gln Gln Asp Leu Glu Lys Leu Phe Glu Ser Val Lys  
 130 135 140  
 Gln Glu Pro Ala Pro Lys Gln Glu Arg Leu Thr Lys Ala Gln Gln Asp  
 145 150 155 160  
 Ala Met Ala Ala Ala Asn Ala Ala Pro Glu Ser Gly Asp Gly Asp Ala  
 165 170 175  
 Glu Ala Gly Glu Val Tyr Ala Asp Glu Asp Asp Gly Glu Val Asp Ala  
 180 185 190  
 Phe Asp Leu Ala Glu Pro Val Asp Val Phe Pro Lys Ile Pro Lys Asp  
 195 200 205  
 Phe Asn Glu Gln Leu Ala Ser Ser Lys Trp Lys Asp Arg Lys Glu Thr  
 210 215 220  
 Leu Asp Ala Leu Tyr Thr Ala Leu Asn Val Pro Arg Ile Lys Asp Gly  
 225 230 235 240  
 Pro Phe Asp Asp Ile Val Arg Ser Leu Ala Lys Ser Met Lys Asp Ala  
 245 250 255  
 Asn Val Ala Val Val Thr Val Ala Ala Asn Cys Ile Asp Leu Leu Ala  
 260 265 270  
 Lys Gly Leu Arg Gly Ala Phe Ala Lys His Arg Ser Thr Ile Met Pro  
 275 280 285  
 Pro Ile Met Glu Arg Leu Lys Glu Lys Lys Gln Thr Val Ala Asp Ala  
 290 295 300  
 Leu Gly Gln Ala Leu Asp Ala Val Phe Ala Ser Thr Asn Leu Ser Asp  
 305 310 315 320  
 Cys Leu Glu Glu Ile Leu Glu Phe Leu Lys His Lys Asn Pro Gln Val  
 325 330 335  
 Lys Gln Glu Thr Leu Lys Phe Leu Ile Arg Cys Leu Arg Thr Thr Arg  
 340 345 350  
 Asp Val Pro Ser Lys Ala Glu Val Lys Ala Ile Ala Asp Ala Ala Thr  
 355 360 365  
 Lys Leu Leu Thr Glu Ser Thr Glu Val Asn Arg Ala Gly Gly Ala Glu  
 370 375 380  
 Ile Leu Gly Thr Leu Met Lys Ile Met Gly Glu Arg Ala Met Asn Pro  
 385 390 395 400  
 Tyr Leu Asp Gly Leu Asp Asp Ile Arg Lys Thr Lys Ile Lys Glu Phe  
 405 410 415  
 Tyr Glu Ile Ala Glu Val Lys Ala Lys Asp Arg Pro Lys Pro Ile Val  
 420 425 430  
 Gly Pro Pro Lys Thr Val Pro Ala Ala Gly Lys Lys Val Val Gly Gly  
 435 440 445  
 Lys Lys Pro Ala Leu Gly Met Lys Lys Pro Ala Pro Ala Ala Ala Ala  
 450 455 460  
 Pro Pro Pro Glu Glu Pro Ala Pro Thr Leu Ser Pro Pro Lys Pro Ala  
 465 470 475 480

Thr Lys Ser Ile Pro Ser Lys Leu Gly Gly Val Pro Lys Pro Gly Gly  
 485 490 495  
 Leu Pro Thr Pro Gly Ala Gly Leu Lys Leu Gln Arg Lys Leu Gly Gly  
 500 505 510  
 Pro Gly Gly Leu Ala Ser Pro Gln Arg Arg Val Ile Ser Pro Pro Ser  
 515 520 525  
 Glu Glu Gln Pro Pro Ala Pro Ala Ala Pro Lys Phe Gly Leu Gly Arg  
 530 535 540  
 Gly Leu Ala Gly Arg Pro Ile Thr Lys Pro Ser Ala Ala Pro Glu Pro  
 545 550 555 560  
 Ala Pro Ala Pro Ala Ala Pro Pro Gln Val Ser Gly Ile Ser Ala Ile  
 565 570 575  
 Glu Arg Ala Glu Leu Asp Glu Leu Arg Leu Glu Arg Glu Arg Phe Leu  
 580 585 590  
 Arg Met Ile Glu Asp Leu Lys Ser Glu Arg Thr Arg Leu Asn Ser Gln  
 595 600 605  
 Val Thr Glu Leu Gln Asp Gln Asn Ala Gln Leu Ile Glu Asp His Thr  
 610 615 620  
 Arg Asp Val Leu Ser Ile Lys Ala Lys Glu Thr Gln Leu Val Arg Ala  
 625 630 635 640  
 Arg Ser Asp Ala Glu Ala Ala Glu Gln Thr Val Gln Lys Gln Gln Arg  
 645 650 655  
 Glu Ile Asp Arg Leu Lys Arg Glu Leu Ala Arg Ala Leu Arg Ala Ser  
 660 665 670  
 Ala Gln Ser Pro Pro Asn Gly Phe Ser Asp Asn Met Ser Phe Pro Val  
 675 680 685  
 Pro Glu Thr Ser Ile Tyr Tyr Glu Thr Gly Ile Asn Gly Tyr Asn Ala  
 690 695 700  
 Ile Pro Arg Thr Gly Leu His Met Gly Ser Arg Phe Asp Gly Gly Arg  
 705 710 715 720  
 Pro Arg Ser Tyr Val Ala Ala Ser Pro Ser Glu Glu Lys Glu Asn Thr  
 725 730 735  
 Asp Leu Glu Ser Pro Gly Arg Gly Ser Arg Asp Gly Gly Leu Gly Arg  
 740 745 750  
 Arg Lys Leu Ser Pro Ser Phe Gly Thr Asn Tyr Ser Gly Met Gly Ser  
 755 760 765  
 Pro Thr Arg Ser Ser Ile Pro Gly Ser Gly Ser Ala Ser Gly Glu Glu  
 770 775 780  
 Gln Pro Met Arg Ser Ser Glu Pro Ala Glu Asn Trp Lys Arg Ala Ala  
 785 790 795 800  
 Glu Val Thr Ser Gln Leu Lys Ala Arg Ile Glu Gln Met Lys Val His  
 805 810 815  
 Pro Tyr Ser Leu Phe Thr Cys Gly His Val Ser Asp Arg Ser Tyr  
 820 825 830

&lt;210&gt; 42658

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42658

Cys Thr Leu Gln Asp Met Asn Asn Gly Asp Cys Leu Ser Tyr Leu Leu  
 1 5 10 15  
 Val Asp Asn Gly Thr Glu Thr Ser Leu Ala Leu Asp Asn Gly Ile Gly  
 20 25 30  
 Asp Thr His Leu Ala Ala Glu Ser Gly Lys Glu Asp Asn Gln Leu Asn

## 19138

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      35              40              45
Arg Val Asn Val Val Gly Asp Glu Asn Lys Gly Ser Leu Leu Val Leu
  50              55              60
Asp Glu Ala Asp Asn Val Val Glu Thr Val Leu Asp Val Val Gly Leu
  65              70              75              80
Leu Gly Asp Ile Leu Leu Leu Leu Ala Leu Gly Asn Ser Gly Ser Leu
      85              90              95
Ser Val Glu Thr Leu Leu Leu Leu Gly Leu Gly Leu Arg Ala Val Leu
      100              105              110
Val Glu Glu Leu Glu Gly Leu Gly Ser Gly Val Ala Val Gln Ser Val
      115              120              125
Leu Glu Leu Ser Asn Gly Arg Gly Asp Leu Gln Ala Glu Val Gln Asn
      130              135              140
Leu Leu Leu Ala Leu Lys Ala Asp Ile Leu Gly Pro Leu Asp Glu Ala
  145              150              155              160
Gly Glu Val Ala Leu Gly Leu Asp Val Leu Ala Asn Thr Glu Val Ala
      165              170              175
Gly Ala Ala Leu Asp Glu Arg Val Leu Glu Phe Val Ser Glu Thr Asn
      180              185              190
Ser Phe Gln Lys Phe Glu Glu
      195

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&lt;210&gt; 42659

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42659

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Cys Ser Gly Ala Val Ser Ala Glu Thr Pro Leu His Leu Arg Pro Asp
  1              5              10              15
His Phe Leu Ile Gln Arg His His Asp Thr Phe Trp Leu Ala Arg Ser
      20              25              30
His Leu Thr Asp Lys Lys Ser Tyr Ile Lys Met Lys Thr Arg Leu Tyr
      35              40              45
Val Cys Thr Ala Cys Met Arg Arg Asn Phe Ser Thr Ala Leu Thr Leu
      50              55              60
Arg Asp Ser Pro Thr Ala Val Ala Pro Ser Asn Pro Pro Asn Ala Pro
  65              70              75              80
Lys Leu Gln Leu Arg Asp Leu Thr Pro Ser Asp Leu Ser Tyr Tyr Trp
      85              90              95
Asp Thr Arg Ile Pro Asn Glu Ser Gln Leu Ser Tyr Ala Asp Lys Phe
      100              105              110
Phe Thr Pro Ser Arg His Ser Pro Val Lys Leu Trp Ser Ala Ser Lys
      115              120              125
Phe Arg Thr Thr Pro Leu Ser Ser Leu Glu Pro Glu Val Ala Phe Leu
      130              135              140
Gly Arg Ser Asn Val Gly Lys Ser Ser Leu Leu Asn Ala Ile Met Gly
  145              150              155              160
Lys Glu Met Cys Trp Thr Ser Ser Lys Pro Gly Arg Thr Arg Glu Met
      165              170              175
Asn Ala Phe Gly Ile Gly Gly Thr Lys Gly Gly Glu Ser Lys Ile Val
      180              185              190
Leu Leu Asp Met Pro Gly Tyr Gly Lys Gly Ser Arg Thr Glu Trp Gly
      195              200              205
Ile Glu Ile Leu Lys Tyr Leu Gln Gly Arg Arg Gln
      210              215              220

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<210> 42660  
 <211> 509  
 <212> PRT  
 <213> A.fumigatus

<400> 42660

Glu	Gly	Trp	Gly	Glu	Ser	Pro	Ser	Ser	Pro	Arg	Ser	Pro	Ser	Arg	Pro
1				5					10					15	
Pro	Ser	Ile	Arg	His	Arg	Arg	Ser	Met	Gln	His	Leu	Gln	Glu	Leu	Glu
			20					25					30		
Ala	Arg	Leu	Asp	Gln	Leu	Ile	Ser	Glu	Asn	Arg	Leu	Leu	Ile	Ala	Ala
			35					40					45		
Arg	Glu	Ala	Ala	Glu	Asp	Lys	Leu	Arg	Asn	Ala	Ser	Val	Ala	Arg	Arg
	50					55					60				
Lys	Ser	Asp	His	Thr	Leu	Asn	Glu	Arg	Ser	Ala	Asp	Leu	Arg	Asp	Arg
65					70					75					80
Glu	Ala	Glu	Val	Glu	Lys	Leu	Lys	Lys	Ser	Val	Glu	Trp	Leu	Gln	Lys
				85					90					95	
Glu	Val	Thr	Arg	Leu	Thr	Glu	Glu	Asn	Glu	Gly	Leu	Ile	Thr	Thr	Asn
			100					105					110		
Ser	Asn	Leu	Thr	Ala	Ala	His	Ala	Lys	Glu	Ile	Glu	Ser	Val	Arg	Glu
			115					120					125		
Ser	Ser	Ser	Arg	Gln	Leu	Asp	Asp	Leu	Arg	Ser	Arg	Tyr	Glu	Gln	Leu
			130					135				140			
Ser	Met	Glu	Val	Gln	Asn	Thr	Val	Arg	His	Glu	Ile	Glu	Thr	Ala	Leu
145					150					155					160
Ala	Arg	Lys	Asp	Asn	Glu	Leu	Arg	Arg	Leu	Arg	Glu	Glu	Leu	Glu	Thr
				165					170					175	
Ala	Arg	Asp	Lys	Val	Ser	Gln	Leu	Gln	Lys	Ile	Ala	Ala	Ser	Leu	
			180					185					190		
His	Asp	Asn	Val	Leu	Val	Phe	Arg	Asp	Glu	Asp	Tyr	Phe	Asp	Ala	Ala
			195				200					205			
Cys	Gln	Lys	Leu	Cys	Gly	His	Val	Gln	Gln	Trp	Val	Leu	Arg	Phe	Ser
	210					215					220				
Lys	His	Ser	Asp	His	Arg	Arg	Cys	Arg	Lys	Leu	Ala	Glu	Ile	Gln	Asp
225					230					235					240
Glu	Lys	Ile	Ala	Asp	Arg	Phe	Asp	Asn	Ala	Ile	Leu	Asp	Gly	Tyr	Asp
				245					250					255	
Thr	Asp	Thr	Tyr	Leu	Ala	Asp	Arg	Val	Arg	Arg	Arg	Asp	Ile	Phe	Met
			260					265					270		
Ser	Val	Val	Met	Thr	Met	Val	Trp	Glu	Phe	Val	Phe	Thr	Arg	Tyr	Leu
			275				280					285			
Phe	Gly	Met	Asp	Arg	Glu	Gln	Arg	Gln	Lys	Leu	Lys	Ser	Leu	Glu	Lys
	290					295					300				
Gln	Leu	Asn	Glu	Val	Gly	Pro	Arg	Ser	Ala	Val	His	Arg	Trp	Arg	Ala
305					310					315					320
Ile	Thr	Leu	Thr	Leu	Leu	Ser	Lys	Arg	Pro	Ala	Phe	Ala	Arg	Gln	Arg
				325					330					335	
Glu	Ser	Asp	Thr	Glu	Ala	Val	Ala	Leu	Glu	Ile	Phe	Glu	Thr	Leu	Ser
			340					345					350		
Arg	Leu	Leu	Pro	Pro	Pro	Ser	His	Val	Glu	Val	Gln	Leu	Leu	Glu	Ser
			355				360					365			
Leu	Arg	Lys	Val	Leu	Arg	Val	Ala	Val	Asn	Leu	Ser	Ile	Glu	Met	Arg
	370					375					380				
Thr	Gln	Leu	Ala	Glu	Tyr	Ile	Met	Leu	Pro	Pro	Leu	Gln	Pro	Glu	Tyr

## 19140

385                    390                    395                    400  
 Asp Thr Asn Gly Asp Leu Ala Arg Gln Val Tyr Phe Asn Ala Ser Leu  
                          405                    410                    415  
 Met Asn Glu Arg Ser Gly Glu Thr Thr Ser Asn Glu Glu Leu Glu Ser  
                          420                    425                    430  
 Gln Gln Ala Val Val Arg Val Val Leu Phe Pro Leu Val Val Lys Lys  
                          435                    440                    445  
 Gly Asn Asp Thr Gly Glu Gly Glu Asp Glu Val Val Val Cys Pro Ala  
                          450                    455                    460  
 Gln Val Leu Val Ala Arg Pro Asp Lys Asp Pro Arg Ala Ser Lys Ile  
 465                    470                    475                    480  
 Phe Ser Ser Asp Arg Met Ser Leu Asp Gly Thr Lys Ser Val His Ser  
                          485                    490                    495  
 Val Ala Pro Ser Ser Thr Met Asp Ile Ser Asn Val Ile  
                          500                    505

&lt;210&gt; 42661

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42661

Leu Thr Met Ala Ser Gly Lys Ser Ser Arg Ser Asn Ser Ser Gln Thr  
 1                    5                    10                    15  
 Glu Thr Ala Ala Ala Thr Gly Ala Tyr Pro Ser Ala Gly Gly Tyr Glu  
                          20                    25                    30  
 Thr Pro Ala Pro His Thr His His Asp Ala Ala Ser Glu Gly Arg Ser  
                          35                    40                    45  
 Val Thr Asn Lys Pro Lys Arg Arg Lys Asn Arg His Arg Lys Arg Arg  
                          50                    55                    60  
 Asn Arg Arg Gln Ser Phe Leu Ala Pro Glu Glu Ser His Asn Gly Ala  
 65                    70                    75                    80  
 Ala Ala Ser Gly Ala Asp Ala Asp Ala Met Ile Ala Gly Asp Gln Pro  
                          85                    90                    95  
 Tyr Ser Arg Pro Ala Leu Pro Phe Tyr Asn Leu Gly Arg Asp Leu Ser  
                          100                    105                    110  
 Ser Thr Ser Leu Glu Ser Glu Ala Leu Leu Asp His Arg  
                          115                    120                    125

&lt;210&gt; 42662

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42662

Ala Val Gln Ala Trp Arg Val Arg Leu Cys Trp Thr Ile Gly Arg Phe  
 1                    5                    10                    15  
 Ser Phe Gly Leu Gly Gly Ile Ala Ser Leu Ser Phe Ala Leu Leu Met  
                          20                    25                    30  
 Met Arg Leu Leu Lys Ser Met Gln Lys Ser Thr His His Ala Thr Ser  
                          35                    40                    45  
 Glu Arg Lys Pro Thr Gly Thr Val Leu Ser Thr Trp Val Tyr Asp Asp  
                          50                    55                    60  
 Ser Val Ser Phe Tyr Arg Phe Ser Phe Ser Trp Tyr Thr Leu Arg Tyr  
 65                    70                    75                    80  
 Gln Gly Leu Ser Gly Arg Arg Arg

<210> 42663  
 <211> 289  
 <212> PRT  
 <213> A.fumigatus

<400> 42663

Gly	Ala	Ala	Pro	Ser	Ser	Pro	Val	Val	Lys	Thr	Thr	Glu	Pro	His	Gly
1				5					10					15	
Gly	Asp	Asp	Glu	Asp	Leu	Thr	Trp	Thr	Asp	His	Met	Val	Ser	Ser	Gln
			20					25					30		
Val	Glu	Gln	Gln	Gln	Gly	Thr	Pro	Ser	Asp	Arg	Pro	Ser	Glu	Pro	Ala
			35				40					45			
Pro	Glu	Thr	Glu	Pro	Ile	Ser	Thr	Arg	Glu	Ala	Ala	Thr	Ser	Ile	Asp
	50					55					60				
Val	Glu	Gln	Leu	Asp	Asn	Ala	His	Asp	Ala	Ser	Pro	Ala	Val	Asn	
65				70				75						80	
Asp	Arg	Leu	Glu	Arg	Ser	Gly	Glu	Glu	Arg	Thr	Arg	Val	Lys	Lys	Glu
			85					90					95		
Ile	Val	Ser	Glu	Glu	Pro	Glu	Val	Gln	Tyr	Glu	Gly	Leu	Leu	Gly	Ile
			100					105					110		
Pro	Arg	Glu	Glu	Lys	Ala	Glu	Ile	Ser	Ser	Gln	Gly	Glu	Asp	Thr	Ile
			115				120					125			
Gln	Val	Lys	Ser	Asp	Ala	Glu	Val	Glu	Glu	Ser	Val	Lys	Ala	Thr	Val
			130				135					140			
Glu	Gly	Thr	Pro	Glu	Asp	Ser	Met	Ser	Gln	Glu	Asp	Ala	Pro	Ile	Ser
145				150					155					160	
Val	Leu	Asp	Gly	Gly	Asp	Ala	Thr	Thr	Lys	Asp	Gln	Phe	Thr	Ser	Ile
			165					170						175	
Glu	Val	Asn	Asp	Pro	Ser	Gln	Ser	Lys	Asp	Ile	Leu	Glu	Pro	Glu	Asn
			180					185					190		
Glu	Glu	Leu	Pro	Leu	Pro	Ile	Pro	Gly	Lys	Lys	Lys	Lys	Ala	Gln	Gln
			195				200						205		
Glu	Thr	Lys	Ile	Asp	Glu	Thr	Ser	Gln	Asp	Asp	Ser	Val	Asp	Ala	Val
			210			215					220				
Gln	Glu	Glu	Ser	Pro	Thr	Ser	Arg	Glu	Met	Thr	Asp	Thr	Gly	Leu	Pro
225				230					235					240	
Val	Ala	Glu	Ser	Gln	Ala	Asp	Pro	Ile	Ala	Glu	Pro	Phe	His	Glu	Leu
				245					250					255	
Pro	Glu	Pro	Gln	Lys	Ala	Val	Glu	Ile	Ala	Val	Glu	Asp	Lys	Ser	Met
			260				265						270		
Gln	Glu	Thr	Leu	Lys	Phe	Lys	Gln	Asp	Val	Thr	Pro	Ala	Glu	Asp	Val
			275				280						285		

Phe

<210> 42664  
 <211> 948  
 <212> PRT  
 <213> A.fumigatus

<220>

<221> UNSURE

<222> (238), (269)

<223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42664

Glu	Pro	Pro	Ala	Leu	Gly	Arg	Lys	Lys	Ser	Lys	Lys	Asp	Lys	Lys	Lys	1	5	10	15
Asp	Leu	Leu	Ala	Gln	Asn	Thr	Ala	Val	Glu	Ser	Arg	Glu	Asn	Lys	Phe	20	25	30	
Lys	Glu	Lys	Gln	Leu	Ala	Thr	Glu	Glu	Pro	Leu	Ile	Thr	Pro	Ser	Asp	35	40	45	
Ala	Arg	Thr	Thr	Val	Leu	Ala	Thr	Pro	Val	Phe	Thr	Gln	Ala	Leu	Glu	50	55	60	
Thr	Pro	Thr	Lys	Thr	Thr	Val	Asp	Ala	Gly	Glu	Arg	Glu	Leu	His	Leu	65	70	75	
Ser	Ala	Val	Gln	Ser	Thr	Val	Pro	Val	Glu	Asp	Asn	Ile	Asn	Ala	Leu	85	90	95	
Glu	Thr	Ser	Gly	Ala	Gln	Thr	Leu	Glu	Ser	Phe	Arg	Thr	Leu	Glu	Ala	100	105	110	
Pro	Glu	Gln	Pro	Leu	Glu	Arg	Asn	Ile	Leu	Leu	Asn	Asp	Tyr	Ala	Ala	115	120	125	
Lys	Thr	Pro	Glu	Glu	Leu	Pro	Ala	Val	Glu	Lys	Ser	Ala	Thr	Tyr	Glu	130	135	140	
Thr	Ala	Thr	Glu	Pro	Ile	Ile	Glu	Glu	Ala	Ala	Leu	Ser	His	Lys	Asn	145	150	155	
Ser	Lys	Lys	Lys	Ser	Lys	Lys	Ala	Lys	Lys	Gln	Ala	Gln	Glu	Gln	Gln	165	170	175	
Glu	Lys	Ser	Thr	Thr	Pro	Thr	Pro	Ala	Glu	His	Gly	Glu	Glu	Ser	Ile	180	185	190	
Val	Glu	Thr	Thr	Ala	Ala	Ile	Pro	Ser	Thr	Pro	Gly	Pro	Ala	Glu	Asn	195	200	205	
Ser	Asp	Asp	Ile	Pro	Glu	Ala	Asn	Ile	Ser	Glu	Glu	Gln	Val	Ala	Gln	210	215	220	
Leu	Glu	His	Ser	Glu	Gln	Leu	Val	Leu	Ser	Asp	Ala	Ala	Xaa	Pro	Gln	225	230	235	
Glu	Arg	Leu	Gly	Gln	Thr	Pro	Asn	Met	Asp	Asn	Gln	Thr	Asp	Asp	Val	245	250	255	
Gln	Ser	Thr	Glu	Gln	Gly	Lys	Glu	Gly	Asn	Val	Gln	Xaa	Glu	Pro	Arg	260	265	270	
Gln	Val	Glu	Ser	Glu	Asp	Pro	Ile	Glu	Ser	Gln	Pro	Gly	Ser	Thr	Ala	275	280	285	
Ala	Val	Ala	Arg	Lys	Leu	Ser	Lys	Lys	Asp	Arg	Arg	Lys	Ala	Lys	Lys	290	295	300	
Lys	Ser	Ala	Lys	Asp	Ala	Ile	Glu	Pro	Ser	Asp	Glu	Pro	Glu	Leu	Arg	305	310	315	
Asn	Pro	Thr	Glu	Pro	Ile	Gly	Ala	Ser	Cys	Ser	Thr	Ser	Asn	Gln	Ala	325	330	335	
Lys	Ile	Asp	Gln	Asp	Gln	Phe	Leu	Thr	Val	Ala	Ser	Asp	Lys	Gln	Met	340	345	350	
Val	Glu	Glu	Val	Pro	Arg	Pro	Leu	Glu	Val	Glu	Pro	Ala	Ala	Ser	Glu	355	360	365	
Val	Tyr	Gln	Gly	Ala	Thr	Asp	Glu	Asn	Asp	Trp	Pro	Ala	Ile	Asp	Trp	370	375	380	
Glu	Lys	Gly	Lys	Val	Glu	Phe	Lys	Glu	Gln	Thr	Pro	Leu	Ser	Ser	Pro	385	390	395	
Glu	Ala	His	Ala	Val	Leu	Phe	Glu	Pro	Ala	Ile	Ala	Glu	Phe	Asp	Glu	405	410	415	
Thr	Ala	Ile	Pro	Glu	Gly	Leu	Leu	Arg	Arg	Gln	Ser	Leu	Ser	Arg	Glu	420	425	430	



Glu Gln Leu Ala Gly Gly Lys Asp Gly Ser Ser Gln His Thr Arg Ala  
 435 440 445  
 Asp Glu Ile Ala Ala Pro Gln Glu Gly Ala Val Met Ile Glu Pro Ser  
 450 455 460  
 Ala Val Ala Glu Thr Glu Gln Ser Ala Gly Leu Gln Ala Lys Ser Val  
 465 470 475 480  
 Ser Ser Gln Gly Ala Pro Lys Thr Ile Gln Asp Asp Met Gln His Pro  
 485 490 495  
 Glu Asn Arg Leu Ala Arg Asp Gln Thr Lys Ser Glu Thr Gly Val Val  
 500 505 510  
 Pro Ser Lys Gln Ser Lys Ile Gly Ser Ile Phe Pro Asp Leu Glu Arg  
 515 520 525  
 Gly Ser Phe Arg Arg Pro Val Pro Gly Gln Val Leu Met Pro Val Lys  
 530 535 540  
 Asp Arg Ala Glu Asp Glu Thr Ile Asp Gln Asn Ala Asp Asp Asn Ser  
 545 550 555 560  
 Ala Ile Lys Val Ser Glu Ala Pro Ile Pro Ala Gly Glu Pro Glu Glu  
 565 570 575  
 Ser His Leu Gln Ser Gln Gln Asp Glu Lys Gly Pro Glu Pro Thr Thr  
 580 585 590  
 Thr Val Ser Thr Leu Asp Leu Ser Leu Glu Glu Pro Thr Lys Met Gln  
 595 600 605  
 Asp Thr Ser Asn Thr Pro Val Asn Leu Ala Val Asp Ile Glu Val Asp  
 610 615 620  
 Pro Ser Tyr Asn Val Ser Val Ile Ser Asp Gly Leu Val Asn Glu Thr  
 625 630 635 640  
 Lys Ser Ile Glu Ile Glu Trp Lys Thr Asp Gly Asp Lys Gly Thr Gln  
 645 650 655  
 Glu Ala Glu Thr Pro Leu Tyr Ala Pro Leu Pro Val His Glu Gln Lys  
 660 665 670  
 Ser Ser Leu Val Ser Gln Ala Ser Pro Leu Asp Met Asp Arg Asp Glu  
 675 680 685  
 Pro Ile Pro Arg Asn Asp Ser Ser Cys Gly Leu Arg Arg Ser Pro Ser  
 690 695 700  
 Ile His Gly Arg His Asn His Pro Pro Arg Thr Trp Ser Leu Glu Asp  
 705 710 715 720  
 Thr Pro Ile Thr Lys Ala Val Thr Pro Pro Leu Phe Gly Gly Pro Val  
 725 730 735  
 Gly Ala Thr Ala Asp Met Ser Ser Pro Pro Arg Thr Pro Leu Gln Pro  
 740 745 750  
 Ile Ala Glu Gln Glu Pro Glu Val Arg Val Glu Gln Ala Ser Gly Phe  
 755 760 765  
 Arg Ser Met Val Ser Glu His Gly Thr Pro Arg Leu Glu Met Lys Pro  
 770 775 780  
 Glu His Val Leu Pro Arg Pro Glu Thr Pro Ile Arg Lys Phe Thr Asp  
 785 790 795 800  
 Asn Ala Leu Ala Arg Gln Thr Trp Pro Val Ala Glu Asn Asp Ile Phe  
 805 810 815  
 Lys Ser Ser Glu Asp Glu Asp Ala Ala Leu Thr Val Lys Lys Gln Arg  
 820 825 830  
 Pro Gly Asn Lys Trp Pro Ala Glu Val Leu Lys Thr Pro Asp Lys Gly  
 835 840 845  
 Met Pro Ile Leu Arg Pro Ser Ser Val Ser Ser Val Lys Ser Val Gln  
 850 855 860  
 Ser Thr His Ser Val Thr Gly Gly Gln Arg Ser Leu Arg Arg Thr Ser  
 865 870 875 880

## 19144

Arg Asn Thr Ser Gly Asp Leu Arg Ala Ala Ser Gln Ala Gln Glu Ser  
                   885                  890                  895  
 His Gly Thr Gln Pro His Ala Thr Pro Gln Pro Pro Gln Pro Pro Pro  
                   900                  905                  910  
 Ser Asp Leu Asn Ile Glu His Ile Ala Ser Ser Ser Ser Tyr Asp Pro  
                   915                  920                  925  
 Val Thr Asp Lys Gly Lys Arg Pro Ile Arg Ala Met Thr Asp Val Tyr  
                   930                  935                  940  
 Val Ser Val Tyr  
 945

&lt;210&gt; 42665

&lt;211&gt; 672

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42665

Cys Ala Ser Leu Asn Leu Cys Arg Asn Gln Pro Thr Met Arg Pro Arg  
 1                  5                  10                  15  
 Arg Glu Ser Arg Leu Ala Gln Ser Phe Arg Pro Gly Ser Met Thr Ile  
                   20                  25                  30  
 Pro Ser Arg Ser Ile Asp Leu Ala Ser Arg Gly Thr Pro Ser Gly Thr  
                   35                  40                  45  
 Arg Val Phe Gln Ala Gly Asp Asp Ser Asp Gly Ser Asp Gly Ala Asp  
                   50                  55                  60  
 Asp His Thr Pro Leu Ile Arg Pro Ala Ser Gly His His Asn Asn Lys  
 65                  70                  75                  80  
 Ser Trp Tyr Gly Thr Asp Ala Lys Ala Ser Pro Phe Ala Ser Arg Gln  
                   85                  90                  95  
 Arg Arg Thr Ser Val Gln Ser Ala Ser Ser Arg Cys Ser Pro Arg Gly  
                   100                  105                  110  
 Leu Ala Thr Pro Asp Pro Asp Arg Asp Tyr Asp Ile Asn Asn Pro Pro  
                   115                  120                  125  
 Ser Ile Pro Ser Ser Pro Lys Leu Gly Gly Glu Met Asn Tyr Asp Asp  
                   130                  135                  140  
 Ala Val Val Thr Gly Ala Asp Phe Asp Phe Ala Leu Ala Lys Ser Ile  
 145                  150                  155                  160  
 Asp Asn Arg Asn Gln Ala Gly Ser Arg Pro Asn Asp Met Val Ile Asp  
                   165                  170                  175  
 Val Asp Gly Arg Ser Thr Gln Gln Lys Pro Ser Thr Gln Ser Ser Pro  
                   180                  185                  190  
 Val Ser Pro His Leu Ser Pro His Glu Ala Leu Arg Arg Arg Arg Thr  
                   195                  200                  205  
 Val Ala Leu Pro Val Glu Glu Asp Val Cys Phe Pro Ile Glu Glu Ala  
                   210                  215                  220  
 Ser Glu Leu Ala Glu Glu Asp Ala Arg Arg Thr Ser Arg Glu Asp Gly  
 225                  230                  235                  240  
 Arg Arg Arg Arg Arg Thr Lys Glu Trp Pro Asp Leu Ser Val Leu Glu  
                   245                  250                  255  
 Glu Trp Ser Arg Glu Glu Lys Glu Glu Arg Asn Gly Val Leu Arg Ala  
                   260                  265                  270  
 Lys Lys Ile Ser Glu Pro Val Leu Ile Glu Gly Arg Leu Arg Pro Gln  
                   275                  280                  285  
 Tyr Arg Val Trp Arg Arg Glu Glu Asp Glu Ala Pro Tyr Arg Phe Thr  
                   290                  295                  300  
 Tyr Phe Asn Glu Glu Phe Gln Ser Thr Ile His Ala Gln Ser Ile Ser

## 19145

305                      310                      315                      320  
 Glu Leu Val Gln Pro Gly Gly Ser Phe Arg Glu Leu Phe Ile Pro Asp  
                                  325                      330                      335  
 Pro Pro Glu Leu Glu Asp Ser Ser Asp Glu Glu Asp Phe Glu Asp Glu  
                                  340                      345                      350  
 Asn Asn His Ser Asp Pro Val Thr Asp Ser Asn His Asp Gly Gln Asp  
                                  355                      360                      365  
 Asn Ala Arg Ala Glu Asp His Arg Pro Ala Gln Ala Gly Gly His Asn  
                                  370                      375                      380  
 Val Asn Ala Ala Asn Gly Pro Lys Ala Gln His Asn Thr Ser Ile Ile  
 385                      390                      395                      400  
 Ser Glu Gly Met Ser Glu Ala Arg Ala Ser Val Glu Ala Ser Pro Ala  
                                  405                      410                      415  
 Arg Lys Val Ser Thr Pro Lys Pro Lys Lys Phe Gly Pro Arg Pro Thr  
                                  420                      425                      430  
 Phe Trp Leu Asp Val Leu Ser Pro Thr Asp Ala Glu Met Arg Val Ile  
                                  435                      440                      445  
 Ala Lys Ala Phe Gly Ile His Ala Leu Thr Ala Glu Asp Ile Met Met  
                                  450                      455                      460  
 Gln Glu Ala Arg Glu Lys Val Glu Leu Phe Arg Ser Tyr Tyr Phe Val  
 465                      470                      475                      480  
 Asn Tyr Arg Thr Phe Glu Gln Asp Pro Asn Ser Glu Asn Tyr Leu Gln  
                                  485                      490                      495  
 Pro Val Asn Met Tyr Ile Val Val Phe Arg Glu Gly Ile Leu Ser Phe  
                                  500                      505                      510  
 His Phe Ser Gln Thr Pro His Pro Ala Asn Val Arg Arg Arg Ile Arg  
                                  515                      520                      525  
 Gln Leu Met Asp Tyr Leu Ile Leu Ser Ser Asp Trp Ile Ser Tyr Ala  
                                  530                      535                      540  
 Leu Ile Asp Asp Ile Thr Asp Val Phe Gly Pro Leu Ile Gln Ser Ile  
 545                      550                      555                      560  
 Glu Asp Glu Val Asp Glu Ile Asp Glu Arg Ile Met Lys Met His Ser  
                                  565                      570                      575  
 Pro Gly Arg Ile Asp Thr Ser Val Asn Pro Ala Asn Arg Arg Glu Asp  
                                  580                      585                      590  
 Gly Asp Asp Val Pro Glu Pro Pro Ala Pro Gly Glu Met Leu Arg Arg  
                                  595                      600                      605  
 Val Gly Glu Cys Arg Lys Lys Val Met Gly Met Tyr Arg Leu Leu Ser  
                                  610                      615                      620  
 Asn Lys Ala Asp Val Val Lys Gly Phe Ala Lys Arg Cys Asn Glu His  
 625                      630                      635                      640  
 Trp Glu Val Ala Pro Lys Ser Glu Ile Gly Leu Tyr Leu Gly Asp Ile  
                                  645                      650                      655  
 Gln Asp His Ile Leu Thr Met Thr Ser Ser Leu Thr Tyr Tyr Glu Thr  
                                  660                      665                      670

&lt;210&gt; 42666

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42666

Arg Val Pro Tyr Ile Arg Glu Arg Gly Pro Ala Asn Gln Gly His Arg  
 1                      5                      10                      15  
 Leu Leu Ser Arg Ala His Ser Asn Tyr Leu Ala Gln Ile Asn Ile Leu  
                                  20                      25                      30

## 19146

Met Asn Glu Arg Gln Glu Gln Thr Ala Asp Val Leu Gly Arg Leu Thr  
 35 40 45  
 Val Leu Gly Thr Ile Val Leu Pro Met Asn Ile Ile Cys Gly Met Trp  
 50 55 60  
 Gly Met Asn Val Lys Val Pro Gly Gln Asp Ile Asp Asn Leu Trp Trp  
 65 70 75 80  
 Phe Trp Ser Ser Lys Asp Ser Leu His Tyr Ala Leu Phe Phe Arg Gly  
 85 90 95  
 Phe Tyr Tyr Glu Met Val Ile  
 100

&lt;210&gt; 42667

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42667

Lys Cys Lys Thr Trp Leu Leu Asn Tyr Val Val Ser Ser Ser Asn Arg  
 1 5 10 15  
 Val Gly Val Trp Ala Lys Tyr Leu Val Ala Leu Ser Ser Ser Phe Thr  
 20 25 30  
 Ser Gly Glu Asn Gly His Thr Ser Lys Pro Thr Glu Val Arg Pro Gly  
 35 40 45  
 Thr Ser Ser Lys Arg Lys Arg Leu His Ile Leu Tyr Leu Ile Asn Asp  
 50 55 60  
 Leu Phe His His Thr Lys Tyr His Thr Asp Thr Pro Ala Thr Phe Ser  
 65 70 75 80  
 Thr Leu Ser Gly Ser Leu Gln Pro His Ile Val Glu Leu Leu Gly Tyr  
 85 90 95  
 Ala Ala Ser Tyr Asp Arg Phe Lys Asn Pro Lys His His Arg Arg Leu  
 100 105 110  
 Asp Asp Leu Leu Asn Ile Trp Glu Lys Asn Gly Tyr Tyr Gly Ala Asp  
 115 120 125  
 Tyr Val Asn Lys Leu Arg Glu Val Val Lys Asn Ser Ala Glu Ser Gly  
 130 135 140  
 Pro Val Lys Ser Phe Ile Asp Val Glu Gln Asn Met Asp Thr Val  
 145 150 155 160  
 Asn Arg Ser Val Glu Lys Asn Val Pro Phe Val Met Pro Ser Thr His  
 165 170 175  
 Gly Asp Ser Ser Thr Pro Tyr Tyr Asp Leu Pro Ala Gly Asn Leu Ile  
 180 185 190  
 Pro His Ile Ile Pro Asp Ser Thr Val Pro Leu Arg Pro Asp Thr Ile  
 195 200 205  
 Lys Pro Leu Gln Phe Leu Ala Gly Ser Ala Asp Glu Lys Leu Val Thr  
 210 215 220  
 Ala Leu Lys Ala Phe Leu Lys Asp Val Asp Arg Met Tyr Asn Ser Gly  
 225 230 235 240  
 Gln Thr Glu Gln Lys Glu Asn Glu Val Val Asp Ile Asp Glu Met Gly  
 245 250 255  
 Gln Thr Ile Ile Arg Asp Ser Ser Thr Gly Glu Ile Val Gly Gly Asp  
 260 265 270  
 Thr Tyr Tyr Gly Trp Ser Arg Ala Phe Cys Gln Gln Met Lys Lys Arg  
 275 280 285  
 Arg Ala Lys Gly Ser Ser Arg Asn Arg Thr Arg Ser Gly Ser Arg Ser  
 290 295 300  
 Arg Ser Ala Ser Arg Arg Arg Arg Tyr Ser Gly Ser Ser Glu Ser Gly

## 19147

305                      310                      315                      320  
 Asp Ser Arg Trp Arg Ser Ser Ser Ser Arg Ser Arg Ser Ala Pro Arg  
                          325                      330                      335  
 Arg His Glu Ala Asn Asp Arg Arg Tyr Asp Ser Arg Ser Arg Ser Pro  
                          340                      345                      350  
 Arg Arg Ser Arg Ser Arg Glu Arg Ser Tyr Ser Pro Arg Ala Pro Ser  
                          355                      360                      365  
 Pro Pro Arg Tyr Pro Pro Pro Glu His Gln Thr Ser Gln Tyr Ser Asn  
                          370                      375                      380  
 Thr Gly Pro His Gly Phe His Ser Ser His Pro Pro Pro Pro Pro Pro  
 385                      390                      395                      400  
 Met His Phe Ala Pro Gly Gly Asn Val Pro Pro Val Pro Pro Val Pro  
                          405                      410                      415  
 Pro Ala Phe Pro Pro Arg Ile Ala Pro Gly  
                          420                      425

&lt;210&gt; 42668

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42668

Lys Lys Phe Leu Lys Arg His Ala Ser Gln Thr Gln Gly Tyr Arg Gln  
 1                      5                      10                      15  
 Tyr Gly Leu Ser Asp Glu Asn Met Ser Gly Trp Lys Ala Asp His Arg  
                          20                      25                      30  
 Leu Gly Gly Arg Ser Ser Arg Ala Ser Lys Arg Ala Thr Pro Val Pro  
                          35                      40                      45  
 Gly Ile Glu Asp Val Gly Ser Ser Asp Glu Tyr Ser Asp Tyr Val Asp  
                          50                      55                      60  
 Glu Lys Asp Asp Asn Leu Lys Gly Lys Arg Ser His Ile Cys Asn Arg  
 65                      70                      75                      80  
 Arg Cys His Thr Pro Asp Arg Leu Leu Tyr Arg Cys Cys Gly Lys Ile  
                          85                      90                      95  
 Leu Pro

&lt;210&gt; 42669

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42669

Ala Ser Gln Pro Ser Gly Ala His Thr Gly Tyr Tyr Asp Gly Leu Pro  
 1                      5                      10                      15  
 Asp Arg Trp Leu Leu Thr Ile His Glu Ala Tyr Phe Thr Gly Ala Ala  
                          20                      25                      30  
 Gln Arg Pro Pro Lys Gln Val Lys Leu Asp Phe Phe Leu Met His Cys  
                          35                      40                      45  
 Val Thr Ser Ser Ile Phe Leu Ser Lys Ile Val Thr Leu Pro Tyr Leu  
                          50                      55                      60  
 Asp Thr Arg Thr Lys Leu Arg Leu Leu Glu Trp Lys Gly Arg Ala Asp  
 65                      70                      75                      80  
 Leu Val Phe Tyr Val Ser Arg Gly Val Pro Asp Leu Leu Leu Glu Glu  
                          85                      90                      95  
 Val Thr Thr Tyr Glu Ala Pro Asn Asp Trp Lys Thr Ile Phe Tyr Glu

## 19148

	100		105		110										
Ser	Ser	Val	His	Pro	Arg	Asp	Asp	Gly	His	Leu	Ser	Lys	Leu	Val	Arg
	115						120					125			
Ala	Leu	Ala	Asn	Gly	Glu	Lys	Val	Cys	Arg	Pro	Phe	Glu	Ala	Arg	Ala
	130						135				140				
Glu	Glu	Leu	Gly	Leu	Leu	Ile	Thr	Gly	Asp	Met	Trp	Leu	Lys	Ile	Ala
145					150				155						160
Asn	Met	Gly	Lys	Pro	Asp	Ala	Arg	Ile	Arg	Leu	Thr	Leu	Arg	Thr	Met
			165						170					175	
Phe	Gln	Gly	Phe	Ala	Asp	Asp	Arg	Leu	Arg	Thr	Ser	Tyr	Gln	Phe	Asn
		180						185					190		
Gln	Arg														

&lt;210&gt; 42670

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42670

Lys	Ala	Ser	Ala	Pro	Ile	Ser	Val	Thr	Gly	Asp	Val	Ile	Leu	Leu	Thr
1				5					10					15	
Val	Phe	Tyr	Thr	Asp	Val	Val	Glu	Lys	Phe	Ser	Leu	Glu	Ser	Phe	Ser
			20					25				30			
Asn	Lys	Lys	Asn	Pro	Ser	Val	Ser	Lys	His	Asp	Pro	Asn	Phe	Gly	Tyr
		35					40				45				
Lys	Asp	Phe	Ser	Ser	Leu	Ala	Leu	Lys	Pro	Asp	His	Ala	Asn	Arg	Pro
	50					55				60					
Leu	Trp	Ile	Asp	Pro	Leu	Lys	Gly	Thr	Ile	Thr	Leu	Gly	Glu	Phe	Leu
65					70				75						80
Pro	Thr	Gly	Ala	Ser	Gly	Pro	Arg	Leu	Ser	Asp	His	Asp	Arg	Arg	Ala
			85						90				95		
Pro	Phe	Thr	Pro	Asp	Thr	Leu	Ala	Arg	Ile	Pro	Leu	Asp	Trp	Glu	Gln
			100					105				110			
Phe	Val	Cys	Gly	Arg	Val	Arg	Arg	Pro	Ala	Ala	His				
		115					120								

&lt;210&gt; 42671

&lt;211&gt; 509

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42671

Thr	Thr	Tyr	Ala	Glu	Phe	Pro	Ile	Phe	Asn	Thr	Met	Ala	Gly	Glu	Glu
1				5					10					15	
Glu	Asp	Ile	Asn	Arg	Thr	Asn	Asn	Pro	Pro	Pro	Phe	Thr	Glu	Arg	Val
			20					25					30		
His	Asp	His	Asn	Pro	Phe	Val	Ala	Phe	Arg	Arg	Tyr	Ala	Asp	Glu	Gln
		35					40				45				
Ile	Ser	Ser	Met	Leu	Gln	Ala	Val	Met	Gly	Leu	Pro	Ser	Ser	Ile	Ser
		50				55					60				
Ala	Pro	His	Ser	Asn	His	Trp	Ala	Ile	Phe	Ala	Glu	Glu	His	Asn	Cys
65					70				75						80
Arg	Glu	Pro	Asn	Tyr	Arg	Gln	Arg	Gln	Thr	Gly	Glu	Gly	Lys	Glu	Gly
			85						90				95		
Glu	Tyr	Pro	Ala	Ser	Ser	Gly	Thr	Gly	Ala	Ser	Gly	Asn	Thr	Asp	Asn

```
<210> 42672
<211> 726
<212> PRT
<213> A.fumigatus
```

&lt;400&gt; 42672

Lys Ala Gln Ser Arg Trp Glu Ser Phe Ser Pro Leu Ala Pro Gln Ala  
 1 5 10 15  
 Gln Asp Phe Leu Thr Thr Ile Ala Glu Pro Leu Ser Arg Pro Thr His  
 20 25 30  
 Leu His Glu Tyr Arg Leu Thr Gly Asn Ser Leu Tyr Ala Ala Val Ser  
 35 40 45  
 Val Gly Leu Gln Pro Thr Asp Ile Ile Asn Phe Leu Asp Arg Leu Ser  
 50 55 60  
 Lys Thr Pro Leu Pro Asp Thr Val Lys Ser Phe Ile Ile Asp Phe Thr  
 65 70 75 80  
 Lys Ser Phe Gly Lys Ile Lys Val Val Leu Lys His Asn Arg Phe Phe  
 85 90 95  
 Val Glu Ser Thr Asp Pro Ala Met Leu Gln Met Leu Leu Gln Asp Glu  
 100 105 110  
 Val Ile Gly Gln Gln Arg Val Asn Gly Ser Glu Gly Ile Ile Gln Gln  
 115 120 125  
 Ala Ala Pro Lys Met Gly Gly Leu Val Ile Pro Gly Thr Lys Asp Ala  
 130 135 140  
 Ala Gly Val Gln Gln Thr Ser Glu Glu Lys Pro Ala Asn Gly Val Pro  
 145 150 155 160  
 Gly Gln Glu Arg Lys Glu Asp Asp Ile Leu Leu Ala Ile Arg Asp Asp  
 165 170 175  
 Asp Asp Asp Asp Glu Gln Ala Gln Val His Ser Phe Glu Ile Pro Asn  
 180 185 190  
 Glu Ala Val Glu Ser Val Lys Ala Arg Cys Gln Ala Met Gly Cys Pro  
 195 200 205  
 Ala Leu Glu Glu Tyr Asp Phe Arg Asn Asp Glu Ile Asn Pro Thr Leu  
 210 215 220  
 Asp Ile Asp Leu Lys Pro Asn Ala Arg Ile Arg Ser Tyr Gln Glu Lys  
 225 230 235 240  
 Ser Leu Ser Lys Met Phe Gly Asn Gly Arg Ala Lys Ser Gly Ile Ile  
 245 250 255  
 Val Leu Pro Cys Gly Ala Gly Lys Thr Leu Val Gly Ile Thr Ala Ala  
 260 265 270  
 Cys Thr Ile Lys Lys Gly Thr Ile Val Leu Cys Thr Ser Ser Met Ser  
 275 280 285  
 Val Val Gln Trp Arg Asn Glu Phe Leu Arg Trp Ser Asn Ile Asp Pro  
 290 295 300  
 Gly Asp Ile Ala Ile Phe Thr Ser Asp Asn Lys Glu Arg Phe Arg Arg  
 305 310 315 320  
 Ser Thr Gly Ile Ile Val Ser Thr Tyr Ser Met Val Ser Gln Thr Arg  
 325 330 335  
 Ala Arg Ser His Asp Ala Gln Lys Met Met Asp Trp Met Gln Ser Arg  
 340 345 350  
 Glu Trp Gly Leu Met Ile Leu Asp Glu Val His Val Val Pro Ala Ser  
 355 360 365  
 Met Phe Arg Lys Val Thr Ser Ala Ile Ala Thr Gln Ser Lys Leu Gly  
 370 375 380  
 Leu Thr Ala Thr Leu Leu Arg Glu Asp Asp Lys Ile Lys Asp Leu Asn  
 385 390 395 400  
 Phe Leu Ile Gly Pro Lys Leu Tyr Glu Ala Asn Trp Met Glu Leu Ala  
 405 410 415  
 Glu Gln Gly His Ile Ala Lys Val Gln Cys Ala Glu Val Trp Cys Pro  
 420 425 430



## 19151

```

Met Thr Thr Glu Phe Tyr Thr Glu Tyr Met Arg Glu Lys Ser Arg Lys
    435                                440                                445
Ala Ala Leu Leu Tyr Ile Met Asn Pro Arg Lys Phe Gln Ala Cys Gln
    450                                455                                460
Phe Leu Ile Asp Tyr His Glu Lys Arg Gly Asp Lys Val Ile Val Phe
465                                470                                475                                480
Ser Asp Asn Val Tyr Ala Leu Glu Arg Tyr Ala Leu Lys Leu Asn Lys
    485                                490                                495
Ala Tyr Ile Tyr Gly Gly Thr Pro Gln Asn Glu Arg Met Arg Ile Leu
    500                                505                                510
Glu Asn Phe Gln His Asn Glu Gln Val Asn Thr Ile Phe Leu Ser Lys
    515                                520                                525
Ile Gly Asp Thr Ser Leu Asp Leu Pro Glu Ala Thr Cys Leu Ile Gln
    530                                535                                540
Ile Ser Ser His Tyr Gly Ser Arg Arg Gln Glu Ala Gln Arg Leu Gly
545                                550                                555                                560
Arg Ile Leu Arg Ala Lys Arg Arg Asn Asp Glu Gly Phe Asn Ala Phe
    565                                570                                575
Phe Tyr Ser Leu Val Ser Lys Asp Thr Asp Glu Met Phe Tyr Ser Ser
    580                                585                                590
Lys Arg Gln Ala Phe Leu Val Asp Gln Gly Tyr Ala Phe Lys Val Ile
    595                                600                                605
Thr His Leu Gln Gly Ile Glu Asn Leu Glu Gly Leu Ala Tyr Ala Thr
    610                                615                                620
Pro Ala Glu Arg Arg Glu Leu Leu Gln Glu Val Met Leu Gln Asn Glu
625                                630                                635                                640
Thr Ser Ala Glu Val Glu Asn Val Thr Asp Asp Leu Phe Ser Glu Arg
    645                                650                                655
Ser Gly Gly Pro Lys Gly Arg Ala Lys Gly Gly Val Lys Arg Ser Ala
    660                                665                                670
Ala Thr Leu Ser Gly Leu Ala Gly Gly Glu Asp Met Ala Tyr Ile Glu
    675                                680                                685
Tyr Asn Lys Ser Arg Asn Lys Gln Leu Lys Asp Lys Ala Gly His His
    690                                695                                700
Pro Leu Phe Arg Lys Leu Glu Arg Glu Arg Leu Lys Arg Lys Lys Glu
705                                710                                715                                720
Leu Gln Asp Ile Met Arg
    725

```

&lt;210&gt; 42673

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42673

```

Leu Cys Leu Val Ile Arg Leu Ser Ala Glu Thr Ile Pro Ile Pro Thr
1          5          10          15
Thr Ser Phe Thr Ser Thr Gln Glu Asn Cys Arg Tyr Val Arg Ala Gln
20        25        30
Ala Cys Tyr Lys Leu Ser Ser Lys Leu Thr His Leu Phe Pro Phe Glu
35        40        45
Val Asn Gly Thr His Leu Ser Ala Asp Ser Asn Ser Phe Leu Glu Lys
50        55        60
Arg Arg Arg Gly Leu Val Arg Phe Thr Asn Ala Leu Val Arg His Pro
65        70        75        80
Val Leu Ser Gln Glu Gln Leu Val Val Met Phe Leu Thr Val Pro Thr

```

## 19152

				85					90					95
Val	Cys	Ile	Ser	Ala	Cys	Ile	Asn	Gly	Asn	Glu	Lys	Leu	Thr	
			100					105					110	

<210> 42674  
 <211> 199  
 <212> PRT  
 <213> A.fumigatus

<400> 42674  
 Glu Leu Ser Val Trp Arg Lys Gln Ala Thr Ile Ser Val Gln Asp Glu  
 1 5 10 15  
 Phe Thr Gly Arg Val Leu Pro Pro Asp Leu Glu Asp Ser Leu Pro Ala  
 20 25 30  
 Asn Leu Thr Asp Ile Phe Glu Thr Val Arg Ser Gly Val Lys Arg Ser  
 35 40 45  
 Ala Glu Ile Tyr Ile Asn Leu Cys Thr Leu Leu Glu Arg Leu Ala Lys  
 50 55 60  
 Arg Asn Glu Gly Leu Ala Ala Asp His Leu Arg Phe Ser Leu Ala Leu  
 65 70 75 80  
 Gln Ser Leu Thr Glu Val Thr Lys Asp Thr Tyr Ala Val Asp Thr Asn  
 85 90 95  
 Asp Val Pro Ile Leu Asn Glu Gly Ile Met Ala Thr Ala Arg His Leu  
 100 105 110  
 Ser Asn Ser Gln Ser Leu Leu Glu Asp Glu Ala Arg Ala Trp Glu Asn  
 115 120 125  
 Gly Ile Leu Glu Asp Leu Lys Phe Gln Arg Asp Cys Leu Val Ser Val  
 130 135 140  
 Arg Glu Met Phe Asp Arg Arg Asp Arg Tyr Ala Arg Asn Asn Ile Pro  
 145 150 155 160  
 Gln Leu Glu Arg Arg Ile Glu Ser Asn Glu Arg Lys Leu Glu Glu Leu  
 165 170 175  
 Arg Thr Arg Pro Gln Gly Ala Val Lys Pro Gly Glu Ile Glu Lys Val  
 180 185 190  
 Glu Glu Ser Ile Phe Lys Val  
 195

<210> 42675  
 <211> 382  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (342)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42675  
 Arg Gly Ser Phe Gln Pro Pro Gly Leu Asn Thr Gly Cys Gly Lys Thr  
 1 5 10 15  
 Ala Ser Val Tyr Ala Val Ala Lys Glu Leu Asp Phe Glu Val Phe Glu  
 20 25 30  
 Ile Asn Pro Gly Asn Arg Arg Ser Ala Lys Asp Ile Leu Glu Arg Val  
 35 40 45  
 Gly Asp Met Thr Gln Asn His Leu Val His Lys Val Ala Ala Ser Glu  
 50 55 60

## 19153

Asp Ile Ser Asn Asp His Ser Leu Gly Val Arg Leu Glu Ala Pro Ala  
 65 70 75 80  
 Pro Asp Glu Ser Lys Gln Asn Lys Phe Met Gly Phe Phe Thr Pro Ala  
 85 90 95  
 Ala Gly Lys Lys Pro Lys Lys Asp Lys Lys Ala Gly Gln Lys Asp Ser  
 100 105 110  
 Gln Gln Glu Ser Asp Ser Lys Arg Ala Arg Ser Gln Lys Gln Ser Leu  
 115 120 125  
 Ile Leu Leu Glu Glu Ala Asp Ile Leu Phe Glu Glu Asp Lys Gln Phe  
 130 135 140  
 Trp Ser Gly Val Met Ala Leu Val Ser Gln Ser Lys Arg Pro Ile Ile  
 145 150 155 160  
 Ile Thr Cys Asn Asp Glu Asn Leu Val Pro Leu Glu Glu Ile Pro Phe  
 165 170 175  
 His Ala Ile Leu Arg Tyr Lys Pro Pro Gln Arg Pro Thr Val Asp  
 180 185 190  
 Tyr Leu Leu Leu Ala Ala Asn Glu Gly His Met Leu Lys Arg Glu  
 195 200 205  
 Ala Val Asp Asp Leu Tyr Leu Ala Thr Gly Arg Asp Leu Arg Arg Thr  
 210 215 220  
 Ile Met Asn Leu Asn Phe Trp Cys Gln Met Ala Ile Gly Ser Glu Lys  
 225 230 235 240  
 Ser Gly Leu Asp Trp Ile Ile Asp Arg Trp Gly Lys Gly Ala Glu Ile  
 245 250 255  
 Gly His Asp Ser Asp Pro Leu Arg Val Val Ser Leu Asn Thr Tyr Glu  
 260 265 270  
 Pro Ser Met Gly Trp Phe Ser Arg Asp Met Leu Leu Asp Asn Thr Leu  
 275 280 285  
 Asp Ser Arg Ile Glu Ser Thr Arg Glu Leu Leu His Trp Trp Gln Ile  
 290 295 300  
 Ser Leu Gln Glu Thr Asp Glu Met Ala Asp Ser Ser Phe Glu Asn Val  
 305 310 315 320  
 Ser Ser Ala Gly Thr Thr Asn Phe Asp His Thr Asn Leu Glu His Leu  
 325 330 335  
 Gln Arg Leu Asn Val Xaa Ser Asp Tyr Ala Asp Leu Arg Ser Val Leu  
 340 345 350  
 Asp Val Leu Cys Ala Arg Cys Ser Leu Asp Gln Lys Gln Val Arg Cys  
 355 360 365  
 Val Gly Leu Glu Asp Asn Ser Lys Thr Asn Tyr Gln Phe Pro  
 370 375 380

&lt;210&gt; 42676

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42676

Asp Ser Ile Asn Asn Thr Ile Pro Ala Met Ser Glu Lys Gln Arg Thr  
 1 5 10 15  
 Asn Tyr Val Glu Gly Tyr Pro Leu Leu Gln Ala Asp Thr Val Pro Asp  
 20 25 30  
 Tyr Ser Ser Phe Leu Ala Ser Ile Gly Ser Thr Phe Glu Val Phe Met  
 35 40 45  
 Gly Gln Thr Phe Arg Glu Glu Gln Gln Lys Asp Ile Glu Ala Ser Gln  
 50 55 60  
 Ala Arg Asn Val Leu Glu Thr Val Val Ala Pro Arg Arg Val Asn Thr

## 19154

```

65              70              75              80
Ser Lys Ala Thr Phe Leu Thr Ala Phe Glu Pro Leu Arg Arg Ala Asp
              85              90              95
His Leu Phe Pro Pro Pro Pro Gly Arg Leu Ala Pro Ser Phe Glu Asn
              100              105              110
Arg Leu Gly Pro Leu Ser Glu Asp Leu Ala Pro Tyr Ile Arg Ala Ile
              115              120              125
Val Ala Phe Asp Leu Arg Leu Glu His Tyr Arg Leu Gln Leu Ser Gly
              130              135              140
Leu Leu Ser Glu Asn Asp Gly Gly Ser Lys Arg Met Arg Lys Thr Arg
145              150              155              160
Ala Ser Arg Ala Ala Leu Glu Gly Gly Ser Lys Ala Glu Thr Arg Lys
              165              170              175
Glu Arg Trp Phe Pro Pro Gly Thr Asn Pro Ala Leu Val Leu Ala Thr
              180              185              190
Gly Asn Lys Glu Trp Gln Asp Leu Val Arg Thr Gly His Phe Thr
              195              200              205
Val Thr Ser Ile Arg Glu Ser Thr Lys Glu Cys Ser Asp Leu Ala Ser
              210              215              220
Glu Ser Ser Gly Asp Gly Gly Ile
225              230

```

&lt;210&gt; 42677

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42677

```

Arg Ile Ala His Ser Arg Leu Ser Ile Met Ser Leu Phe Gly Thr Ser
1              5              10              15
Pro Asp Asp Pro Ser Met Gly Asp Ser Val His Gln Arg Ser Arg Ser
              20              25              30
Ser Leu Phe Ala Asp Glu Pro Leu Pro Gly Gly Ala Gly Ala Gly Asn
              35              40              45
Ser Ala Asn Leu Gly Ser Ser Ser Leu Phe Ala Asp Asp Gly Phe
              50              55              60
Gln Ser Ser Ser Pro Trp Asn Ser Asn Ala Asn Lys Arg Ala Ala Arg
65              70              75              80
His Glu Leu Val Lys Thr Leu Leu Pro Asp Ala Asp Val Pro Glu Ser
              85              90              95
Tyr Ile Asp Ala Tyr Asp Leu Val Leu Asn Glu Gly Ile Val Ser Gly
              100              105              110
Ala Ser Trp Ala
              115

```

&lt;210&gt; 42678

&lt;211&gt; 309

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42678

```

Thr Phe Ala Asn Ala Leu Val Glu Leu Pro Leu Pro Lys Ser Ser Tyr
1              5              10              15
Leu Asp Arg Leu Arg Asp Arg Gln Gln Pro Ser Ala Pro Ser His Pro
              20              25              30
Glu Glu Arg Pro Thr Thr Pro Pro Pro Pro Pro Ala Ala Ile Asn Asp

```



&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (511)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42680

Val	Asn	Met	Ala	Trp	His	His	Leu	Asp	Ile	Asp	Lys	Pro	His	Leu	Ala	1	5	10	15
Tyr	Met	Ile	Leu	Gly	Gly	Phe	Thr	Gly	Leu	Phe	Met	Leu	Cys	Ser	Leu	20	25	30	
Phe	Val	Lys	Glu	Lys	Leu	Tyr	Ile	Gly	Glu	Ala	Thr	Val	Ala	Thr	Leu	35	40	45	
Cys	Gly	Ile	Ile	Phe	Gly	Pro	His	Ala	Ala	Asn	Leu	Phe	Asn	Pro	Ala	50	55	60	
Glu	Trp	Gly	Asn	Val	Asp	Lys	Ile	Thr	Leu	Glu	Cys	Ser	Arg	Ile	Val	65	70	75	80
Leu	Val	Val	Gln	Cys	Phe	Ala	Val	Gly	Val	Glu	Leu	Pro	Lys	Ala	Tyr	85	90	95	
Met	Glu	Arg	His	Trp	Lys	Ser	Val	Ser	Leu	Leu	Leu	Val	Pro	Val	Met	100	105	110	
Thr	Trp	Gly	Trp	Leu	Val	Thr	Ser	Leu	Phe	Ile	Trp	Trp	Met	Val	Pro	115	120	125	
Pro	Phe	Asn	Trp	Leu	Glu	Ser	Leu	Val	Cys	Ala	Ala	Cys	Val	Thr	Ala	130	135	140	
Thr	Asp	Pro	Val	Leu	Ala	Ser	Ser	Val	Val	Gly	Lys	Gly	Lys	Phe	Ala	145	150	155	160
Lys	Arg	Val	Pro	Lys	His	Leu	Arg	Asp	Leu	Leu	Ser	Ala	Glu	Ser	Gly	165	170	175	
Cys	Asn	Asp	Gly	Met	Ala	Phe	Pro	Phe	Ile	Tyr	Leu	Gly	Phe	Tyr	Ile	180	185	190	
Leu	Arg	Tyr	Arg	Pro	Asp	Ala	Gly	Lys	Val	Ser	Leu	Asn	Trp	Phe	Cys	195	200	205	
Val	Thr	Ile	Leu	Tyr	Glu	Cys	Ile	Phe	Gly	Ala	Ile	Tyr	Gly	Phe	Leu	210	215	220	
Ile	Gly	Tyr	Ile	Ala	Arg	His	Ala	Ile	Lys	Phe	Ala	Glu	Arg	Lys	Gln	225	230	235	240
Leu	Ile	Asp	Arg	Glu	Ser	Phe	Leu	Val	Phe	Tyr	Phe	Val	Leu	Ala	Val	245	250	255	
Phe	Cys	Ala	Gly	Ser	Gly	Ser	Leu	Leu	Gly	Met	Asp	Asp	Leu	Leu	Ile	260	265	270	
Gly	Phe	Ala	Cys	Gly	Val	Gly	Phe	Ser	Asn	Asp	Gly	Trp	Phe	Thr	Glu	275	280	285	
Lys	Thr	Glu	Glu	Ser	His	Val	Ser	Asn	Val	Ile	Asp	Leu	Leu	Leu	Asn	290	295	300	
Leu	Ala	Tyr	Phe	Val	Tyr	Phe	Gly	Ser	Ile	Ile	Pro	Trp	Glu	Asp	Tyr	305	310	315	320
Asn	Asn	Pro	Glu	Ile	Gly	Leu	Val	Pro	Trp	Arg	Leu	Val	Val	Ile	Ala	325	330	335	
Ile	Leu	Val	Ile	Phe	Phe	Arg	Arg	Ile	Pro	Ile	Met	Met	Leu	Leu	Lys	340	345	350	
Pro	Val	Ile	Pro	Asp	Val	Lys	Thr	Trp	Arg	Glu	Ala	Leu	Phe	Ala	Gly	355	360	365	
His	Phe	Gly	Pro	Ile	Gly	Val	Gly	Ala	Ile	Phe	Ala	Ala	Ile	Leu	Thr	370	375	380	

## 19157

Arg Ala Glu Leu Glu Thr Asp Ser Thr Gln Pro Leu Ser Glu Lys Glu  
 385 390 395 400  
 Leu Pro Gln Pro Gly Ser Pro Asp Tyr Tyr Ile Val Gln Leu Ile Trp  
 405 410 415  
 Pro Ile Thr Thr Phe Met Val Ile Ser Ser Ile Leu Val His Gly Ser  
 420 425 430  
 Ser Ile Ala Val Phe Thr Leu Gly Lys Arg Ile Asn Thr Leu Thr Val  
 435 440 445  
 Thr Leu Ser Tyr Thr Thr Ala Asn Glu Glu Gly Pro Ser Trp Met Asn  
 450 455 460  
 Arg Leu Pro Arg Val Gln Ser Leu Ala Lys Gly Ser Met Ser Phe Arg  
 465 470 475 480  
 Lys Thr Asp Gly Asp Asp Leu Gly Asp Ser Ser Thr Glu Pro Glu Phe  
 485 490 495  
 Pro Pro Gly Thr Leu Pro Pro Ile Gly Val Pro Gly Asn Phe Xaa Arg  
 500 505 510  
 Arg Val Arg Glu Glu Glu Ser Glu Thr Pro Thr Gly Arg Pro Ser Ser  
 515 520 525  
 Arg Lys Thr Arg Arg Arg Arg Arg Asp Asp Gly Ala Gly Gly Pro  
 530 535 540  
 Ile Ser Gln Ser Ala Ile Met Pro Gln Arg Pro Ala Glu Ala Gly Glu  
 545 550 555 560  
 Glu Thr Glu Lys Ala Gly Gly Glu Ala Glu Lys Ala Gly Glu Glu Ala  
 565 570 575  
 Glu Lys Ser Lys Glu Glu Ala Gln Glu Arg Glu Lys Ile Glu Arg Gly  
 580 585 590  
 Gly Ser Pro Pro Thr His Glu Arg Asp Arg Phe Gly Arg Glu Pro Val  
 595 600 605  
 Val Glu Val Tyr Leu Glu Gly His Thr Met Ile Ile Glu Asp Glu Glu  
 610 615 620  
 Gly Asn Val Leu Lys Thr Glu Asp Ile Ser His Lys Ser Pro Glu Glu  
 625 630 635 640  
 Arg Gln Gln His Val Glu Glu Gln Lys Arg Gln Leu Gln Lys Asp Lys  
 645 650 655  
 Ser Gly Glu Leu Ser Lys Ser Arg Ser Gln Pro His Glu Lys Thr Glu  
 660 665 670  
 Gly Glu Gln Ile Gln His Ala Val Gly Asp Ala Ala Gly Pro Ser Leu  
 675 680 685  
 Gly Lys Ala Arg Lys Gln Phe Gly Lys Trp Val Gly Trp Gly Lys Gly  
 690 695 700  
 Arg Gly Glu Gln Ala Glu Ser Lys Glu Ala Lys Lys Ala Ala Glu Lys  
 705 710 715 720  
 Lys Ser Thr Glu Ser Gly Lys Pro Ala Lys Pro Lys Ala Arg Ser Ala  
 725 730 735  
 His Ala Tyr Gln Phe Gly Asn Thr Ile Ile Val Glu Asp Glu Asp Gly  
 740 745 750  
 Glu Val Ile Lys Lys Tyr Ser Ile Pro Ala Ala Gly Lys Val Glu Gly  
 755 760 765  
 Gly Ala Pro Gly Arg Arg Gly Leu Gly Arg Met Gly Thr Trp Phe Gly  
 770 775 780  
 Lys Asp Gly Glu Ala Glu Thr Ser Gln Ala Ala Gln Asn Lys Lys Thr  
 785 790 795 800  
 Ser Lys Asp Glu Trp Leu Ala Asp Asp Gly Leu Arg Phe Thr Leu Ala  
 805 810 815  
 Asn Asp Asp Glu Val Ser Lys Arg Gly Val Gly His Lys Gly Arg Arg  
 820 825 830

## 19158

Met Thr Lys His Glu Phe Ala Glu Gln Ile Lys Asn Leu Asp Pro Lys  
 835 840 845  
 Ala Arg Arg Gln Leu Val Glu Glu Thr Asp Val Pro Glu Arg Val Lys  
 850 855 860  
 Asn Val Ala Arg Asp Glu Ala Glu Gln Arg Glu Ser Ser Arg Ala Gln  
 865 870 875 880  
 Pro Val Glu Met Pro Val Ser Pro Gly Thr Gln Val Glu Thr Arg Gly  
 885 890 895  
 Ile Asp Gln Phe Asp Ser Asp Ser Glu Thr Thr Gly Asp Glu Ser Val  
 900 905 910  
 Gln Asp Ile Pro Gly Pro Asp Val Ala Ala Ser Val Ala Arg Val Thr  
 915 920 925  
 Arg Gly Ser Ala Ala Gln Glu Arg Arg Asn Gln Leu Glu Pro Ser Asp  
 930 935 940  
 Ser Pro Ser Arg His Arg Pro Arg Ser Arg Arg Asp Ser Glu Asp Asp  
 945 950 955 960  
 Gly Thr Glu Arg Ile Pro Pro Ala Arg Leu Arg Glu Ala Ala Gly Leu  
 965 970 975  
 Ala Pro Arg Pro Gln Glu Ala Asp Phe Asp Asp Thr Gly Glu Thr Pro  
 980 985 990  
 Ala Glu Arg Arg Arg Arg Leu Ala Ala Leu Gly Glu Leu His Asn Asp  
 995 1000 1005  
 Ser Asp Ser Asp Asp Pro Glu Ala Ala Val Glu Asp Thr Asp Ser Asp  
 1010 1015 1020  
 Asp Asn Asn Glu Phe Arg Gln Val Arg Gly Arg Val Gln Phe Ala Asp  
 1025 1030 1035 1040  
 Gly Ser Arg Ala Ser Pro Arg Arg Asp Asp Ala Gly Ile Val Ser Gly  
 1045 1050 1055  
 Leu Pro Ser Ala Ser Pro Asp Gln Ser Gln Ser Pro Gly Arg Arg Gly  
 1060 1065 1070  
 His Arg Thr Arg Ile Ser Trp Gly Gly Glu Lys Gly Arg Glu Ser  
 1075 1080 1085

&lt;210&gt; 42681

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42681

Pro Gln Glu Leu Gln Gln Gly Ile Tyr Phe Val Val Pro Asp Glu His  
 1 5 10 15  
 Ile Asp Lys Ala Arg Asp Ile Leu Val Glu Ala Gly Phe Pro Pro Cys  
 20 25 30  
 Gln Leu Gly Lys Phe Cys Gly Phe Asp Trp Pro Lys Ser Phe His Gly  
 35 40 45  
 Ile Pro Ser Ala Arg Phe Asn Ile Val Asp Gln Gly Pro Leu Asn Tyr  
 50 55 60  
 Ser Arg Pro Glu Leu Tyr Gly Pro Asp Pro Arg Glu Trp Tyr Ser Leu  
 65 70 75 80  
 Glu Leu Tyr Lys Lys Ser Glu Leu Met Trp Gly Ala Pro Glu Ile Pro  
 85 90 95  
 Leu Gly Pro Pro Ala Pro Asn Asn Pro Asp Tyr Trp Thr Ile Asn Asp  
 100 105 110  
 Glu Arg Leu Pro Glu Val Ala Arg Gly Leu His Gln Val Arg Val Val  
 115 120 125  
 Glu Ala Asp Tyr Pro Val Lys Ile Pro Ser Pro Ala Arg Tyr Ala Glu



## 19159

```

      130                      135                      140
Met Leu Thr Leu Leu Tyr Phe Arg Asp Asn His Pro Glu Glu Thr Phe
145                      150                      155                      160
Arg Gly Ser Phe Trp Glu Val Leu Met Ile Asp Met Gln Thr Val Leu
      165                      170                      175
Lys Lys His Arg Leu Phe Thr Leu Ser Asp Leu Pro Pro Arg Thr Arg
      180                      185                      190
Ser Trp Trp Lys Ile Leu Thr Lys Asn Ile Arg Glu Arg Thr His Gly
      195                      200                      205
Asp Ala Glu Glu Arg Phe Gly Asp Glu Met Lys Lys Ala Gly Glu Val
      210                      215                      220
Pro Glu Lys Ser Pro Trp Pro Ser Gln Arg Thr Met Pro Asp Gly Trp
225                      230                      235                      240
Arg Glu Glu Leu Lys Arg Leu Glu Glu Glu Glu Arg Arg Lys Lys
      245                      250                      255
Arg Lys Glu Glu Gln Glu Glu Glu Gln Leu Arg Lys Asn Lys Glu Lys
      260                      265                      270
Val Lys Glu Glu Gln Asn Ala
      275

```

&lt;210&gt; 42682

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42682

```

Ser Ser Val Leu Thr Leu Arg Ile Glu Thr Lys Gln Gln Val Lys Lys
1      5      10      15
Glu Ala Asn Asp Arg Ser Lys Lys Gln Thr Arg Ala Ser Thr Ser Gly
      20      25      30
Asp Lys Lys Gly Gln Glu Arg Thr Arg Glu Asp Lys Arg Gly Gln Glu
      35      40      45
Arg Thr Arg Glu Asp Lys Arg Gly Gln Glu Arg Thr Arg Glu Asp Lys
      50      55      60
Arg Gly Gln Glu Arg Thr Arg Glu Asp Lys Arg Gly Gln Glu Arg Thr
      65      70      75      80
Arg Glu Asp Lys Arg Gly Gln Glu Arg Thr Arg Asp Arg Glu Trp Arg
      85      90      95
Arg Gly Lys Thr Lys Thr Leu Gly Ala Asp Ala Thr His His Glu Ala
      100      105      110
Gly Gln Phe Lys Asp Leu Glu Pro Arg Arg Gln Arg Arg Asn Pro Arg
      115      120      125
Pro Gln Pro Gly Asn Ser
      130

```

&lt;210&gt; 42683

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42683

```

Ile Asn Gly Lys Ala Met Pro Ser Leu Gln Pro Asp Ser Ala Asp Arg
1      5      10      15
Arg Ser Arg Arg Cys Leu Gly Thr Arg Leu Ala Asn Leu Pro Leu Pro
      20      25      30
Thr Thr Glu Glu Ala Lys Thr Gly Ser Val Ala Val Thr Gln Ala Ala

```

## 19160

```

      35              40              45
His Thr Arg Leu Ser Ser Gln Leu Lys Gly Gly Thr Ile His Gln Met
      50              55              60
Asn Lys Leu Val Thr Asn Gln Pro Gln Val Ile Thr Gly Thr Ser Lys
65              70              75              80
Arg Leu Thr Asp Phe Gln
      85

```

&lt;210&gt; 42684

&lt;211&gt; 1138

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42684

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His Tyr Ser Ser Asp Glu Pro Asp Trp Ser Ser Val Lys Pro Val Ser
1              5              10              15
Glu Thr Phe Lys Pro Ile Leu Cys Ala Thr Asn Ser Ser Lys Thr Ile
      20              25              30
Lys Gln Glu Lys Lys Leu Trp Asn Thr Ala Glu Leu Leu Pro Glu Phe
      35              40              45
Leu Asp Ile Ala Ala Arg Ser Val Pro Arg Asp Thr Phe Arg Arg Gln
      50              55              60
Thr His Glu Ala Pro Trp Leu Glu Thr Leu Phe Val Ala Val Ala Glu
65              70              75              80
Leu Ala Phe Ser Ile Val Lys Gln Glu Ser Ser Gly Ser Ser Ala Ala
      85              90              95
Tyr Val Ser Glu Phe Val Val Val Leu Glu Gln Leu Phe Arg Ile Val
      100              105              110
Leu Asn Arg Asn Val Gln Leu Ser Leu His Thr Leu Leu Thr His Ala
      115              120              125
Ala Tyr Thr Gly Leu Leu Lys Glu Gly Leu Ser Pro Val Glu Trp Gly
      130              135              140
Leu Thr Ala Leu Leu Ile Glu Leu Gly Ala Asp Ile Phe Leu Pro Asn
145              150              155              160
Ser Gly Leu Lys Asp Ser Thr Lys Leu Leu Arg Ala Leu Leu Glu Lys
      165              170              175
Ile Leu Leu His Trp Arg Ser Gly Val His Pro Thr Asp Ser Asn Tyr
      180              185              190
Asp Thr Ile Lys Asn Gly Ile Val Ile Pro Leu Leu Arg Ala Phe Leu
      195              200              205
Ala Ala Arg Asp Leu Pro Thr Phe Met Gln Leu Trp Tyr Glu Gln Leu
      210              215              220
Ile Asp Val Glu Glu Ala Arg Leu Val Asp Ser Ser Leu Ser Leu Phe
225              230              235              240
Ser Ile Trp Glu Asp Asp Asp Leu Cys Asn Val Tyr Ser Asp Ile Leu
      245              250              255
Arg Ser Pro Leu Thr His Ala Thr Ala Asp Ala Gln Met Arg Ala Ala
      260              265              270
Ala Val Glu Ile Arg Gly Glu Asp Gly Lys Ile Ser Ser Ala Pro Gly
      275              280              285
Ala Phe Ala Gln Phe Val Leu Leu Glu Ala Gly Leu Arg Asn Arg Ala
      290              295              300
Leu Gly Ala Ala Gly Ala Arg Glu Glu Leu Asn Ser Ile Leu Gly Thr
305              310              315              320
Val Thr Ala Thr Leu Ser Ser Lys Gln Ser Phe His Trp Arg Trp Arg
      325              330              335

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Leu Trp Arg Leu Ala Arg Asn Ile Leu Ala Asn Asn Val Gln Ser Ala  
 340 345 350  
 Glu Asp Pro Leu Met Val Ala Thr Trp Asn Leu Thr Asp Ala Ala Val  
 355 360 365  
 Asn Ser Ile Gln Arg Asn His Lys Asn Arg Met Lys His Thr Cys Ser  
 370 375 380  
 Ala Leu Glu Ser Phe Glu Ala Tyr Gln Phe Ala Leu Ala Ala Val Lys  
 385 390 395 400  
 Glu Thr Thr Asp Thr Gly Arg Leu Glu Ser Phe His Val Leu Thr Ser  
 405 410 415  
 Glu Val Lys Asp Tyr Ile Gly Thr Ile Thr Lys Gln Asp Thr Leu Gly  
 420 425 430  
 Ser Leu Ala Ser Pro Trp Asn Gly Arg Val Glu Thr Leu Asp Ser Ser  
 435 440 445  
 Val Ser Leu Ala Leu Gly Tyr Phe Leu Thr Leu Val Arg Asn Pro Asp  
 450 455 460  
 Ile Trp Pro Gln Leu Lys Thr Asp Asp Arg Arg Ala Leu Phe Glu Asn  
 465 470 475 480  
 Ile Leu Gly Leu Ala Ala Ser Gln Ser Arg Leu Pro Ser Ala Ser Leu  
 485 490 495  
 Glu Thr Tyr Pro Leu Asn Ala Arg Phe Val Gln Ala Trp Thr Ser Val  
 500 505 510  
 Val Cys His Glu Tyr Leu Leu Asn Ser Pro Ala Ile Ala Val Asp Leu  
 515 520 525  
 Val His Val Leu Ser Lys Gln Leu Lys Glu Asp Lys Glu Tyr Arg Lys  
 530 535 540  
 Leu Tyr Ile Glu Ser Leu Gln Arg Val Pro Gly Pro Leu Ile Met Arg  
 545 550 555 560  
 His Gln Arg Gly Val Leu Leu Asp Leu Leu Gln Gly Ile Leu Val Gln  
 565 570 575  
 Glu Asp Asp Met Ala Glu Ile Lys Leu Gly Leu Leu Ser Leu Met Ala  
 580 585 590  
 Lys Leu Ala Asp Met Pro Lys Thr Ala Ala Thr Cys Thr Ser Asp Trp  
 595 600 605  
 Glu Pro Met Phe Thr Ala Ala Lys Ala Val Thr Leu Gln Gly Thr Glu  
 610 615 620  
 Asn Asp Leu His Val Met Lys Ala Phe Arg Asn Leu His Arg Ala Val  
 625 630 635 640  
 Leu Ser Lys Leu Leu Val Leu Ser Glu Glu Asp Arg Asn Lys Leu Phe  
 645 650 655  
 Lys Lys Met Tyr Arg Lys Val Ser Ala Lys Val Leu Lys Leu Lys Phe  
 660 665 670  
 Leu Asp His Asp Ser Met Glu Cys Phe Phe Phe Arg Ile Ser Leu Ser  
 675 680 685  
 Gln Phe Trp Leu His Arg Glu Gln Leu Ser Gly Ala Phe Val Glu Gln  
 690 695 700  
 Glu Leu Asp Ser Cys Arg Arg Tyr Met Phe His Leu Ile Val Ala Glu  
 705 710 715 720  
 Val Arg Ser Val Lys Asp Gln Leu Lys Lys Lys Lys Ile Glu Glu Thr  
 725 730 735  
 Val Thr Leu Ile Lys Ile Leu Asp Ala Leu Glu Asp Phe Glu Asp Leu  
 740 745 750  
 Val Val Asp Ser Ile Glu Val Glu Lys Phe Leu Thr Lys Ile Glu Ser  
 755 760 765  
 Tyr Val Glu Arg Ser Met Asp Ser Arg Ser Ser Leu Arg Arg Leu Ile  
 770 775 780

## 19162

Arg Arg Arg Val Phe Thr Gly Arg Arg Ser Asp Arg Ser Ile Thr Gly  
 785 790 795 800  
 Ser Val Val Gln Cys Ala Glu Thr Leu Ser Leu Lys His Met Phe Gly  
 805 810 815  
 Glu Glu Gln Gln Leu Phe Ile Arg Ala Thr Thr Glu Lys Phe Lys Ser  
 820 825 830  
 Met Ser Val Asp Glu Val Thr Ala Val Ile Arg Glu Leu Arg Glu Leu  
 835 840 845  
 Gly Phe Asp Gly Asp Arg Ala Pro Tyr His Leu Leu Ala Ala Gly Val  
 850 855 860  
 Ala Val Ala Ser Leu Pro Ser Thr Glu Asp Lys Glu Thr Ser Ala Ala  
 865 870 875 880  
 Lys Glu Leu Ser Leu Leu Cys Thr Ala Val Thr Gly Ser Leu Ser Gln  
 885 890 895  
 Ser Thr Ser Ile Glu His Phe Thr Phe Ala Thr Glu Cys Leu Asp Ile  
 900 905 910  
 Leu Leu Arg Asn His Thr Arg Cys Ile Ser Gln Trp Asn Ile Asp Ser  
 915 920 925  
 Leu Leu Ala Ala Ile Ala Val Cys Ala Ser Lys Ala Gly Pro Arg Ile  
 930 935 940  
 Asn Pro Glu Tyr Ala Ala Thr Ile Tyr Val Arg Leu Cys Lys Leu Met  
 945 950 955 960  
 Gly Val Leu Leu Gly Leu His Arg Gln Lys Leu Gly Gly Arg Phe His  
 965 970 975  
 Leu Ile Leu Pro Ala Met Gln Arg Leu Leu Asn Cys Leu Phe Ala Arg  
 980 985 990  
 Ser Arg Lys Arg Ser Arg Ser Met Leu Ser Ala Lys Gly His Thr Gln  
 995 1000 1005  
 Gln Pro Tyr Trp Leu Ala Pro Leu Gln Ala Ser His Ala Val His Phe  
 1010 1015 1020  
 Thr Arg Leu Leu Thr Ser Leu Cys Asp Pro Thr Val Ser Ala Val Ser  
 1025 1030 1035 1040  
 Arg Pro Thr Gln Ser Gly Gly Asn Arg Asp Ala Leu Thr Asp Gln Thr  
 1045 1050 1055  
 Lys Lys Ala Lys Arg Ile Ala Gly Gln Tyr Leu Gln Tyr Leu Ile Met  
 1060 1065 1070  
 Glu Tyr Ala Gln Ser Ser Leu Arg Gly Ser Leu Val Pro Glu Val Lys  
 1075 1080 1085  
 Ala Ala Ile Leu Pro Gly Leu Tyr Ala Val Leu Asp Val Met Ser Arg  
 1090 1095 1100  
 Glu Thr Met Arg Ala Met Asn Ala Gly Leu Asp Val Ser Gly Arg Ala  
 1105 1110 1115 1120  
 Ile Phe Lys Gly Leu Tyr Asp Asp Tyr Val Lys Phe Gly Lys Trp Asn  
 1125 1130 1135  
 Lys Gly

&lt;210&gt; 42685

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42685

Asn Thr Trp Met Ile Ser Ser Ser Met Ile Val Asp Gly Leu Ser Trp  
 1 5 10 15  
 Trp Gln Ser Trp Ile Cys Val Trp Val Gly Tyr Phe Ile Ala Ala Ile

## 19163

	20		25		30										
Phe	Ile	Cys	Leu	Thr	Gly	Arg	Ile	Gly	Ala	Lys	Tyr	His	Val	Pro	Phe
	35		40		45										
Pro	Val	Ala	Val	Arg	Ser	Ser	Phe	Gly	Ile	Trp	Gly	Ser	Phe	Trp	Pro
	50		55		60										
Val	Leu	Asn	Arg	Ala	Val	Met	Ala	Val	Ile	Trp	Tyr	Gly	Val	Gln	Ser
65			70		75									80	
Tyr	Ile	Gly	Gly	Glu	Cys	Val	Leu	Val	Ser	Thr	Ser	Lys	Arg		
			85		90										

<210> 42686  
 <211> 264  
 <212> PRT  
 <213> A.fumigatus

<400> 42686

Leu	Leu	Thr	Arg	Gln	Cys	Val	Thr	Val	Met	Ile	Glu	Ala	Ile	Trp	Pro
1			5						10					15	
Ser	Tyr	Ala	His	Leu	His	Asn	Ser	Leu	Pro	Ala	Ser	Ala	Gly	Val	Glu
			20					25					30		
Thr	Lys	Asp	Phe	Val	Ser	Phe	Phe	Leu	Phe	Trp	Leu	Leu	Ser	Leu	Pro
		35					40					45			
Ala	Leu	Trp	Phe	Pro	Ile	His	Lys	Ile	Arg	His	Leu	Phe	Thr	Ala	Lys
		50				55					60				
Ala	Ile	Tyr	Ser	Pro	Ile	Ala	Ala	Ile	Ala	Phe	Phe	Ala	Trp	Ser	Ile
65					70					75				80	
Ala	Arg	Ala	Asn	Gly	Ile	Gly	Pro	Val	Val	His	Gln	Pro	Ala	Thr	Val
				85					90					95	
His	Gly	Ser	Thr	Leu	Ala	Trp	Ala	Ile	Val	Lys	Ala	Ile	Met	Ser	Cys
			100					105					110		
Leu	Gly	Asn	Phe	Ala	Ala	Leu	Ile	Met	Asn	Asp	Pro	Asp	Phe	Ser	Arg
		115					120					125			
Phe	Ala	Arg	Lys	Pro	Lys	Asp	Ala	Leu	Trp	Ser	Gln	Leu	Leu	Thr	Ile
		130				135					140				
Pro	Ile	Gly	Phe	Gly	Ile	Thr	Ser	Phe	Ile	Gly	Ile	Ile	Ala	Ser	Ser
145					150					155				160	
Ala	Ser	Ala	Val	Ile	Tyr	Asn	Thr	Asp	Pro	Val	Trp	Asn	Pro	Leu	Asp
				165					170					175	
Leu	Leu	Arg	Met	Phe	Leu	Asp	Gly	Ala	Ser	Ser	Gly	Glu	Arg	Phe	Gly
			180					185					190		
Ile	Phe	Val	Ile	Ala	Thr	Gly	Phe	Ala	Leu	Ala	Gln	Leu	Gly	Thr	Asn
		195					200					205			
Ile	Ser	Ala	Asn	Ser	Val	Ser	Ala	Gly	Thr	Asp	Leu	Thr	Ala	Leu	Leu
		210				215					220				
Pro	Arg	Tyr	Leu	Asn	Ile	Arg	Arg	Gly	Ser	Tyr	Ile	Cys	Ala	Ala	Val
225					230					235				240	
Gly	Leu	Ala	Met	Cys	Pro	Val	Cys	Arg	Ser	Cys	Ser	Ser	Val	Leu	Gly
				245					250					255	
Cys	Val	Arg	Thr	Arg	Thr	Asp	Ile								
			260												

<210> 42687  
 <211> 174  
 <212> PRT  
 <213> A.fumigatus

19164

<400> 42687

Trp	Asn	Leu	Val	Ser	Ser	Ser	Asn	Gln	Phe	Thr	Thr	Tyr	Leu	Ser	Ala
1				5					10					15	
Tyr	Ser	Ile	Phe	Leu	Ser	Ala	Ile	Ala	Gly	Pro	Met	Ile	Cys	Asp	Tyr
			20					25					30		
Tyr	Leu	Asn	Arg	Lys	Gly	Tyr	Leu	Gln	Val	Lys	Asp	Leu	Tyr	Ser	Ala
		35					40					45			
Ser	Lys	Gly	Gly	Pro	Tyr	Tyr	Phe	Val	Phe	Gly	Phe	Ser	Trp	His	Ala
	50					55					60				
Tyr	Ala	Ser	Tyr	Leu	Ser	Gly	Ile	Leu	Val	Asn	Ile	Val	Gly	Phe	Ala
65					70					75				80	
Gly	Ala	Val	Gly	Arg	Thr	Val	Pro	Leu	Gly	Ala	Gln	Tyr	Ile	Tyr	Asn
			85					90						95	
Ile	Asn	Tyr	Phe	Ser	Gly	Phe	Phe	Val	Ser	Ala	Val	Met	Tyr	Tyr	Ile
		100					105						110		
Leu	Thr	Arg	Ile	Phe	Pro	Leu	Pro	Ala	Ser	Ser	Asp	Arg	Trp	Asn	Glu
		115					120					125			
Val	Asp	Ser	Asp	Asp	Glu	Val	Ser	Tyr	Gly	Gln	Glu	Val	Asp	Ala	Asp
	130				135						140				
Asp	Val	His	Thr	Pro	Gly	Lys	Val	Arg	Ser	Leu	Asp	Lys	Asp	Ser	Asp
145					150					155					160
Trp	Asp	Arg	Lys	Gly	Ala	Lys	Ile	Ala	Ser	Gly	Ala	Met	Val		
			165						170						

<210> 42688

<211> 162

<212> PRT

<213> A.fumigatus

<400> 42688

Val	Thr	Leu	Asp	Gly	Glu	Glu	Ser	Ser	Phe	Glu	His	Leu	Asn	Gly	Tyr
1				5					10					15	
Arg	Asn	Leu	Gln	Ser	Asn	Asp	Asn	Pro	Asp	Ala	Thr	Pro	Phe	Asn	Tyr
		20					25						30		
Asn	Leu	Thr	Asn	Phe	Ser	His	Phe	Gly	His	Glu	Asn	His	Ser	Glu	Ala
		35					40					45			
Ile	His	Asn	Thr	Asp	Asn	Thr	Ser	Pro	Asn	Gly	Ser	Ser	Pro	Ser	Thr
	50					55					60				
Glu	Tyr	Pro	Ser	Glu	Gln	His	Leu	Met	Val	Pro	Ser	Glu	Tyr	Tyr	Thr
65					70					75				80	
Ile	Glu	Tyr	Pro	Val	Gln	Leu	Pro	Asn	Ala	Cys	Ser	Asp	Val	Thr	Gly
			85					90						95	
Ser	Cys	Leu	Cys	Gly	Asn	Asp	Cys	Ala	Cys	Val	Gly	Cys	Leu	Thr	His
		100					105						110		
Ser	Gly	His	Asn	Gly	Phe	Ala	Val	Glu	Ser	Ser	Ala	Ile	Glu	Asn	Asn
	115						120					125			
Asn	Leu	Ser	Pro	Ser	Ser	Pro	Ser	Ala	Lys	His	Glu	Ser	Val	Gly	Ser
	130					135					140				
Pro	Leu	Val	Pro	Gly	His	Thr	His	Ala	Thr	Val	Gln	Ser	Pro	Asn	Pro
145					150					155					160
Met	Leu														

<210> 42689

<211> 682

<212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42689

Thr Ala His Ile Ala Thr Met Val Leu Ala Lys Ser Lys Asn Ser Val  
 1 5 10 15  
 Gly Leu Gly Asn Thr Leu Met Lys Asp Arg Phe Gly Lys Gly Lys Ala  
 20 25 30  
 Ser Asn Gln Lys Lys Val Ser His Asn Ala Ala Ile Thr Arg Thr Ala  
 35 40 45  
 Gln Asp Gly Ser Thr Tyr Ile Thr Asn Ala Ala Lys Glu Ala Ser Trp  
 50 55 60  
 Val Lys Met Arg Ser Ile Thr Glu Gln Ala Ala Leu Asp Glu Phe Leu  
 65 70 75 80  
 Ser Thr Ala Glu Leu Ala Gly Thr Asp Phe Thr Ala Glu Lys Met Ser  
 85 90 95  
 Asn Ile Lys Ile Ile His Ser Asp Gln Lys Asn Pro Tyr Leu Leu Ser  
 100 105 110  
 Ala Ser Glu Lys Ser Ala Arg Lys Lys His Gln Gln Asn Lys Gly  
 115 120 125  
 Lys Leu Thr Val Pro Arg Arg Pro Lys Trp Asp Ala Thr Thr Thr Arg  
 130 135 140  
 Asp Gln Leu Glu Ala Met Glu Lys Glu Ser Phe Leu Glu Trp Arg Arg  
 145 150 155 160  
 Gly Leu Ala Glu Leu Gln Glu Asn Asn Asp Leu Leu Met Thr Pro Phe  
 165 170 175  
 Glu Arg Asn Leu Glu Val Trp Arg Gln Leu Trp Arg Val Ile Glu Arg  
 180 185 190  
 Ser Asp Val Val Val Gln Ile Val Asp Ala Arg Asn Pro Leu Met Phe  
 195 200 205  
 Arg Ser Glu Asp Leu Glu Asn Tyr Val Lys Glu Ile Asp Pro Lys Lys  
 210 215 220  
 Gln Asn Leu Leu Leu Val Asn Lys Ala Asp Met Leu Thr Glu Lys Gln  
 225 230 235 240  
 Arg Glu Met Trp Ala Asp Tyr Phe Glu Arg Asn Asn Ile Asn Phe Arg  
 245 250 255  
 Phe Phe Ser Ala His Leu Ala Lys Glu Arg Asn Glu Ala Arg Leu Leu  
 260 265 270  
 Glu Glu Glu Ser Asp Ser Glu Ser Glu Glu Lys Glu Ala Glu Asp Leu  
 275 280 285  
 Ala Asn Ala Thr Ser Ser Met Asn Ile Asn Asp Pro Gln Asp Ala Lys  
 290 295 300  
 Asn Ala Ser Ile Glu Asp Gly Gln Pro Glu His Asp Gly Gly Leu Lys  
 305 310 315 320  
 Leu Pro Glu Tyr Arg Lys Ser Arg Arg Thr Asp Ile Leu Asp Val Glu  
 325 330 335  
 Glu Leu Glu Glu Leu Phe Leu Ser Ser Thr Pro Asp Thr Leu Pro Asp  
 340 345 350  
 Ser Gly Asn Gly Ala Gly Gln Arg Lys Gln Lys Thr Thr Ile Gly Leu  
 355 360 365  
 Val Gly Tyr Pro Asn Val Gly Lys Ser Ser Thr Ile Asn Ala Leu Leu  
 370 375 380  
 Gly Ala Lys Lys Val Ser Val Ser Ala Thr Pro Gly Lys Thr Lys His  
 385 390 395 400  
 Phe Gln Thr Leu Tyr Leu Ser Pro Glu Ile Met Leu Cys Asp Cys Pro  
 405 410 415  
 Gly Leu Val Phe Pro Asn Phe Ala Thr Thr Lys Ala Glu Leu Val Val

	420		425		430
Asn Gly Val	Leu Pro Ile Asp	Gln Gln Arg Glu Phe	Thr Gly Pro Ala		
	435		440		445
Gly Leu Val	Ala Gln Arg Ile	Pro Lys His Phe	Leu Glu Asp Val Tyr		
	450		455		460
Gly Val Lys	Ile His Thr Arg	Pro Leu Glu Glu	Ser Gly Thr Gly Ile		
465		470		475	480
Pro Ser Ala	His Asp Leu Leu Arg	Ala Tyr Ala Arg	Ala Arg Gly Phe		
	485		490		495
Ala Thr Thr	Gly Gln Gly Gln	Pro Asp Glu Ser	Arg Ala Ala Arg Tyr		
	500		505		510
Val Leu Lys	Asp Tyr Val Asn	Gly Lys Leu Leu	Phe Cys His Pro Pro		
	515		520		525
Pro Val Pro	Asp Gly Glu Glu	Pro Ile Asp Pro	Leu Glu Tyr Asn Arg		
	530		535		540
Glu Leu Tyr	Asp Thr Ala His	Leu Pro Ala Arg	Arg Gln Ala Met Leu		
545		550		555	560
Ala Arg Thr	Ala Gln Ala Asn	Ala Gly Gly Glu	Phe Asp Asp Glu		
	565		570		575
Ala Glu Leu	Leu Ser Val Gly	Ser Ser Ser Lys	Gln Gly Arg Ala Val		
	580		585		590
Glu Gly Ser	Arg Ser Arg Asn	Leu Asp Ser Gly	Phe Phe Gly Pro Gly		
	595		600		605
Ala Lys Gly	Ser Ala Gly Arg	Leu Thr Leu Pro	Phe Asn Ala Gln Tyr		
	610		615		620
Thr Glu Gln	Gly Gln Gln Ile	Arg Lys Gln Leu	Thr Gly Arg Lys Glu		
625		630		635	640
Arg Leu Met	Ile Ala Leu Glu	Arg Gly Val Asn	Val Ser Glu Val Arg		
	645		650		655
Gly Asn Ser	Lys Lys His Phe	Lys Gly Asn Lys	Lys Arg Ala Lys Ala		
	660		665		670
Lys Arg Thr	Lys Ala Glu Asp	Asp Asp Tyr			
	675		680		

&lt;210&gt; 42690

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42690

Met Thr Leu	Gly Leu Leu Glu	Ser Ile Ser	Gln Gln Gln	Pro Leu Arg
1	5	10	15	
Leu Leu Leu	Leu Ile Leu Glu	Leu Ser Asp	Asn Gly Val	Leu Ala Arg
	20	25	30	
Leu Val Leu	Ala Ser Thr Lys	Leu Leu Gln	Val Asp Leu	Ile Gly Ser
	35	40	45	
Val Gly Asp	Ala Gln Arg Pro	Asp His Gly	Pro Gln Ile	Gly Gln Gly
	50	55	60	
Arg Ile Leu	Ala Asp Thr Gly	Gly Ala Val	Gly Leu Asp	Ser Ala Val
65		70		80
Asp Asp Gly	Gln Gly Gly Leu	Gly Asp Glu	Asp Leu Gly	Leu Gly Asp
	85	90		95
Leu Leu Glu	Ser Gly Leu Gly	Val Ala Leu	Val Asp Leu	Asp Gly Gly
	100	105		110
Val Lys Asp	Asp Glu Ala Gly	Gly Val Asp	Leu Asp Ala	Gly Leu Gly
	115	120		125



## 19167

Asp Pro Leu Glu Asp Asp Ala Val Gly Gly Gln Arg Leu Ala Glu Gly  
 130 135 140  
 Leu Leu Ala Val Val Val Asp Thr Gly Asp Glu Pro Leu Glu Gly Leu  
 145 150 155 160  
 Phe Gly Gly Ala Asp Gly Ala His Arg Val Val Asp Ala Ser Gly Pro  
 165 170 175  
 Gln Pro Ala Leu Asp Asn Leu Glu Ala Ala Ala Leu Ser  
 180 185

&lt;210&gt; 42691

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42691

Leu Pro Pro Pro Leu Gln Gln His Leu Ser Leu Ser Leu Gln Pro Pro  
 1 5 10 15  
 Ile Gly Glu Asn Gly Gly Gln Pro Arg Phe Lys Arg Ser Ala Arg Leu  
 20 25 30  
 Leu Leu Arg Lys Leu Arg Val Leu Arg Lys Ser Pro Pro Ser Arg Pro  
 35 40 45  
 Ser Tyr Asp Pro Val Ser Leu Thr Leu Leu Leu Asn Phe Ile Ile Val  
 50 55 60  
 His Phe Pro Cys Leu Leu Arg Leu Asp Leu Tyr Ser Leu Ala His Ser  
 65 70 75 80  
 Arg Leu Leu Asp Ser Leu Arg Phe Ser Ser Ile His Tyr Ile His Asp  
 85 90 95  
 Met Ser Ala Ser Thr Arg Ile Pro Pro Ile Ala Gln Pro Phe Val Ser  
 100 105 110  
 Asp Arg Ala Lys Arg Val Leu Asp Leu Val Arg Cys Leu Phe Thr Ile  
 115 120 125  
 Ser Pro Gly Tyr Lys Phe Ser Asn Thr Cys Arg Gly Val Gln Val Glu  
 130 135 140  
 Glu Phe Val Glu Lys Asp Cys Ile Pro Ala Glu Ala Val Phe Gln Ala  
 145 150 155 160  
 Gln Leu Gly Glu Gly Glu Lys Arg Trp Gln Thr Asn Pro Ala Val Leu  
 165 170 175  
 Glu Glu Leu Lys Ala Lys Ala Arg Lys Leu Gly Leu Trp Asn Met Phe  
 180 185 190  
 Leu Pro Lys Asn His Phe Ser Gln Gly Ala Gly Phe Ser Asn Leu Glu  
 195 200 205  
 Tyr Gly Leu Met Ala Glu Tyr Leu Gly Lys Ser Lys Leu Ala Ser Glu  
 210 215 220  
 Val Gly Asp Leu Ser Arg Val Leu Ala Lys Ser Asp Asp Gly Gly Ala  
 225 230 235 240  
 Asp Trp Trp Ile Phe Arg Arg Arg Ile Thr Leu Pro Leu Ile Pro Val  
 245 250 255  
 Thr Trp Arg Cys Trp Pro Ser Met Ala Met Arg Arg Arg Arg Ser Ser  
 260 265 270  
 Gly Leu Leu Leu Cys Ser Thr Ala Arg Ser Ala Arg Leu Ser Ser  
 275 280 285

&lt;210&gt; 42692

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (19), (55), (93)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42692

```

Leu Ala Asp Phe Ala Thr Asp Asp Pro Arg Gly Val Ser Cys Lys Arg
1          5          10          15
Gln Pro Xaa Ala Ile Arg Thr Pro Phe Ser Ser Asn Arg His Leu His
          20          25          30
Thr Gln Gly Asp Ser Phe Pro Trp Ala Lys Val Trp Gln Thr Ser Pro
          35          40          45
Pro Gln Ala Ile Arg Gln Xaa Phe Val Ile Pro Asp Asn Glu Arg Tyr
          50          55          60
Ser Glu Asp Phe Phe Leu Ala Ser Glu Thr Ala Gly Thr Ser Trp Phe
65          70          75          80
Ser Val His Gln Gly Thr Pro Ser Met Ala Ser Val Xaa Asp Ser Ala
          85          90          95
Leu Gly Glu Ser Phe Lys Phe Tyr Cys Ile Pro Ser Gly Cys Pro
          100          105          110

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&lt;210&gt; 42693

&lt;211&gt; 794

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42693

```

Phe Gly Gly Arg Phe Cys Ile Glu Thr Arg Trp Ser Arg Ser Gly Ile
1          5          10          15
Thr Val Ala Gly Gly Pro Ser Val Thr Met Ser Ser Ile Ser Ser Asn
          20          25          30
Ser Pro Pro Thr Ser Lys Ala Ser His Thr Ala Val Gln Gln His Ser
          35          40          45
Gly Lys Glu Gln Glu Gln Asp Thr Asp Ser Pro Leu Asp Asn Ala Lys
          50          55          60
Phe Leu Ser Phe Glu Asp Trp Lys Lys Gln Asn Leu Ala Lys Val Gly
65          70          75          80
Gln Ser Ala Glu Asn Val Gly Gly Asn Arg Arg Ser Gly Val Thr Gly
          85          90          95
Asn Glu Ser Arg Arg Arg Pro Thr Gly Ile Ser Asn Ala Leu Asp Ser
          100          105          110
Leu Gly Glu Asp Ala Glu Ile Glu Leu Asp Phe Gly Gly Phe Gly Ala
          115          120          125
Asp Ala Pro Glu Ala Ala Arg Pro Pro Ser Phe Gly Ser Gly Val Gln
          130          135          140
Val Gly Lys Ser Ala Gly Ser Val Asp Ser Lys Thr Gly Gly Asp Ala
145          150          155          160
Asn Gly Pro Ser Pro Gly Met Ile Arg Ser Gly Ser Ser Arg Arg Lys
          165          170          175
Asp Ala Gly Thr Thr Cys Lys Glu Arg Phe Asn Tyr Ala Ser Phe Asp
          180          185          190
Cys Ala Ala Thr Val Leu Lys Thr Asn Pro Glu Cys Gln Gly Ser Ser
          195          200          205
Ser Val Leu Ile Glu Asn Lys Asp Ser Tyr Met Leu Asn Glu Cys Arg
          210          215          220

```

Ala Lys Asn Lys Phe Leu Ile Leu Glu Leu Cys Asp Asp Ile Leu Val  
 225 230 235 240  
 Asp Thr Val Val Leu Ala Asn Tyr Glu Phe Phe Ser Ser Ile Phe His  
 245 250 255  
 Thr Phe Arg Val Ser Val Ser Asp Arg Tyr Pro Ala Lys Pro Asp Gln  
 260 265 270  
 Trp Arg Glu Leu Gly Val Phe Glu Ala Arg Asn Thr Arg Glu Val Gln  
 275 280 285  
 Ala Phe Ala Val Glu Asn Pro Leu Ile Trp Ala Arg Tyr Leu Lys Ile  
 290 295 300  
 Glu Phe Leu Thr His Tyr Gly Asn Glu Phe Tyr Cys Pro Leu Ser Leu  
 305 310 315 320  
 Ile Arg Val His Gly Thr Thr Met Leu Glu Glu Tyr Lys His Asp Gly  
 325 330 335  
 Glu Ala Ser Arg Val Asp Asp Glu Ile Val Asp Glu Thr Leu Glu Pro  
 340 345 350  
 Asp His Ala Val Thr Ala Ala Ile Ala Glu Pro Ser Glu Asn Ser Ser  
 355 360 365  
 Asp Leu Gly Ala Glu Asn Arg Glu Ser Met Arg Arg Lys Leu Gln Asp  
 370 375 380  
 Gly Leu Gln Asp Ala Cys Pro Asn Pro Ala Gln Gly Leu Glu Arg Leu  
 385 390 395 400  
 Leu Ala Asn Tyr Leu Asp Ser Glu Ile Cys Ser Val Gln Ala Arg Pro  
 405 410 415  
 Thr Arg Thr Ala Gly Gln Glu Arg Ala Asp Ala Ala Val Gln His Asp  
 420 425 430  
 Ser Pro Ser Thr Asp Thr Thr Pro Pro Gly Pro Glu Ala Ser Gly Pro  
 435 440 445  
 Ile Val Pro Gly Ala Gly Asn Gly Thr Lys Phe Ala Pro Asp Ala Arg  
 450 455 460  
 Arg Ala Ala Gly Gln Ser Gly Ala Asp Gly Asn Pro Leu Pro Ala Ser  
 465 470 475 480  
 Met Ala Thr Met Ser Glu Pro Val Gln His Asp Thr Thr Ser Glu Ala  
 485 490 495  
 Asp Gln Lys Ser Thr Ala Ser Ser Gln Glu Glu Gln Val Pro Ser Val  
 500 505 510  
 Asp Ser Ala Lys Phe Ser Ala Thr Gln Pro Pro Ser Pro Asn Pro Thr  
 515 520 525  
 Thr Gln Glu Ser Phe Phe Lys Ser Val Asn Lys Arg Leu Gln Met Leu  
 530 535 540  
 Glu Ser Asn Ser Thr Leu Ser Leu Leu Tyr Ile Glu Glu Gln Ser Arg  
 545 550 555 560  
 Ile Leu Arg Asp Ala Phe Ser Lys Val Glu Lys Arg Gln Leu Ser Lys  
 565 570 575  
 Thr Ser Thr Phe Leu Glu Asn Leu Asn Val Thr Val Met Asn Glu Leu  
 580 585 590  
 Arg Gln Phe Arg Glu Gln Tyr Asp Gln Val Trp Lys Thr Val Ala Leu  
 595 600 605  
 Glu Phe Glu Thr Gln Arg Ile Gln Tyr His Gln Glu Ile Phe Ser Leu  
 610 615 620  
 Ser Ala Gln Leu Gly Val Leu Ala Asp Glu Leu Val Phe Gln Lys Arg  
 625 630 635 640  
 Val Ala Val Ile Gln Ser Ile Met Val Phe Phe Cys Phe Gly Leu Val  
 645 650 655  
 Leu Phe Ser Arg Gly Ala Met Ser Ser Tyr Met Glu Phe Pro Ser Val  
 660 665 670

## 19170

Gln Asn Met Val Ser Arg Ser Tyr Ser Leu Arg Ser Ser Ser Pro Pro  
675 680 685  
Phe Ser Ser Pro Ser Met Ser Pro Ser Ser Thr Arg Pro Ser Phe Thr  
690 695 700  
Tyr Arg Ser Arg His Arg Arg Asn Gly Thr Asp Asp Thr Gln Asp Ser  
705 710 715 720  
Ala Pro Ser Pro Thr Ile Ser Tyr Ser Pro Pro Thr Pro Asn Ser Glu  
725 730 735  
Thr Ser Val Pro Leu Glu Ser Ile Glu Lys Gln Glu Ser Pro Pro Ser  
740 745 750  
Pro Gly Asp Leu Glu Leu Pro Asp Ile Glu Leu Pro Gln Phe Arg Ser  
755 760 765  
Gln Ser Ser Pro Pro Val Leu Lys Ser Gly Glu Asp Ser Asp Gly Glu  
770 775 780  
Ile Ser Glu Thr Ser Gly Ser Met Glu Val  
785 790

&lt;210&gt; 42694

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42694

Ser Ala Ser Glu Lys Ser Ala Pro Leu Tyr Thr Met Asp Ser Thr Pro  
1 5 10 15  
Thr Ala Pro Leu Thr Asp Arg Ser Thr Asn Thr His Leu Ala Ala Asn  
20 25 30  
Gln Asp Lys Val Asn Asp Leu Lys Thr Ala Ala Ala Asn Leu Asn Ser  
35 40 45  
Met Glu Tyr His Arg Ser Val Leu Gln Gly Lys Leu Gln Asn Glu Asp  
50 55 60  
Lys  
65

&lt;210&gt; 42695

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42695

Lys Trp Trp Ser Ser Gly Ala Gly Asp Pro Arg Cys Ala Ile Tyr Leu  
1 5 10 15  
Val Met Gly Lys Ser Asp Pro Thr Asn Pro Asp Pro Tyr Arg Gln Gln  
20 25 30  
Ser Val Ile Leu Val Pro Ala Gly Leu Pro Gly Ile Thr Val His Arg  
35 40 45  
Met Leu Thr Val Tyr Gly Tyr Asp Asp Ala Pro His Gly His Gly His  
50 55 60  
Ile Ser Phe Asn Asn Val Arg Val Pro Val Ser Asn Ile Val Leu Gly  
65 70 75 80  
Glu Gly Arg Gly Phe Glu Ile Ile Gln Gly Arg Leu Gly Pro Gly Arg  
85 90 95  
Ile His His Ala Met Arg Thr Ile Gly Ala Ala Glu Lys Ala Leu Glu  
100 105 110  
Trp Leu Ile Ala Arg Val Asn Asp Asp Arg Lys Lys Thr Phe Gly Lys  
115 120 125

## 19171

Pro Leu Ser Ala His Gly Val Ile Leu Glu Trp Ile Ala Lys Ser Arg  
 130 135 140  
 Ile Glu Ile Asp Ala Ala Arg Leu Ile Val Leu Asn Ala Ala Ile Lys  
 145 150 155 160  
 Ile Asp Gln Gly Asp Ala Lys Ser Ala Leu Lys Glu Ile Ala Gln Ala  
 165 170 175  
 Lys Val Leu Val Pro Gln Thr Ala Leu Thr Val Ile Asp Arg Ala Val  
 180 185 190  
 Gln Ala Tyr Gly Ala Ala Gly Val Cys Gln Asp Thr Pro Leu Ala Asn  
 195 200 205  
 Leu Trp Ala Met Ile Arg Thr Leu Arg Ile Ala Asp Gly Pro Asp Glu  
 210 215 220  
 Val His Leu Gln Gln Leu Gly Arg Arg Glu Asn Lys Ser Arg Gln Asp  
 225 230 235 240  
 Ala Ile Val Ala Lys Leu Lys Tyr Gln Lys Glu Glu Ala Glu Arg Leu  
 245 250 255  
 Leu Leu Ala Asn Gly Phe Gln Lys Pro Lys Ser His Leu  
 260 265

&lt;210&gt; 42696

&lt;211&gt; 416

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (75), (111), (149)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42696

Gly Ile Pro Ser Phe Phe Leu Arg Asn Phe Ser Pro Asn Ser Ser Gln  
 1 5 10 15  
 Gly Asn Phe Gly Lys Ser Gly Gly Ile Pro Leu Ala Asn Lys Ser Arg  
 20 25 30  
 Arg Lys Arg Phe Ala Trp Gly Val Pro Lys Ser Pro Trp Gly Gly Cys  
 35 40 45  
 Phe Pro Ser Pro Gln Arg Arg Gly Asn Trp Arg Ile Leu Gln Pro Thr  
 50 55 60  
 Thr Arg Glu Val Phe Pro Ala Ser Ala Asn Xaa Glu Leu Phe Gly Pro  
 65 70 75 80  
 Pro Ser Val Gln Thr Gly Ile Cys Thr Pro Lys Gly Ile Leu Ser Arg  
 85 90 95  
 Gly Pro Lys Phe Gly Lys Pro Ala Pro His Lys Pro Ser Ala Xaa Cys  
 100 105 110  
 Leu Leu Phe Pro Thr Thr Arg Asp Thr Pro Arg Thr Phe Ser Leu Pro  
 115 120 125  
 Arg Lys Leu Leu Val Leu Pro Gly Ser Pro Phe Ile Arg Ala Leu His  
 130 135 140  
 Leu Trp His Pro Xaa Trp Thr Pro His Trp Val Ser Leu Ser Ser Phe  
 145 150 155 160  
 Ile Ala Phe Arg Pro Val Ala Pro Arg Tyr Pro Pro Pro Ser Asp Pro  
 165 170 175  
 Val Pro Ile Thr Gly Ser Leu Pro Asn His Ala Ala Lys Pro Ile Pro  
 180 185 190  
 Ser Leu Ser Met Val Phe Gly Arg Asn Lys Asn Asp Gln Ile Ser Lys  
 195 200 205

## 19172

Ser Trp Ser Asp Leu Trp Asp Glu Asp Glu Glu Phe Glu His Glu Asp  
 210 215 220  
 Val Val Phe Gln Glu Arg His Glu Ala Asn Ser Arg Ser Trp Ser His  
 225 230 235 240  
 Glu Ser Ser Ser Met Asp Val Pro Thr Pro Ser Ala Gly Leu Arg Glu  
 245 250 255  
 Ser Lys Ser Ser Ser Leu Leu Asn Ala Arg Ser Ser Ala Gln Gln Thr  
 260 265 270  
 Pro Ser Thr Lys Pro Val Asn Ile Ala Thr Lys Ser Thr Leu Asp Asp  
 275 280 285  
 Val Gly Thr Pro Ala Val Ile Ser Ala Pro Arg Phe Ser Gln Ser Ser  
 290 295 300  
 Pro Lys Lys Ser Asn Leu Asp Lys Trp Ala Ala Leu Gly Asp Arg Arg  
 305 310 315 320  
 Arg Asn Tyr Lys Pro Ala Glu Lys Ser Phe Gly Gln Pro Lys Ser Ser  
 325 330 335  
 Ile Asn Met Ser Trp Arg Lys Asp Trp Gly Leu Gly Ser Ser Gly Phe  
 340 345 350  
 Asp Tyr Gly Ser Trp Ala Lys Lys Asp Asn Leu Ala His Gln Asp Arg  
 355 360 365  
 Arg Arg Arg Pro Phe Leu Glu Lys Gly Arg Arg Arg Asp Gly Val Glu  
 370 375 380  
 Ser Pro Lys Ala Val Lys Pro Val Thr Pro Ser Ser Tyr Asp Gly Ser  
 385 390 395 400  
 Ile Asp Glu Asp Leu Asp Leu Val Gly Gly Trp His Asp Leu His Leu  
 405 410 415

&lt;210&gt; 42697

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42697

Leu Val Asp Phe Gln Ala Thr Asn Asn Ser Ala Pro Asp Thr Gly Asn  
 1 5 10 15  
 Met Glu Val Leu Ala Lys Tyr Gly Asn Glu Ala Gln Lys Lys Gln Trp  
 20 25 30  
 Leu Ala Pro Leu Leu Asp Gly Lys Ile Arg Ser Ala Phe Leu Met Thr  
 35 40 45  
 Glu Pro Asp Val Ala Ser Ser Asp Ala Thr Asn Ile Glu Leu Asn Ile  
 50 55 60  
 Arg Arg Glu Gly Asn Glu Tyr Val Leu Asn Gly Ser Val Cys Arg Arg  
 65 70 75 80  
 Phe Ser Pro Phe Ser Leu Glu His Pro Tyr Ser Pro Ile Ala Asp Arg  
 85 90 95  
 Asn Gly Gly Pro Pro Ala Leu Val Thr Pro Val Ala Gln Ser Thr Trp  
 100 105 110  
 Ser Trp Ala Ser Pro Thr Arg Pro Thr Gln Thr Pro Thr Ala Asn Ser  
 115 120 125  
 Leu Ser Ser Ser Cys Pro Pro Val Phe Pro Ala Ser Pro Cys Thr Gly  
 130 135 140  
 Cys  
 145

&lt;210&gt; 42698

&lt;211&gt; 212

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42698

Cys Ser Pro Val Thr Arg Leu Thr Leu Glu His Ser Asp Lys Lys Asn  
 1 5 10 15  
 Ala Thr Thr Tyr Gln Leu Phe His Arg Ser Gln Asn Asp Pro Leu Ile  
 20 25 30  
 His Asp Pro Glu Ala Asp Asp Arg Val Leu His Pro Val Ser Gly Pro  
 35 40 45  
 Ser Leu Pro Ile Ser Glu Gly Lys Lys Arg Ser Lys Asn Leu Ser Asp  
 50 55 60  
 Leu Ser Ser Glu Phe Gly Ser Asp Ser Ile Arg His Asn Glu Gly Glu  
 65 70 75 80  
 Ala Ala Asn Tyr Gly Ile Tyr Phe Asp Asp Thr Lys Tyr Asp Tyr Met  
 85 90 95  
 Gln His Leu Arg Glu Leu Gly Ala Gly Gly Glu Ser Tyr Phe Val  
 100 105 110  
 Glu Ala Thr Ser Lys Gly Lys Ser Lys Ala Lys Gly Met Lys Leu Glu  
 115 120 125  
 Asp Ala Leu Lys Gln Gln Met Thr Leu Asp Asp Thr Arg Ser Glu Phe  
 130 135 140  
 Gly Ala Gly Ser Val Tyr Gly Ser Glu Tyr Thr Ser Asp Leu Arg Ser  
 145 150 155 160  
 Thr Thr Ser Ser Tyr Ser Arg Lys Pro Thr Tyr Gln Asp Gln Gln Asp  
 165 170 175  
 Val Pro Asp Ala Ile Ala Gly Phe Lys Pro Asp Met Asp Pro Arg Leu  
 180 185 190  
 Arg Glu Val Leu Glu Ala Leu Glu Asp Glu Glu Tyr Val Asp Pro Asp  
 195 200 205  
 Asp Glu Glu Asp  
 210

&lt;210&gt; 42699

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42699

Cys Thr Pro Lys Thr Cys Pro Asn His Asn Asp Ile Val Ala Asn Cys  
 1 5 10 15  
 Ala Leu Gln Ser Phe Thr Val Ser Val Asp Pro Tyr His His Val Lys  
 20 25 30  
 Arg Leu Asp Leu Lys Ala Phe Asp Glu Thr Pro Met Pro Pro Met Tyr  
 35 40 45  
 Leu Ile Phe Arg Pro Pro Gln Met Leu Pro Thr Thr Thr Leu Asn Pro  
 50 55 60  
 Val Ser Ser Glu Thr Gly Lys Ser Lys Arg His Ile Ala Arg Asp Ile  
 65 70 75 80  
 Gly Ser Pro Val Gly Ile Asp Thr Leu Arg Ser Asp His Ile Gly Asp  
 85 90 95  
 Pro Asp Arg Trp Leu Trp Phe Gly Ile Leu Met Thr Ala Met Gly Gly  
 100 105 110  
 Ile Ala Leu Ile Tyr Ser  
 115

<210> 42700  
 <211> 228  
 <212> PRT  
 <213> A.fumigatus

<400> 42700  
 Ser Pro Trp Phe Phe Phe Arg Leu Ala Asp Ser Pro Phe Ala Glu Gly  
 1 5 10 15  
 Phe Ser Ser Asp Tyr Asp Ile Pro Thr Ser Pro Ser Trp Ala Pro Phe  
 20 25 30  
 Gln Lys Val Lys Met Tyr Asn Ile Pro Asp Gln Ile Phe Asp Gln Tyr  
 35 40 45  
 Asn Arg Ala Gln Val Ser Thr Ser Met Gly Leu Phe Ala Glu Leu Asn  
 50 55 60  
 His Ala Trp Val Ala Ile Asp Asn Ala Leu Tyr Ile Trp Asp Tyr Thr  
 65 70 75 80  
 His Pro Asn Pro Gln Leu Val Gly Phe Glu Asp Gln Pro Asn Ser Ile  
 85 90 95  
 Asn Ala Val Lys Leu Ala Lys Pro Arg Ala Gly Val Phe Leu Pro Ser  
 100 105 110  
 Ile Thr His Leu Leu Val Ile Ser Thr Thr Ala Glu Val Ile Leu Leu  
 115 120 125  
 Gly Met Gly Cys Glu Thr Thr Pro Gly Gly Ala Arg Gln Val Ser Leu  
 130 135 140  
 Tyr Gln Thr Gly Met Ser Val Ser Ile Arg Gly Leu Asp Ile His Val  
 145 150 155 160  
 Ile Ala Ser Ser Asp Ala Thr Gly Arg Ile Phe Phe Gly Gly Ser Thr  
 165 170 175  
 Asp Asn Asp Val Tyr Glu Leu Thr Tyr Gln Gln Glu Glu Arg Trp Phe  
 180 185 190  
 Gln Gly Gln Met Leu Gln Ser Gln Pro Tyr Gln Phe Ala His Arg Gly  
 195 200 205  
 Phe His Ala Gln Ser Glu Phe His Ser Glu Asp Tyr Gly Asp Gly Gly  
 210 215 220  
 Ala Asp Gly Asp  
 225

<210> 42701  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 42701  
 Val Ser Gln Cys Arg Asp Arg Pro Gly Arg Leu Ser Ala Gly Ala Gln  
 1 5 10 15  
 Pro Leu Ile Phe Pro Ser Gly Leu His Gln Ser Leu Thr Ser Cys Phe  
 20 25 30  
 Ile Leu Gln Asp Phe Tyr Asp Pro Ile Asn Asp Arg Leu Leu Glu Pro  
 35 40 45  
 Arg Leu Thr Gly Ile Ser Tyr Ser Leu Pro Ala Asp Gly Tyr Tyr Glu  
 50 55 60  
 Gln Ala Tyr Tyr Arg Gly Arg Phe Gln Pro Ser Val Ala Pro His Ala  
 65 70 75 80  
 Phe Pro Ser Glu Ala Ala Phe  
 85



<210> 42702  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 42702  
 Pro Asp Leu Tyr Ser Pro Ala Thr Thr Pro Ser Cys Pro Lys Gly Ile  
 1 5 10 15  
 Met Leu Trp Gln His Gly Lys Tyr Asp Val Met Pro Asp Gly Ser Ile  
 20 25 30  
 Gln Leu Thr Pro Ile Gly Leu Asp Val Arg Gln Leu Val Ser Asp Pro  
 35 40 45  
 Cys Ser Lys Glu Val Ala Val Tyr Ala Arg Tyr Asn Gln Thr Glu Ala  
 50 55 60  
 Phe Ser Val Arg Arg Arg Pro Val Pro Thr Ile Met Ile Ser Leu Leu  
 65 70 75 80  
 Thr Val Arg Cys Ser His Leu Arg Ser Pro  
 85 90

<210> 42703  
 <211> 685  
 <212> PRT  
 <213> A.fumigatus

<400> 42703  
 Ser Leu Arg Arg Thr Arg Pro Ala Val Ser Ser Ser Ala Ala Leu Leu  
 1 5 10 15  
 Thr Thr Met Ser Met Ser Ser His Ile Asn Arg Arg Asn Gly Gly Ser  
 20 25 30  
 Arg Gly Arg Cys Ser Lys Val Asn His Thr Ser Ser Arg Ile Ala Ala  
 35 40 45  
 Phe Thr Pro Ser Leu Ser Phe Thr Gln Lys Thr Thr Glu Thr Val Glu  
 50 55 60  
 Gln Met Glu Ile Asp Asp Thr Arg Arg Leu Leu Tyr Thr Leu Ser Ser  
 65 70 75 80  
 Ser Ser Thr Ile Arg Val Phe His Met Lys Pro Asp Gly Thr Leu Ala  
 85 90 95  
 Leu Ala Ile Thr Lys Pro Ala Met Asp Ile Tyr Ala Asn Ile Gly His  
 100 105 110  
 Ile Ile Ala Ser Asn Glu Thr Leu Asn Pro Lys Val Pro Ile Val Ser  
 115 120 125  
 Ile Ser Pro Ile Pro Ala Ala Glu Ala Ser Arg Tyr His Leu Met Ala  
 130 135 140  
 Thr Thr Ala Thr Gly Tyr Arg Ile Tyr Leu Ser Ala Thr Ala Ser Tyr  
 145 150 155 160  
 Ser Trp Ser Pro Ala Pro Asn Gly Thr Asn Ala Pro Thr Ser Met Gln  
 165 170 175  
 Ala His His Val Lys Thr Pro Pro Phe Asp Asn Pro Pro Ser Thr Pro  
 180 185 190  
 Val Glu Leu Gly Gln Pro Arg Phe Gln Thr Ser Gly Ala Ser Arg Val  
 195 200 205  
 Pro Ile His Ser Leu Asn Pro Thr Arg Phe Thr Val Arg Tyr Pro Pro  
 210 215 220  
 Gly Tyr Phe Phe Cys Phe Thr Cys Lys Asp Pro Thr Gln Lys Thr Asp  
 225 230 235 240  
 Thr Leu Phe Ile Ser Ser Pro Asp Ser Gly Arg Val Ala Arg Ser Gln

													245			250			255		
Glu	Asn	Val	Ile	Pro	Gly	Lys	Ala	Gly	Glu	Thr	Gly	Ile	Trp	Leu	Ser						
				260					265					270							
Leu	Gly	Ser	Arg	Ala	Glu	Asp	Val	Gly	Leu	Cys	Ser	Ala	Pro	Ser	Ala						
				275					280					285							
Ala	Ala	Ser	Thr	Pro	Gly	Gly	Phe	Gly	Asn	Glu	Leu	Ala	Val	Gln	Phe						
				290					295					300							
Asp	Ser	Ala	Ala	Ala	Glu	Ile	Ala	Ile	Leu	Thr	Asn	Thr	Gly	Ile	His						
305					310					315					320						
Val	Ile	Arg	Arg	Arg	Arg	Leu	Val	Asp	Met	Phe	Ala	Ala	Leu	Val	Arg						
				325					330					335							
Gly	Gly	Gly	Thr	Gly	Gly	Asp	Glu	Gly	Leu	Glu	Gly	Glu	Val	Lys	Asn						
				340					345					350							
Phe	Ile	Arg	Thr	Tyr	Gly	Arg	Ser	Glu	Thr	Leu	Ala	Thr	Ala	Leu	Ala						
				355					360					365							
Val	Ala	Cys	Gly	Gln	Arg	Val	Glu	Val	Ser	Thr	Asp	Ser	Arg	Leu	Thr						
				370					375					380							
Gln	Ile	Asn	Asp	Pro	Asp	Val	Leu	Glu	Phe	Ala	Arg	Lys	Val	Phe	Ile						
385					390					395					400						
Glu	Tyr	Gly	Gly	Arg	Pro	Thr	Val	Asn	Glu	Asn	Ala	Val	Ala	Asp	Ser						
				405					410					415							
Ser	Thr	Pro	Ala	Ile	Asp	Thr	Val	Ile	Leu	Ser	Pro	Arg	His	Ala	Gly						
				420					425					430							
Ile	Ala	Leu	Tyr	Met	Ser	Arg	Leu	Leu	Arg	Ser	Ile	Trp	Lys	Lys	Glu						
				435					440					445							
Ile	Val	Thr	Val	Gly	Ser	Gly	Pro	Asn	Gly	Ala	Gln	Thr	Ile	Ser	Ala						
				450					455					460							
Ser	Val	Pro	Thr	Thr	Lys	Leu	Gln	Ser	Val	Gln	Arg	Asp	Leu	Ser	Ala						
465					470					475					480						
Leu	Gln	Asp	Phe	Phe	Lys	Ala	Asn	Lys	Ser	Phe	Ile	Glu	Gly	Leu	Ser						
				485					490					495							
Gly	Pro	Glu	Ala	Leu	Ala	Arg	Val	Ser	Thr	Lys	Gln	Glu	Glu	Thr	Ala						
				500					505					510							
Leu	Gln	Ala	Glu	His	Arg	Ala	Leu	His	Ser	Leu	Val	Gln	Leu	Val	Ser						
				515					520					525							
His	Thr	Ile	Glu	Gly	Ile	Ser	Phe	Val	Leu	Val	Leu	Phe	Asp	Glu	Arg						
				530					535					540							
Val	Asp	Glu	Ile	Val	Ala	Thr	Leu	Pro	Asp	Glu	Ser	Lys	Gln	Arg	Phe						
545					550					555					560						
Leu	Lys	Leu	Thr	Phe	Glu	Glu	Leu	Phe	Ser	Thr	Ser	Lys	Gly	His	Asp						
				565					570					575							
Ile	Ala	Lys	Glu	Leu	Val	Lys	Gly	Ile	Val	Asn	Arg	Asn	Ile	Ala	Lys						
				580					585					590							
Gly	Ser	Asn	Val	Glu	Thr	Val	Ala	Asp	Ala	Leu	Arg	Arg	Arg	Cys	Gly						
				595					600					605							
Ser	Phe	Cys	Ser	Ala	Glu	Asp	Val	Val	Ile	Phe	Lys	Ala	Gln	Glu	Leu						
				610					615					620							
Leu	Lys	Arg	Ala	Thr	Glu	Ala	Gly	Ala	Asn	Ser	Glu	Ile	Gly	Arg	Asn						
625					630																

<210> 42704  
 <211> 243  
 <212> PRT  
 <213> A.fumigatus

<400> 42704  
 Arg Cys Arg Ser Pro Leu Val Thr Leu Ser Gly Arg Gln Gln Ala Asn  
 1 5 10 15  
 Pro Pro Pro Gln Asp Ser Arg Arg Asp Tyr Phe Tyr Phe Arg Lys Gln  
 20 25 30  
 Cys Tyr Asp Leu Ile Phe Lys Val Ile Ile Ala Val Asp Asn Leu Ala  
 35 40 45  
 Ala His Asp Pro Gly Val Val Asp Gly Gln Leu Thr Ile Ile Ala Lys  
 50 55 60  
 Arg Lys Asn Glu Ala Tyr Gly Val Ile Ser Asp Ser Thr Asp Glu Val  
 65 70 75 80  
 Phe Leu Thr Ser Leu Tyr Asp Trp Tyr Leu Glu Gln Gly Trp Ser Asp  
 85 90 95  
 Arg Leu Leu Gln Asn Asn Ser Pro Phe Val Val Thr Tyr Leu Glu Arg  
 100 105 110  
 Lys Ser Ala Asp Asp Ile Ala His Ala Asp Leu Leu Trp Arg Tyr Phe  
 115 120 125  
 Ala Gln Ser Gln Arg Phe Tyr Glu Ala Ala Asn Val Gln Tyr His Leu  
 130 135 140  
 Ala Gln Ser Ala Phe Ala Leu Pro Leu Ala Arg Arg Ile Glu Tyr Leu  
 145 150 155 160  
 Gly Arg Ala Arg Ala Asn Ala Ser Ile Phe Thr Pro Asp Val Gly Arg  
 165 170 175  
 Gln Ser Arg Gln Arg Leu Val Gln Asp Ile Ser Asn Leu Ile Asp Ile  
 180 185 190  
 Ala Asn Ile Gln Asp Asp Leu Leu Gln Arg Leu Lys Asp Asp Thr Arg  
 195 200 205  
 Ile Ala Pro Glu Arg Arg Thr Glu Val Leu Lys Glu Val Asp Gly Pro  
 210 215 220  
 Ile Met Asp Ile Ser Thr Val Arg Phe Ser Ser Asn His Ala Phe Val  
 225 230 235 240  
 Arg Ala Tyr

<210> 42705  
 <211> 206  
 <212> PRT  
 <213> A.fumigatus

<400> 42705  
 Ser Val Leu Gln Leu Phe Asn Gln Tyr Ala Asp Pro Ala Ser Tyr Tyr  
 1 5 10 15  
 Asp Ile Cys Leu Gln Ile Phe Tyr Leu Ala Asp Tyr Arg Asn Ser Ala  
 20 25 30  
 Asp Ile Arg Ser Thr Trp Gln His Leu Phe Gln Asp Leu His Asp Glu  
 35 40 45  
 Thr Leu Ala Lys Gly Glu Pro Gln Pro Tyr Glu Ala Val Ile Glu Lys  
 50 55 60  
 Val Arg Ser Leu Gly Ser Arg Leu Arg Met Ser Glu Thr Val Phe Pro  
 65 70 75 80  
 Ile Lys Asp Leu Leu Pro Met Leu Glu Arg Tyr Ala Leu Glu His Gln

[illegible]

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<210> 42706
<211> 138
<212> PRT
<213> A.fumigatus
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<210> 42707
<211> 395
<212> PRT
<213> A.fumigatus
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<400> 42707															
Leu	Ala	Leu	Phe	Phe	Pro	Ala	Val	Ser	Leu	Ser	Lys	Leu	Phe	Ser	Pro
1				5					10					15	
Val	Ile	Ser	Pro	Leu	Ser	Gly	Ile	Pro	Phe	Ile	Met	Pro	Ala	Ser	Ala
			20					25					30		
Pro	Val	Thr	Pro	Pro	Ser	Lys	Pro	Gln	Ala	Val	Asn	Pro	His	Glu	Asp
		35					40					45			
Glu	Ile	Pro	Ile	Ser	Tyr	Asp	Ile	Asn	Ile	Pro	Tyr	Val	Asp	Val	Ala
	50					55					60				
Lys	Glu	Ser	Thr	Ser	His	Thr	Arg	Tyr	Pro	Glu	Tyr	Leu	Pro	Thr	Trp

## 19179

65					70					75					80
Asp	Lys	Val	Trp	Phe	Asp	Pro	Leu	Pro	Pro	Phe	Lys	Tyr	Glu	Asp	Pro
				85					90					95	
Ala	Leu	Arg	Val	Lys	Asp	Lys	Ser	Lys	Arg	Asn	Leu	Leu	Thr	Pro	Gly
			100					105					110		
Val	Lys	Val	Ser	His	Ile	Gln	Pro	Gln	Ile	Gly	Ser	Ile	Val	Glu	Gly
			115				120					125			
Val	Gln	Leu	Ser	Gln	Leu	Ser	Asp	Ala	Ala	Lys	Asp	Glu	Leu	Ala	Leu
			130			135					140				
Leu	Val	Ala	Glu	Arg	Lys	Val	Val	Val	Phe	Pro	Ala	Gln	Asp	Leu	Ile
145					150					155					160
Asp	Ala	Gly	Pro	Glu	Lys	Leu	Glu	Gln	Phe	Met	Arg	His	Phe	Gly	Lys
			165						170					175	
Pro	Asn	Tyr	Gln	Pro	Val	Ser	Gly	Thr	Val	Arg	Asp	His	Pro	Gly	Phe
			180				185						190		
His	Ile	Ile	His	Arg	Asp	Gly	Asn	Arg	Glu	Glu	Ile	Ala	Arg	Phe	Leu
		195				200						205			
Glu	Gln	Arg	Thr	Thr	Thr	Thr	Leu	Trp	His	Gln	Asp	Val	Ser	Tyr	Glu
		210				215					220				
Ile	Gln	Pro	Pro	Gly	Tyr	Val	Met	Leu	Gly	Leu	Leu	Glu	Gly	Pro	Glu
225					230					235					240
Val	Gly	Gly	Asp	Thr	Val	Phe	Ala	Ala	Thr	Asp	Met	Ala	Tyr	Lys	Tyr
			245						250					255	
Gly	Phe	Pro	Pro	Ser	Ser	Ser	Tyr	Ala	Glu	Lys	Gln	Lys	Thr	Asp	Arg
			260					265					270		
Ser	Arg	Arg	Leu	Ser	Pro	Thr	Phe	Thr	Ser	Phe	Leu	Asp	Gly	Leu	Arg
		275					280					285			
Ala	Val	His	Ser	Ser	Ala	Lys	Met	Ile	Asn	His	Thr	Arg	Leu	Leu	Gly
		290				295					300				
Gly	Leu	Val	Arg	Lys	Asp	Pro	Val	Asp	Thr	Val	His	Pro	Leu	Val	Arg
305					310					315					320
Ile	His	Pro	Val	Thr	Gly	Glu	Lys	Cys	Leu	Phe	Ile	Asn	Gly	Glu	Phe
			325						330					335	
Ile	Thr	Arg	Ile	Gln	Gly	Leu	Lys	Glu	Pro	Glu	Gln	Arg	Tyr	Leu	Leu
			340					345				350			
Asp	Phe	Leu	Met	Gln	His	Ile	Met	Thr	Gly	His	Asp	Phe	Gln	Ala	Arg
		355					360				365				
Val	Arg	Trp	Gln	Pro	Lys	Thr	Ile	Val	Ile	Phe	Asp	Asn	Arg	Cys	Thr
		370				375					380				
Ile	Arg	Lys	Leu	Phe	Leu	Pro	Ser	His	Ala	Phe					
385					390					395					

&lt;210&gt; 42708

&lt;211&gt; 208

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42708

Leu	Ser	Ile	Ala	Arg	Val	Ala	Thr	Asp	Lys	Leu	Phe	Ser	Leu	Ser	Glu
1			5						10				15		
Tyr	Gln	Asn	Ala	Lys	Arg	Ile	Gly	Val	Tyr	Leu	Ser	Met	Pro	Ser	Gly
			20				25					30			
Glu	Leu	Ser	Thr	Thr	Ala	Ile	Val	Gln	Asp	Ala	Leu	Thr	His	Gly	Lys
		35				40					45				
Glu	Val	Phe	Val	Pro	Tyr	Ile	His	Ser	Ile	Asp	Ser	Pro	Ser	Ser	Thr
	50					55					60				

## 19180

Gln Lys Lys Thr Ser Val Met Asp Met Leu Leu Leu Lys Ser Met Glu  
 65 70 75 80  
 Glu Phe Asn Ser Leu Glu Pro Asp Lys Trp Gly Ile Pro Ser Leu Thr  
 85 90 95  
 Lys Ala Gln Ala Glu Asn Lys Arg Asn Cys Phe Gly Thr Ile Gly Val  
 100 105 110  
 Ser Thr Asn Met Gly Glu Asp Ser Thr Gln Arg Phe Glu Gly Leu Asp  
 115 120 125  
 Leu Ile Val Met Pro Gly Met Ala Phe Asp Gln Gly Phe Arg Arg Leu  
 130 135 140  
 Gly His Gly Lys Gly Tyr Tyr Asp Gln Phe Leu Thr Arg Tyr Ser Ile  
 145 150 155 160  
 Lys Val Ala Glu Lys Lys Thr Thr Thr Ser Lys Met Pro Leu Leu Gly  
 165 170 175  
 Glu Glu Gln Pro His Pro Lys Pro Lys Leu Pro Leu Asn Asp Leu Thr  
 180 185 190  
 Asp Ser Ile Ser Cys Pro Phe Pro Gln Arg Ala Asn Ala Ser Leu Glu  
 195 200 205

&lt;210&gt; 42709

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42709

Arg Leu His Pro Cys Phe Leu His Ile His Leu Gly Glu Phe Ala Leu  
 1 5 10 15  
 Gln Leu Leu Glu Arg Pro Pro Ser Gly Ile Gly Ser Arg Gly Arg Lys  
 20 25 30  
 Ile Ile Gln Ala Val Thr Asp Gly Leu Asp Arg Trp Arg Leu Val Pro  
 35 40 45  
 Met Arg Pro Arg Ser Trp Ala Ala Arg Thr Thr Gly Ile Val Gly Ile  
 50 55 60  
 Met Gln Gln Ser Leu Ser Phe Arg Ile Val Ala Gly Phe Ile Gly Ala  
 65 70 75 80  
 Lys Met Arg Ser Arg  
 85

&lt;210&gt; 42710

&lt;211&gt; 395

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42710

Leu Phe Ala Ser Pro Asp Ile Tyr Ser Ile Ala Leu Thr Thr Cys Ser  
 1 5 10 15  
 Ser Leu Leu Arg Lys Tyr Asn Ile Asp Pro Lys Ser Ile Gly Arg Leu  
 20 25 30  
 Glu Val Gly Thr Glu Thr Leu Leu Asp Lys Ser Lys Ser Val Lys Ser  
 35 40 45  
 Val Leu Met Gln Leu Phe Ala Pro His Gly Asn Thr Asn Ile Glu Gly  
 50 55 60  
 Val Asp Thr Val Asn Ala Cys Tyr Gly Gly Thr Asn Ala Val Phe Asn  
 65 70 75 80  
 Ser Ile Asn Trp Val Glu Ser Ser Ala Trp Asp Gly Arg Asp Ala Ile  
 85 90 95

## 19181

Val Val Cys Gly Asp Ile Ala Leu Tyr Ala Lys Gly Ala Ala Arg Pro  
 100 105 110  
 Thr Gly Gly Ala Gly Ala Val Ala Met Leu Ile Gly Pro Asp Ala Pro  
 115 120 125  
 Ile Val Phe Glu Pro Gly Leu Arg Gly Ser Tyr Val Thr His Ala Tyr  
 130 135 140  
 Asp Phe Phe Lys Pro Asp Leu Thr Ser Glu Tyr Pro Val Val Asp Gly  
 145 150 155 160  
 His Phe Ser Leu Lys Cys Tyr Thr Glu Ala Val Asp Ala Cys Tyr Lys  
 165 170 175  
 Ala Tyr Ala Ala Arg Glu Lys Val Leu Lys Ala Lys Ile Gln Asn Gly  
 180 185 190  
 Thr Asn Gly Val Glu Asn Asp Glu Thr Lys Thr Pro Leu Asp Arg Phe  
 195 200 205  
 Asp Tyr Val Leu Phe His Ala Pro Thr Cys Lys Leu Val Gln Lys Ser  
 210 215 220  
 Tyr Gly Arg Met Leu Tyr Asn Asp Tyr Leu Ala Asn Pro Ser His Pro  
 225 230 235 240  
 Ala Phe Ala Glu Val Pro Ser Glu Leu Arg Asp Leu Asp Tyr Glu Lys  
 245 250 255  
 Ser Phe Thr Asp Lys Thr Val Glu Lys Thr Phe Met Gly Leu Thr Lys  
 260 265 270  
 Lys Thr Phe Ala Glu Arg Val Arg Pro Gly Leu Asp Val Ala Thr Leu  
 275 280 285  
 Cys Gly Asn Met Tyr Thr Ala Thr Val Tyr Ala Gly Leu Ala Ser Leu  
 290 295 300  
 Leu Ser Asn Val Thr Phe Asp Pro Ser Gln Pro Lys Arg Val Ala Leu  
 305 310 315 320  
 Phe Ser Tyr Gly Ser Gly Leu Ala Ser Ser Met Phe Ser Val Lys Ile  
 325 330 335  
 Val Gly Asp Val Ser Gly Met Val Glu Lys Leu Asp Leu His Lys Arg  
 340 345 350  
 Leu Asn Ala Arg Thr Val Leu Pro Pro Gln Thr Tyr Asp Glu Val Arg  
 355 360 365  
 Asn Gln Cys Phe Pro Pro Pro Val Ile Ile Trp Thr Asp Ile Val Ser  
 370 375 380  
 Ser Arg Cys Ala Ser Cys Val Ser Thr Pro Thr  
 385 390 395

&lt;210&gt; 42711

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42711

Phe Thr Gly Val Lys Leu Glu Pro Pro Pro Cys Phe Arg Leu Phe Tyr  
 1 5 10 15  
 Ser Gly Ser Val Tyr Arg Met Leu Phe Leu Ala Leu Gly Arg Met Ala  
 20 25 30  
 Ser Leu Arg Arg Ala Phe Asn Ile Gln Thr Phe Ser Ile Leu Met Pro  
 35 40 45  
 Pro Gln Leu Ile Ile Phe Ala Leu Ile Glu His Asp Ser Ala Val Leu  
 50 55 60  
 Ala Phe Gln Leu Glu His Leu Asn Thr Leu Ala Ser Val Leu Leu Tyr  
 65 70 75 80  
 His Phe Val Gly Gly His Tyr Ser Leu Thr Ala Arg Arg Lys Leu Ala

## 19182

85 90 95  
 Leu Pro Asp Ser Tyr Ser Leu Ile Ile Arg Cys Glu Arg Lys Asn Cys  
 100 105 110  
 Asp

<210> 42712  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 42712  
 Ile Phe Ser Phe Ile Gly Ser Phe Phe Val Phe Lys Ile Phe Thr Phe  
 1 5 10 15  
 Ile Ser His Lys His Arg Glu Tyr Val Ala His Cys Arg Ser Phe Leu  
 20 25 30  
 Ile Gln Ile Met Ile Pro Leu Thr Pro Ala Ser Val Thr Leu Ser Asn  
 35 40 45  
 Phe Tyr Gly Ser Pro Glu Pro His Pro Phe Arg His Gly Gln Arg  
 50 55 60

<210> 42713  
 <211> 486  
 <212> PRT  
 <213> A.fumigatus

<400> 42713  
 Arg Asn Asp Val Ser Pro Tyr Asp Tyr Arg Arg Gly Lys Thr Leu Val  
 1 5 10 15  
 Ser Tyr Leu Ile Ile Ser Leu Arg Trp Gln Asp Gly Ser Gly Val Glu  
 20 25 30  
 Ala Leu Val Gln Val Lys Leu Leu Asn His Thr Arg Asp Ile Ala Asn  
 35 40 45  
 Asn Phe Asp Thr Glu His Gly Ala Gly Glu Thr Thr Ala Val Arg Glu  
 50 55 60  
 Glu Gly Asp Ala Leu Gly Leu Ala Gly Ile Glu Gly Asp Val Ala Glu  
 65 70 75 80  
 Gln Ala Gly Lys Thr Ser Ile His Gly Gly Arg Val His Val Thr Thr  
 85 90 95  
 Glu Gly Gly Asn Ile Lys Thr Gly Thr His Pro Leu Ser Glu Ser Phe  
 100 105 110  
 Leu Gly Gln Thr His Glu Gly Leu Leu His Ser Leu Val Gly Glu Arg  
 115 120 125  
 Phe Leu Val Ile Gln Val Thr Gln Phe Arg Gly Tyr Phe Gly Lys Gly  
 130 135 140  
 Arg Val Ala Gly Val Gly Glu Val Val Ile Val Glu His Ala Ala Ile  
 145 150 155 160  
 Gly Leu Leu His Gln Phe Ala Gly Arg Arg Val Glu Gln Asp Ile Val  
 165 170 175  
 Lys Ala Ile Lys Gly Ser Leu Gly Leu Ile Ile Leu Asn Ser Val Gly  
 180 185 190  
 Ala Ile Leu Asn Leu Gly Leu Lys His Leu Phe Thr Ser Gly Ile Gly  
 195 200 205  
 Leu Val Ala Ser Ile Asn Ser Leu Gly Ile Ala Leu Glu Arg Glu Met  
 210 215 220  
 Ala Ile Asn Asp Gly Val Phe Ala Ser Lys Val Gly Leu Glu Glu Ile



## 19183

225                      230                      235                      240  
 Ile Ser Val Gly Asp Val Thr Ala Thr Glu Thr Arg Leu Glu His Asn  
                                  245                      250                      255  
 Arg Gly Ile Arg Ser Asp Gln His Gly Asn Gly Thr Ser Thr Thr Ser  
                                  260                      265                      270  
 Gly Ala Gly Ser Pro Leu Gly Ile Glu Gly Asn Val Ser Ala Asp Asn  
                                  275                      280                      285  
 Asn Gly Ile Ser Ala Ile Pro Gly Arg Arg Leu Asp Pro Val Asp Ala  
                                  290                      295                      300  
 Val Glu His Ser Val Gly Thr Thr Ile Ala Ser Ile Asp Gly Val Asn  
 305                      310                      315                      320  
 Thr Leu Asn Val Gly Val Ser Met Arg Gly Lys Gln Leu His Gln His  
                                  325                      330                      335  
 Arg Leu Asp Arg Leu Gly Leu Val Lys Lys Gly Leu Cys Ala Asp Leu  
                                  340                      345                      350  
 Lys Thr Ala Asp Arg Leu Gly Val Asp Val Val Phe Ala Lys Glu Gly  
                                  355                      360                      365  
 Gly Ala Gly Gly Gln Ser Asn Gly Val Asp Val Trp Gly Gly Glu Lys  
                                  370                      375                      380  
 Leu Thr Phe Arg Ala Tyr Glu Asp Gln Gly Ser Gly Thr Ile Ile Pro  
 385                      390                      395                      400  
 Ser Arg Ser Ser Gln Lys Leu Ile Leu Val Trp Pro Arg Pro Ile Val  
                                  405                      410                      415  
 Tyr Phe Pro Ser Leu Thr Pro Ser Asn Phe Ser Asn Ser Ala Trp Ser  
                                  420                      425                      430  
 Thr His Trp Thr Cys His Gln Pro Cys Cys Glu Leu Glu Met Leu Asp  
                                  435                      440                      445  
 Arg Thr Arg Phe Lys Gly Ser Arg Pro Thr Tyr Leu Thr Gly Glu Val  
                                  450                      455                      460  
 Asp Leu Asn Gly Leu Asp Thr Asn Val Leu Gly Thr Ser Arg His Gly  
 465                      470                      475                      480  
 Gly Gly Gly Ser Ala Asn  
                                  485

&lt;210&gt; 42714

&lt;211&gt; 922

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42714

Arg Cys Leu Thr Ser Thr Ala Pro Pro Ser His Ile His Ser Ala Met  
 1                      5                      10                      15  
 Gly Asn Asp Lys Lys Phe Glu Tyr Glu Ser Leu Pro Ile Pro Ser Tyr  
                                  20                      25                      30  
 Glu Glu Ala Ile Ser Ser Arg Pro Ser Ser Ser Arg Ser His Leu Gly  
                                  35                      40                      45  
 Pro Asp Glu Ala Ser Asp Asp Ala Glu Arg Gln Gly Leu Leu His Asn  
                                  50                      55                      60  
 Ala Asp Asn Thr Ser Gly Pro Gly Gly Pro Arg Ser Arg Pro His Gly  
 65                      70                      75                      80  
 Tyr Gln Pro Pro Thr Val Glu Ser Val Arg Asn Ser Leu Asp Asp Leu  
                                  85                      90                      95  
 Ala Ser Ser Gly Thr Asp Ser Ala Arg Gly Ser Leu Glu Glu Leu Gln  
                                  100                      105                      110  
 Arg Glu Leu Ala Gln Met Asp Val Glu Glu Ala Gly Val Gln Ser Ser  
                                  115                      120                      125

## 19184

Ser Arg Arg Ser Arg Leu Gly Gln His Phe Ser Lys Arg Phe Asn Ser  
 130 135 140  
 Leu Ser Arg Thr Leu Ser Ala Ile Gln Phe Pro Phe Arg Arg Phe Leu  
 145 150 155 160  
 Pro Asn Phe Arg Phe Thr Ile Asn Leu Asp Gly Ala Arg Pro Arg Phe  
 165 170 175  
 Gln Asp His Ser Cys Ile Ile Met Leu Arg Val Phe Gly Leu Leu Leu  
 180 185 190  
 Val Val Ala Leu Val Tyr Val Phe Phe Phe Ser Asn Leu Phe Asn Leu  
 195 200 205  
 Asn Ser Arg Phe Met Met Gly Gln Ser Tyr Ser Ala Ala Ser Val Gln  
 210 215 220  
 Asn Phe Leu Gln Gly His Ile Asn Glu Thr Asn Ile Ala Asp Asn Leu  
 225 230 235 240  
 Arg Lys Val Thr Lys Phe Pro His Met Ala Gly Thr Glu Gly Ser Phe  
 245 250 255  
 Ala Leu Ala Glu Trp Ile Glu Gln Glu Phe Lys Asn Ala Gly Leu Asp  
 260 265 270  
 Glu Ile Glu Met Glu Glu Phe Gln Val Tyr Leu Asn Tyr Pro Asn Glu  
 275 280 285  
 Gly Gly Arg Arg Val Ala Ile Val Asp Pro Pro Gly Met Ala Trp Glu  
 290 295 300  
 Ala Ala Leu Glu Glu Lys Asn Glu Gln Thr Met Val Phe His Gly His  
 305 310 315 320  
 Ser Lys Ser Gly Asn Val Thr Gly His Leu Val Tyr Ala Asn Tyr Gly  
 325 330 335  
 Ser Arg Glu Asp Phe Gln Leu Leu Ala Asp Gln Gly Ile Asp Met Lys  
 340 345 350  
 Gly Ala Ile Ala Leu Val Arg Tyr Tyr Gly Ser Glu Thr Asp Arg Ala  
 355 360 365  
 Leu Lys Val Lys Leu Ala Glu Met Ala Gly Ala Ala Gly Cys Ile Ile  
 370 375 380  
 Tyr Ser Asp Pro His Glu Asp Gly Phe Arg Arg Gly Pro Ala Phe Pro  
 385 390 395 400  
 Asp Gly Arg Phe Met Pro Asp Asp Gly Val Gln Arg Gly Ala Val Ser  
 405 410 415  
 Leu Met Ser Trp Val Val Gly Asp Val Leu Ser Pro Gly Phe Ala Ser  
 420 425 430  
 Thr Pro Gln Glu Lys Lys Arg Leu Ser Ile Glu Glu Ser Pro Gly Leu  
 435 440 445  
 Pro Gly Ile Pro Ser Ile Pro Ile Ala Trp Arg Asp Ala Gln Arg Leu  
 450 455 460  
 Leu Gln Val Leu Lys Gly His Gly Thr Lys Val Pro Lys Glu Trp Val  
 465 470 475 480  
 Gly Gly Val Pro Glu Val Gln Glu Trp Trp Thr Gly Asp Gly Gly Ser  
 485 490 495  
 Pro Lys Val Asn Leu Met Asn Ile Leu Asp Glu Val Glu Arg Gln Pro  
 500 505 510  
 Ile Tyr Asn Val Ile Gly Arg Ile Ile Gly Leu Glu Gln Pro Glu Lys  
 515 520 525  
 Lys Val Ile Val Gly Asn His Arg Asp Ser Trp Cys Leu Gly Ser Ala  
 530 535 540  
 Asp Pro Gly Ser Gly Thr Ala Val Phe Leu Glu Leu Val Arg Val Phe  
 545 550 555 560  
 Gly Glu Leu Arg Thr Phe Gly Trp Arg Pro Leu Arg Thr Ile Glu Phe  
 565 570 575

## 19185

Val Ser Trp Asp Ala Glu Glu Tyr Asn Met Ile Gly Ser Thr Glu His  
 580 585 590  
 Val Glu Lys Ala Ile Glu Ala Leu Arg Glu Asn Ala Phe Ala Tyr Leu  
 595 600 605  
 Asn Val Asp Val Gly Val Thr Gly Asn Asn Phe Asp Ala Ser Gly Ser  
 610 615 620  
 Pro Leu Phe Gln Arg Ile Val Met Gln Ile Leu Gly Arg Ile Ala Asp  
 625 630 635 640  
 Pro Ile Thr Asn Glu Thr Leu Lys Asp Ile Trp Glu Arg Ala Gln Lys  
 645 650 655  
 Lys Phe Ser Pro Leu Gly Ser Gly Ser Asp Tyr Val Ala Phe Gln Asp  
 660 665 670  
 Ile Ala Gly Thr Ser Ser Val Asp Phe Gly Phe Thr Gly Glu Arg Phe  
 675 680 685  
 Pro Tyr His Ser Cys Tyr Glu Asn Tyr Asp Trp Met Thr Lys Phe Gly  
 690 695 700  
 Asp Pro Gly Phe Gln Tyr His Lys Ala Leu Gly Gln Phe Trp Ala Leu  
 705 710 715 720  
 Leu Leu Ile Asp Leu Ala Asp Asn Pro Ile Leu Gln Phe Asp Leu Gln  
 725 730 735  
 Val Tyr Ala Asp His Val His Thr Tyr Val Thr Asp Leu Val Ala Tyr  
 740 745 750  
 Ala Lys Ser Lys Asn Val Pro Val Ala Pro Gln Leu Leu Glu Asp Arg  
 755 760 765  
 Ala Val Gly Glu Ala Ser Val Ser Phe Gln Pro Leu Phe Asp Ala Ala  
 770 775 780  
 Ser Lys Phe Lys Ser Asp Ala Glu Glu Phe Asp Gln Trp Ala Gln Leu  
 785 790 795 800  
 Trp His Asp Thr Val Trp Gly Ala Gly Gly Phe Glu Asn Asn Val Met  
 805 810 815  
 Ala Ile Gln Arg Leu Ser His Asn Ser Arg Leu Ala Ser Phe Asp Thr  
 820 825 830  
 Gln Leu Leu Asp Leu Asp His Asp Gly Gly Val Ser Thr Leu Pro Ser  
 835 840 845  
 His Ile Thr Ser Val Pro Asp Thr Asp Ser Phe Arg Gln Ile Pro Asn  
 850 855 860  
 Arg Thr Gln Phe Lys His Val Ile Phe Gly Pro Gln Leu Trp Ser Gly  
 865 870 875 880  
 Tyr Asp Ala Ala Val Phe Pro Ala Ile Arg Asp Ser Ile Asp Ser Gly  
 885 890 895  
 Asn Trp Thr Leu Thr Gln Glu Trp Ile Asp Arg Val Ala Lys Ile Ile  
 900 905 910  
 His Arg Ala Ser Asn Ser Leu Val His Asn  
 915 920

&lt;210&gt; 42715

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42715

His Ser Leu Ser Gly Gly Leu Gly Leu Thr Gly Gly Ile Ala Asp Val  
 1 5 10 15  
 Gly Gly Leu Tyr Asp Cys Leu Tyr Gly Leu Tyr Thr Gly Arg Ala Thr  
 20 25 30  
 Pro Asp Ile Leu Asp Met Tyr Asp Arg Val Arg Arg Lys Lys Tyr Leu

## 19186

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      35              40              45
Glu Val Ile Asp Lys Leu Ser Ser Asp Asn Leu Arg Arg Met Phe Glu
      50              55              60
Thr Asp Pro Asp Thr Val Ile Glu Ser Gly Ser Asp Glu Leu Phe Asn
65              70              75              80
Leu Cys Leu Lys Ala Glu Lys Asp Val Glu Leu Ala Lys Gln Leu Val
      85              90              95
Thr Gly Ile Asn Val Ile Lys Tyr Asp Phe Thr Gln His Tyr Ser Glu
      100              105              110
Ala Gly Lys Ile
      115

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<210> 42716  
 <211> 291  
 <212> PRT  
 <213> A.fumigatus

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<400> 42716
Ile Ile Val Val Gly Ala Gly Pro Ala Gly Leu Leu Leu Ala Leu Met
1              5              10              15
Leu Ser Arg Gln Ala Ile Pro Val Thr Val Leu Glu Ala Ala Glu Gln
      20              25              30
Leu Asp Thr Arg Pro Arg Ala Thr His Tyr Gly Ser Pro Ala Val Tyr
      35              40              45
Glu Leu Arg Arg Ala Gly Val Leu Pro Asp Val Leu Ala Glu Gly Phe
      50              55              60
Thr Pro Gly Val Ile Cys Trp Arg Lys Leu Tyr Gly Thr Tyr Leu Ala
65              70              75              80
Gly Ile Asp Asn Arg Ile Met Ala Asn Asp Pro Asp Gln Val Ala Cys
      85              90              95
Leu Pro Leu Gly Arg Leu Gly Gln Ile Leu Leu Asp His Leu Ala Arg
      100              105              110
Gln Pro Ser Ala Glu Ile Lys Trp Asn His Arg Val Thr Gly Leu Gly
      115              120              125
Gln Asp Pro Asp Gln Ala Trp Val Thr Val Ala Thr Pro Thr Gly Glu
      130              135              140
Val Thr Met Gln Ala Thr Tyr Ile Val Gly Cys Asp Gly Ala Asn Ser
145              150              155              160
Gln Ile Arg Arg Ser Leu Phe Gly Asp Gly Val Phe Pro Gly Lys Thr
      165              170              175
Trp Asp Glu Gln Ile Val Ala Thr Asn Val Tyr Tyr Asp Phe His Gln
      180              185              190
Phe Gly Tyr Glu Asp Ala Asn Phe Ile Ile His Pro Glu His Trp Tyr
      195              200              205
Met Ala Ser Arg Ile Thr Lys Asp Gly Leu Trp Arg Val Ser Tyr Gly
      210              215              220
Glu Lys Gly Gly Leu Thr His Glu Gln Leu Ala Glu Arg Gln Pro Lys
225              230              235              240
Lys Phe Gln Ala Met Leu Pro Gly His Pro Thr Pro Asp Gln Tyr Arg
      245              250              255
Leu Val Asn Phe Ser Pro Tyr Arg Val His Gln Arg Leu Ala Glu Lys
      260              265              270
Met Arg Val Gly Arg Phe Leu Leu Ala Ala Asp Ala Ala His Leu Cys
      275              280              285
Asn Pro Leu
      290

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<210> 42717  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 42717  
 Val Ser Ser Pro Leu Ser Phe Leu Ile Lys Ser Pro Ile Ser Arg Tyr  
 1 5 10 15  
 Ala Phe Leu Leu Val Val Thr Trp Val Val Phe Glu Met Asn Leu Leu  
 20 25 30  
 Leu Ile Phe Lys Arg Val Leu Arg Leu Val Ser Ser His Val Leu His  
 35 40 45  
 Cys Ala Arg Thr Lys Leu Cys Val Tyr Leu Ile Asn Ile Trp Gln Ala  
 50 55 60  
 Leu Asn Ile Pro Arg Ala Ile Glu Asp Asn Asn Val Arg Phe Ala Leu  
 65 70 75 80  
 Cys Gly

<210> 42718  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 42718  
 Trp Thr Ala Asp Val Arg Lys Val Lys Ser His Gly Gln Leu Asn Leu  
 1 5 10 15  
 His Ser Pro Glu Ile Cys Ser Lys Leu Arg Phe Tyr Ser Pro Arg Pro  
 20 25 30  
 Ser Gly Leu Ser Gln Ser Pro Pro Ile Leu Lys Glu Ala Tyr Phe Ala  
 35 40 45  
 Tyr Leu Asp Leu Asn Lys Asp Tyr Gly Tyr Ser Ile Thr Gly Val Ala  
 50 55 60  
 Arg Ser Pro Ser Leu Cys Asp Thr Ile Arg Leu Leu  
 65 70 75

<210> 42719  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 42719  
 His Leu Ser Ser Gly Ser Arg Tyr Gly Phe Thr Leu His Ser Met Ala  
 1 5 10 15  
 Ser Gln Thr Gln Thr Gly Gln Arg Pro Lys Val Gln Pro Cys Arg Tyr  
 20 25 30  
 Lys Thr Gly Lys Thr Leu Gly Ala Gly Ser Tyr Ser Val Val Lys Glu  
 35 40 45  
 Cys Val His Ile Asp Thr Gly Arg Tyr Tyr Ala Ala Lys Val Ile Asn  
 50 55 60  
 Lys Arg Leu Met Ala Gly Arg Glu His Met Val Ile Leu Ser Glu Thr  
 65 70 75 80  
 Glu Asn Pro Ala Leu Lys Val Asn Val Asp Ile Lys Arg Gly Leu Met  
 85 90 95  
 Cys Gly Met Val

100

<210> 42720  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 42720  
 Leu Asp Ala Lys Leu Ile Arg Pro Ser Ala Asn Ala Gly Phe Asp Leu  
 1 5 10 15  
 Phe Asp Asp Glu Leu Ile Asn Glu Ser Arg Ala Asn Ser Asn Met Asn  
 20 25 30  
 Ala Ser Asp Tyr Ile Ile Asp Ile Arg Glu Tyr Asp Val Pro Tyr His  
 35 40 45  
 Val Arg Val Ala Ile Asp Lys Gly Gly Arg Leu Asn Pro His Ile Cys  
 50 55 60  
 Gln  
 65

<210> 42721  
 <211> 1320  
 <212> PRT  
 <213> A.fumigatus

<400> 42721  
 Thr Thr Thr Asp Arg Ser Lys Asp Ile Arg Ile Gly Lys Trp Tyr Thr  
 1 5 10 15  
 Val Glu Ala Lys His Gly Val Ile Ser Leu Thr Cys Leu Glu Glu Arg  
 20 25 30  
 Leu Gln Arg Ala Asp Pro Val Ile Leu Ala Phe Asp Ile Glu Thr Thr  
 35 40 45  
 Lys Leu Pro Leu Lys Phe Pro Asp Ser Val Ile Asp Gln Ile Met Met  
 50 55 60  
 Ile Ser Tyr Met Ile Asp Gly Gln Gly Phe Leu Ile Thr Asn Arg Glu  
 65 70 75 80  
 Ile Val Ser Glu Asp Ile Arg Asp Phe Glu Tyr Thr Pro Lys Pro Glu  
 85 90 95  
 Tyr Ser Gly Pro Phe Met Ile Phe Asn Glu Pro Asn Glu Arg Ser Val  
 100 105 110  
 Ile Glu Arg Phe Phe Glu His Ile Lys Glu Ala Lys Pro Thr Val Ile  
 115 120 125  
 Ala Thr Tyr Asn Gly Asp Phe Phe Asp Trp Pro Phe Val Glu Ala Arg  
 130 135 140  
 Ala Ser Val Leu Gly Ile Asp Met Tyr Lys Glu Ile Gly Phe Arg Lys  
 145 150 155 160  
 Asn Ser Glu Asp Ile Tyr Gln Ser Asp His Cys Val His Met Asp Cys  
 165 170 175  
 Phe Ala Trp Val Asn Arg Asp Ser Tyr Leu Pro Gln Gly Ser Arg Gly  
 180 185 190  
 Leu Lys Ala Val Thr Val Ala Lys Leu Gly Tyr Asp Pro Asp Glu Leu  
 195 200 205  
 Asp Pro Glu Leu Met Thr Pro Tyr Ala Ser Glu Arg Pro Gln Thr Leu  
 210 215 220  
 Ala Glu Tyr Ser Val Ser Asp Ala Val Ala Thr Tyr Tyr Leu Tyr Met  
 225 230 235 240  
 Lys Tyr Val His Pro Phe Ile Phe Ser Leu Cys Thr Ile Ile Pro Leu

				245					250				255		
Asn	Pro	Asp		Thr	Leu	Arg	Lys	Gly	Thr	Gly	Thr	Leu	Cys	Glu	Met
			260					265					270		
Leu	Leu	Met	Val	Gln	Ala	Tyr	Lys	Gly	Glu	Ile	Val	Leu	Pro	Asn	Lys
		275					280					285			
His	Lys	Asp	Pro	Pro	Glu	Ser	Phe	Tyr	Glu	Gly	His	Leu	Leu	Glu	Ser
	290					295					300				
Glu	Thr	Tyr	Val	Gly	Gly	His	Val	Glu	Ser	Ile	Glu	Ala	Gly	Val	Phe
305				310						315					320
Arg	Ser	Asp	Ile	Pro	Val	Thr	Phe	Asn	Ile	Asp	Thr	Thr	Ala	Ile	Asp
			325					330						335	
Glu	Leu	Leu	Arg	Asp	Leu	Asp	Ala	Ala	Leu	Lys	Phe	Ser	Ile	Glu	Val
		340					345					350			
Glu	Glu	Lys	Lys	Ser	Met	Asp	Asp	Val	Val	Asn	Tyr	Glu	Asp	Val	Lys
	355					360					365				
Ala	Gln	Ile	Ala	Glu	Arg	Leu	Val	Asn	Leu	Arg	Glu	Lys	Pro	His	Arg
	370				375						380				
Asp	Glu	Val	Pro	Ser	Ile	Tyr	His	Leu	Asp	Val	Ala	Ser	Met	Tyr	Pro
385				390						395					400
Asn	Ile	Met	Ile	Thr	Asn	Arg	Leu	Gln	Pro	Asp	Ser	Met	Ile	Gln	Glu
			405					410						415	
Ser	Asp	Cys	Ala	Ala	Cys	Asp	Phe	Asn	Arg	Pro	Gly	Lys	Thr	Cys	Asp
	420						425						430		
Arg	Arg	Leu	Pro	Trp	Ala	Trp	Arg	Gly	Glu	Phe	Leu	Pro	Ala	Lys	Arg
	435				440							445			
Asp	Glu	Tyr	Asn	Met	Ile	Arg	Gln	Ala	Val	Ala	Asn	Glu	Leu	Phe	Pro
	450				455						460				
Gly	Arg	Thr	Lys	Asn	Ser	Pro	Met	Arg	Ser	Phe	Gly	Glu	Met	Ser	Ala
465			470							475					480
Glu	Glu	Gln	Ala	Ala	Ile	Ile	Lys	Lys	Arg	Leu	Gln	Asp	Tyr	Ser	Lys
			485					490						495	
Lys	Ile	Tyr	His	Lys	Ile	His	Asp	Ser	Lys	Thr	Ile	Val	Arg	Glu	Ala
			500				505						510		
Ile	Ile	Cys	Gln	Arg	Glu	Asn	Pro	Phe	Tyr	Val	Asp	Thr	Val	Arg	Ser
	515					520						525			
Phe	Arg	Asp	Arg	Arg	Tyr	Asp	Phe	Lys	Gly	Lys	Gln	Lys	Val	Trp	Lys
	530				535						540				
Gly	Lys	Thr	Glu	Ala	Leu	Lys	Ala	Ala	Gly	Ala	Ser	Ala	Ala	Glu	Ile
545				550						555					560
Glu	Glu	Ala	Lys	Lys	Met	Ile	Val	Leu	Phe	Asp	Ser	Leu	Gln	Leu	Ala
			565					570						575	
His	Lys	Val	Ile	Leu	Asn	Ser	Phe	Tyr	Gly	Tyr	Val	Met	Arg	Lys	Gly
			580					585					590		
Ser	Arg	Trp	Tyr	Ser	Met	Glu	Met	Ala	Gly	Val	Thr	Cys	Leu	Thr	Gly
	595				</										

## 19190

690					695					700					
Lys	Ala	Met	Ile	Leu	Pro	Thr	Ser	Lys	Glu	Glu	Asp	Lys	Asn	Leu	Lys
705					710					715					720
Lys	Arg	Tyr	Ala	Val	Phe	Asn	His	Asp	Gly	Ser	Leu	Ala	Glu	Leu	Lys
				725					730					735	
Gly	Phe	Glu	Val	Lys	Arg	Arg	Gly	Glu	Leu	Lys	Leu	Ile	Lys	Ile	Phe
			740					745					750		
Gln	Thr	Gln	Ile	Phe	Arg	Phe	Phe	Leu	Glu	Gly	Ser	Thr	Leu	Glu	Glu
		755					760					765			
Thr	Tyr	Ala	Ala	Val	Ala	Arg	Val	Ala	Asp	Arg	Trp	Leu	Asp	Val	Leu
	770					775					780				
Tyr	Asp	His	Gly	Ala	Thr	Leu	Ala	Asp	Glu	Glu	Leu	Ile	Glu	Leu	Ile
785				790					795						800
Ser	Glu	Asn	Arg	Ser	Met	Thr	Lys	Thr	Leu	Glu	Glu	Tyr	Gly	Asn	Gln
				805					810					815	
Lys	Ser	Thr	Ser	Ile	Thr	Thr	Ala	Arg	Arg	Leu	Ala	Glu	Phe	Leu	Gly
			820					825					830		
Glu	Gln	Met	Val	Lys	Asp	Lys	Gly	Leu	Asn	Cys	Lys	Tyr	Ile	Ile	Ser
		835					840					845			
Ala	Lys	Pro	Lys	Asn	Thr	Pro	Val	Thr	Glu	Arg	Ala	Ile	Pro	Val	Thr
		850				855					860				
Ile	Phe	Ser	Ala	Glu	Glu	Pro	Val	Pro	Arg	Phe	Phe	Leu	Arg	Lys	Trp
865				870					875						880
Leu	Lys	Asp	Asp	Pro	Gly	Asp	Met	Asp	Pro	Arg	Ser	Val	Ile	Asp	Trp
				885				890						895	
Asp	Tyr	Tyr	Leu	Glu	Arg	Leu	Gly	Ser	Val	Val	Gln	Lys	Leu	Ile	Thr
			900				905						910		
Ile	Pro	Ala	Ala	Leu	Gln	Lys	Val	Arg	Asn	Pro	Val	Pro	Arg	Val	Ala
		915				920						925			
His	Pro	Asp	Trp	Leu	Gln	Arg	Arg	Ile	Asn	Met	Lys	Glu	Asp	Lys	Phe
	930					935					940				
Lys	Gln	Thr	Lys	Met	Thr	Asp	Met	Phe	Gly	Lys	Thr	Glu	Lys	Asn	Pro
945				950					955						960
Leu	Ser	Asn	Ile	Ser	Thr	Asn	Ile	Leu	Asp	His	Arg	Val	Gln	His	His
			965					970						975	
Gly	Asp	Ile	Gly	Glu	Ala	Val	Ala	Asn	Ser	Thr	Gln	Lys	Leu	Lys	Ser
		980					985						990		
Ser	Pro	Asn	Gly	Lys	Ile	Ser	Gln	Lys	Arg	Lys	His	Pro	Glu	Gly	Leu
		995				1000						1005			
Thr	Lys	Thr	Leu	Leu	Asp	Pro	Phe	Ala	Ser	Leu	Pro	Ala	Ile	Met	Pro
	1010					1015						1020			
Ser	Leu	Asn	Asp	Asp	Tyr	Val	Gly	Phe	Leu	Lys	Tyr	Gln	Lys	Gln	Lys
1025				1030					1035					1040	
Trp	Lys	Ile	Gln	Lys	Gln	Ala	Arg	Ala	Arg	Arg	Arg	Gln	Leu	Phe	Gly
			1045				1050							1055	
Glu	Arg	Val	Asn	Val	Ala	Thr	Asp	Ser	Leu	Ser	Asn	Leu	Phe	Arg	Asn
		1060					1065					1070			
Gln	Ala	Glu	Leu	Leu	Tyr	Ile	Asn	Thr	Trp	Gln	Ile	Leu	Gln	Leu	Cys
	1075					1080						1085			
Glu	Thr	Gly	Arg	Pro	Gly	Leu	Val	Arg	Ala	Phe	Val	Leu	Ile	Asp	Arg
	1090					1095						1100			
Lys	Ile	His	Ala	Leu	Thr	Ile	Lys	Val	Pro	Arg	Gln	Ile	Tyr	Val	Asn
1105				1110					1115					1120	
Leu	Lys	Arg	Asp	Ser	Leu	Pro	Asp	Val	Asp	Val	Pro	Asp	Cys	Glu	Val
			1125				1130							1135	
Glu	Lys	Val	Asn	His	Thr	Leu	Pro	Asn	Gly	His	Pro	Ser	Val	His	Leu



## 19191

1140 1145 1150  
 Phe Lys Leu Thr Leu Ser Glu Asp Thr Tyr Leu Arg Glu Thr Asp Lys  
 1155 1160 1165  
 Ile Asp Ala Leu Leu Gln His Pro Ser Ile Glu Gly Val Tyr Glu Lys  
 1170 1175 1180  
 Asn Ile Pro Leu Ser Val Arg Ala Val Leu Lys Leu Gly Ser Val Cys  
 1185 1190 1195 1200  
 Thr Phe Asp Glu Glu Gln Arg Gly Val Leu Gly Glu Gly Leu Asp Arg  
 1205 1210 1215  
 Gly Phe Asn Leu Ser Thr Leu Cys His Thr Thr Pro Asp Glu Pro Tyr  
 1220 1225 1230  
 Leu Leu Asn Ser Pro Leu Val Tyr His Tyr Leu Tyr His Val Leu Ser  
 1235 1240 1245  
 Gly Asp Arg Gln Ile Phe Ala Leu Phe Ser Thr Thr Lys Ser Glu Ala  
 1250 1255 1260  
 His Ile Val Ile Leu Asn Arg Thr Arg Asp Val Gln Gly Leu Pro Asn  
 1265 1270 1275 1280  
 Val Asp Lys Ile Tyr Ala Glu Leu Arg Ala Arg Thr Met Glu Asn Met  
 1285 1290 1295  
 Gly Gly Asp Gln Ser Gln Asn Ala Phe Glu Tyr Gln Glu Lys Ile His  
 1300 1305 1310  
 Phe Lys Asp His Pro Ser Asp Asp  
 1315 1320

&lt;210&gt; 42722

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42722

Gln Cys Leu Cys Asp Val Thr Val Tyr Leu Val Thr Glu Leu Ala Leu  
 1 5 10 15  
 Gly Gly Glu Leu Phe Asp Arg Ile Cys Arg Lys Gly Ser Tyr Glu  
 20 25 30  
 Ser Asp Ala Ala Asp Leu Ile Arg Ala Val Leu Ser Ala Val Ala Tyr  
 35 40 45  
 Leu His Asp His Gly Ile Val His Arg Asp Leu Lys Pro Glu Asn Leu  
 50 55 60  
 Leu Phe Arg Thr Pro Glu Asp Asn Ala Asp Leu Leu Ile Ala Asp Phe  
 65 70 75 80  
 Gly Leu Ser Arg Ile Met Asp Glu Glu Gln Phe His Val Leu Thr Thr  
 85 90 95  
 Thr Cys Gly Thr Pro Gly Tyr Met Ala Pro Glu Ile Phe Gln Met Ser  
 100 105 110  
 Gly His Gly Lys Pro Val Tyr Val Phe Val Arg Val Leu Pro Leu Ala  
 115 120 125  
 Asn Leu Asn Ser Met Ala Asp Phe Pro Leu Arg Asp Ile Trp Ala Ile  
 130 135 140  
 Gly Val Ile Thr Tyr Phe Leu Leu Cys Gly Tyr Thr Pro Phe Asp Arg  
 145 150 155 160  
 Asp Ser Asn Leu Glu Glu Met Gln Ala Ile Leu Ala Ala Asp Tyr Ser  
 165 170 175  
 Phe Thr Pro Leu Glu Tyr Trp Arg Gly Val Ser Gln Ser Ala Arg Asp  
 180 185 190  
 Phe Ile Lys Gly Cys Leu Thr Val Asp Pro Lys Ala Arg Met Thr Ala  
 195 200 205

## 19192

```

His Glu Ala Leu Gln His Pro Trp Ile Asn Pro Pro Tyr Asp Leu Asn
  210                      215                      220
Asn Asp Ser Gly Ser Gly Glu Asp Leu Leu Pro Thr Val Lys Lys Asn
225                      230                      235                      240
Phe Asn Ala Arg Arg Thr Leu His Lys Ala Ile Asp Thr Val Arg Ala
                      245                      250                      255
Ile Asn Lys Leu Arg Glu Gly Gly Gly Leu Met Met Asp Gly Val Met
  260                      265                      270
Ser Leu Asp Pro Lys Pro Glu His Val Asn Gly Asn Glu Val Thr Glu
  275                      280                      285
Glu Gln His Asp Gly Arg Met Glu Ile Asp Ser Arg Gly Asp Ala Arg
  290                      295                      300
Gly Gln Thr Glu Gln Gln Ile Arg Glu Gln Glu Arg Lys Val Lys Glu
305                      310                      315                      320
Thr Val Ala Gly Leu Trp Ser Gln Ser Ala Lys Lys
                      325                      330

```

&lt;210&gt; 42723

&lt;211&gt; 754

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42723

```

Thr His Pro Trp Phe Thr Ile Thr Ser Thr Met Ser Ser Arg Val Ile
1          5          10          15
Gly Arg Tyr Ser Leu Tyr Phe Gln Pro Gln Arg Ala Lys Arg Thr Leu
          20          25          30
Leu Ser Ser Ile Ala Arg Gly Met Phe Lys Ala Cys Gln Met Leu Ile
          35          40          45
Arg Tyr Thr Gln Ser Phe Val Arg Ala Gln Trp Arg Thr Trp Glu Glu
          50          55          60
Thr Ser Leu Arg Thr Arg Leu Asn Ile Arg Arg Arg Phe Ile Ser Lys
          65          70          75          80
Thr Thr Gln Val Thr Thr Arg Arg Lys Ala Tyr Leu Glu Ile Gly Asp
          85          90          95
Leu Ile Lys Lys Leu Lys Gly Glu Glu Thr Gln Pro Val Ile Met Val
          100          105          110
Ile Gln Ser His Gln Arg His Arg Leu Cys His Asp Ile Pro Ile Leu
          115          120          125
Lys Glu Tyr Pro Val Leu Pro Val Lys Pro Glu Val Ser Asp Met Asp
          130          135          140
Leu Pro Pro Leu Gly Trp Gln Ser Phe Ile Ala Lys Arg Leu Val Thr
          145          150          155          160
His Tyr Leu Tyr Leu Ala Ser Trp Ile His His Leu Thr Met Leu Ala
          165          170          175
Arg Tyr Gly Asp Val Pro Leu Cys Asn Leu Glu Asn Asp Asp Pro Arg
          180          185          190
Tyr Leu Ile Asp Ile Ser Tyr Ala Arg Arg Leu Gln Gln Asn Asn Val
          195          200          205
Val Leu Trp Trp Ser Asn Gly Pro Arg Pro Asp His Ala Gly Tyr Glu
          210          215          220
Lys Asp Asp Val Thr Gly Ser Leu Glu Arg Val Ser Met Pro Ser Val
          225          230          235          240
Asn Val Pro Ser Ala Tyr Asn Thr Val Cys Ile Glu Leu Glu Val Arg
          245          250          255
Asn Leu Ser Ile Asn Thr Ile Leu Thr Ser Ser Ile Ile Asn Glu Leu

```

	260		265		270
Glu Gly Ala Asp Thr Leu Leu Ala Ser Ser Glu Pro Ser Ala Asp Ala					
	275		280		285
Asn Gly Ser Gly Val Leu Tyr Ser Glu Lys Ala Phe Ala Ser Ala Gly					
	290		295		300
Ala Val Val Leu Arg Glu Met Val Lys His Trp Trp Ser Glu Ala Cys					
305		310		315	320
Glu Gly Asn Asn Met Ala Asp Ile Met Val Gln His Leu Ile Arg Trp					
	325		330		335
Val Glu Ser Pro Val Ser Cys Leu Tyr Asp Arg Ser Leu His Asp Tyr					
	340		345		350
Val Arg Met Leu Ser Arg Lys Ser Phe Gln Arg Leu Met Ala Glu Phe					
	355		360		365
Arg Arg Val Gly Ser Asn Val Ile Phe Ala Ser Pro Thr Arg Leu Leu					
	370		375		380
Leu Gln Thr Thr Lys Thr Glu Val Gly Asn Ala Tyr Ala Tyr Ser Gln					
385		390		395	400
Tyr Val Leu Lys Ser Ile Arg Ala Asn Ala Ser Phe His Phe Ile Asp					
	405		410		415
Leu Glu Ile Lys Glu Tyr Trp Asp Tyr Leu Val Trp Tyr Asp Glu Tyr					
	420		425		430
Asn Tyr Gly Gly Lys Gly Cys Arg Lys Val Thr Gly Ser Glu Asp Gln					
	435		440		445
Glu Leu Glu Thr Val Met His Trp Gln Leu Ser Arg Phe Leu Pro Ala					
	450		455		460
Pro Met Gln Thr Ile Phe His Asp Trp Val Val Glu Tyr Ile Glu Leu					
465		470		475	480
Met His Gly Leu Lys Arg Thr Asp Ser Asp Asp Ser Ser Thr Pro Arg					
	485		490		495
Leu Thr Gln Leu Pro Val Gly Asn His Asn Glu Asp Asn Asp Glu Ile					
	500		505		510
Thr Ser Ile Leu Ala Glu Lys Phe Ser Lys Pro Leu Lys Lys Gln Ile					
	515		520		525
Ser Gly Leu Ile Arg Arg Gln Arg Asp Glu Leu Leu His Pro Glu Leu					
	530		535		540
Ala Ser Asp Tyr Val Phe Pro Val Leu Pro Gly Val Leu Val Asp Pro					
545		550		555	560
Asn Asn Asp Lys Arg Asn Pro Val Leu Glu Leu Val Lys Leu Leu Met					
	565		570		575
Gln Val Leu Ser Leu Ser Lys Thr Thr Thr Leu Glu Thr Arg Leu Leu					
	580		585		590
Arg Arg Glu Leu Leu Ala Met Phe Glu Val Arg Glu Phe Ser Lys Glu					
	595		600		605
Gly Arg Phe Glu Asn Pro Gly Ala Ser Leu Lys Leu Pro Glu Leu Ser					
	610		615		620
Cys Asn Ala Cys Cys Leu Ile Arg Asp Leu Asp Leu Cys Arg Asp Glu					
625		630		635	640
Asp Val Leu Pro Glu Met Gly Ser Asp Pro Asn Lys Ala Ala Pro Lys					
	645		650		655
Pro Trp Arg Cys Pro Phe Cys Gln Thr Glu Tyr Asp Arg Leu Ala Gln					
	660		665		670
Glu Glu Ala Leu Ile Gly Gln Val Gln Gly Leu Ile Val Gly Trp Gln					
	675		680		685
Thr Gln Asp Leu Lys Cys Ser Lys Cys Gly Gly Leu Lys Ile Ser Asp					
	690		695		700
Phe Met Glu His Cys Ser Cys Ser Gly His Trp Val Glu Thr Met Asp					

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<210> 42724
<211> 85
<212> PRT
<213> A.fumigatus
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[illegible]

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<210> 42725
<211> 346
<212> PRT
<213> A.fumigatus
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Ser	Arg	Tyr	Pro	Val	Phe	Lys	Pro	Ile	Ser	Glu	Val	Gly	Ser	Ile	Ser
1				5					10					15	
Lys	His	Asp	Asp	Ile	Val	Arg	Leu	Cys	Phe	Thr	Asn	Ser	Ser	Leu	Asp
			20					25					30		
Val	Ser	Tyr	Tyr	Ile	Lys	Lys	Lys	Gln	Gly	Phe	Pro	Ser	Ile	Thr	Asp
		35					40					45			
Lys	Gly	Val	Met	Asp	Ile	Phe	Leu	Gly	Asn	Glu	Gly	Phe	Gly	Phe	Lys
	50					55					60				
Ile	Ala	Ala	Ser	Thr	Ala	His	Lys	Glu	Asp	Arg	Gln	His	Phe	Val	Lys
65					70					75					80
Leu	Asp	Lys	Val	Thr	Val	Lys	Ile	His	Asp	Leu	Asp	Ile	Lys	Leu	Arg
				85					90					95	
Lys	Ser	Lys	His	Lys	Ile	Leu	Phe	Ala	Ile	Phe	Lys	Pro	Met	Leu	Phe
			100					105					110		
Asn	Ile	Val	Arg	Pro	Thr	Leu	Glu	Lys	Val	Leu	Glu	Lys	Gln	Ile	His
		115					120					125			
Asp	Ala	Phe	Val	Lys	Gly	Asp	Ala	Phe	Ala	Phe	Glu	Val	Asn	Gln	Glu
	130					135					140				
Val	Gln	Arg	Ala	Lys	Glu	Ala	Thr	Lys	Gln	Asp	Pro	Ala	Asn	Ala	Pro
145					150					155					160
Asn	Ile	Tyr	Ser	Arg	Tyr	Val	Asp	Ala	Ala	Arg	Ala	Lys	Leu	Thr	Glu
				165					170					175	
Lys	Lys	Gln	Lys	Ala	Gln	Ala	Val	Ala	Gln	Arg	Asp	Thr	Lys	Ile	Gln

# 19195

	180		185		190
Thr Val Thr	Thr Leu His Asp Ser Met Phe Pro Asn Ile Lys Phe Pro				
	195		200		205
Gly Ala Val	Ser Asn Lys Ala Thr Glu Tyr Thr Glu Leu Ala Arg Lys				
	210		215		220
Gly Glu Arg	Trp Glu Ser Pro Val Phe Ser Ile Gly Ser Ala Ser Glu				
225		230		235	240
Ser Lys Asp	Ile Pro Lys Leu Ala Ser Ile Gln Arg Lys Pro His Arg				
	245		250		255
Thr Ala Glu	Gly Arg Leu Arg Glu Lys Pro Asp Gly Arg Pro Met Glu				
	260		265		270
Gly Thr Asp	Gly Arg Ala Thr Gln Gly Gly Gln Val Gly Ala Asp Gly				
	275		280		285
Tyr Pro Lys	Thr Gly Tyr Pro Ser Arg Gly Phe Ala Asp Glu Met Asp				
	290		295		300
Asn Ala Phe	Thr Asn Gly Ala Thr Asn Gly His Thr Asn Gly His Gln				
305		310		315	320
Asn Gly Ala	Ala Thr Lys Val Thr Ala Glu Gly Leu Thr Val Arg Gly				
	325		330		335
Thr Pro Glu	Ala Phe Asn Pro Gln Thr Ala				
	340		345		

<210> 42726  
 <211> 169  
 <212> PRT  
 <213> A.fumigatus

<400> 42726															
His Ser Phe	Phe Val Gly Leu Val Pro Gly Asp Ser Leu Ser Leu Ala														
1	5	10	15												
Thr Gln Thr	Ser Gln Pro Glu Gln Val Gln Gln Gln Ala Gln Asp Pro														
	20	25	30												
Ile Ala Gln	Thr Gln Ser Ser Glu Met Thr Ala Gln Asn Glu Thr Met														
	35	40	45												
Val Gly Ala	Ser Pro Pro Pro Val Asp Ser Ser Glu Glu Ile Pro His														
	50	55	60												
Ala Arg Gly	Pro Pro Ile Val Gly Val Glu Asp Met Gly Leu Gln Asp														
65	70	75	80												
Gly Lys Gly	Val Glu Met Thr Leu Ala Gln Asp Ala Asn Ala Pro Ala														
	85	90	95												
Asp Gln Ser	Ser Ala Pro Thr Asp Gln Pro Arg Ser Thr Ala Asp Glu														
	100	105	110												
Gln Thr Glu	Asn Gln Lys Pro Ala Ser Arg Ala Asn Ala Asp Ser Asp														
	115	120	125												
Gly Asp Ile	Gln Leu Asp Asp Val Lys Glu Ala Gly Glu Ser Ala Pro														
	130	135	140												
Ala Ala Thr	Ala Thr Gly Ala Ala Ala Glu Ala Glu Ala Asn Glu Thr														
145	150	155	160												
Leu Gln Thr	Thr Glu Asn Lys Asp Phe														
	165														

<210> 42727  
 <211> 203  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 42727

```

Thr Gly Gly Asp Gly Gln Glu Ile Ile Arg Pro His Lys His Asp Val
1           5           10           15
Gly Gly Phe His Gly Asp Val Arg Pro Arg Ser Gln Ser Asn Pro Asp
          20           25           30
Arg Cys Ser Cys Gln Ser Arg Arg Val Val Asp Ser Ile Thr His His
          35           40           45
Gly Asp Thr Ile Thr Gly Phe Leu His Arg Cys Asp Tyr Gly Leu Phe
          50           55           60
Val Gly Arg Gly Gly Arg Gly Val Asn Glu Phe Arg Gly Tyr Pro Asn
65           70           75           80
Asp Arg Ser Asp Gly Gln Gly Ser Arg Pro Gly Ile Ser Ser Asp Glu
          85           90           95
Arg Ser Leu Glu Ser His Ala Met Gln Ser Ser Asp Arg Ser His Gly
          100          105          110
Ser Arg Phe Tyr Ser Val Ala Glu Asp Ser Ser Gly Lys Leu Val
          115          120          125
Ile Asn Gly His Met Asn Leu Arg Asp Ala Ser Ser Arg Leu Arg Ala
          130          135          140
Ala Gly Glu Leu Ile Phe Ser Phe Asn Arg Phe Arg Asn Arg Tyr Thr
145          150          155          160
Leu Arg Pro Gln Glu Ser Gly Val Ala Asp Tyr Ser Thr Ile Pro Cys
          165          170          175
Pro Leu Ser Ile Glu Arg Gly Leu Asn Gln Cys Arg Tyr Ser Leu Thr
          180          185          190
Asn Met Gly Ile Glu Val Thr Gln Ala Ala Trp
          195          200

```

&lt;210&gt; 42728

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42728

```

Glu Glu Ala Gly Asp Val Ala Asn Thr Ala Thr Gln Ser Ala Thr Gly
1           5           10           15
Gly Gln Asp Pro Ala Thr Ala Lys Asp Val Asp Val Gln Ala Gly Val
          20           25           30
Gly Ser Ala Ala Gln Lys Ala Lys Glu Lys Val Pro Glu Asp Ala Ser
          35           40           45
Gln Glu Ala Lys Ser Arg Ala Gln Glu Leu Lys Glu Arg Thr Arg Ser
          50           55           60
Tyr Met Glu Gln Lys Met Pro Lys Glu Arg Arg Glu Gln Val Ile Trp
65           70           75           80
Arg Leu Lys Lys Met Val Ile Glu Ile Gln Gly His Pro Asp Cys Lys
          85           90           95
Phe Asn Leu

```

&lt;210&gt; 42729

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42729

```

Gln Asn Leu Pro Arg Cys Arg Gln Gly Pro Gly Thr Gln Arg Leu Val

```

## 19197

```

1           5           10           15
Gln Glu His Gly His Leu His Gln Val Ser Leu Thr Ala Lys Val Asp
      20           25           30
Tyr Thr Asp His Pro Asp Ser Ser Arg Lys Ala Leu Gln Glu Gln Gly
      35           40           45
Tyr Ile Met Gln Glu Asp Cys Asn Arg Glu Trp Asp Arg Leu Tyr Asp
      50           55           60
His Gly Arg Tyr Leu Phe Gly Ala Ile Ala Tyr Lys Asp His Thr Asp
      65           70           75           80
Arg Ile Leu Asp Glu Ile Arg Phe Ile Gly Asp Gln Phe Asn Gln Asp
      85           90           95
Pro Gln Asn Arg Ala Phe Arg Ser Ala Leu Glu Lys Leu Phe Asn Asp
      100          105          110
Leu Gly Arg Asp Ala Ser Gly Asn Val Ala Phe Lys Lys His Leu Leu
      115          120          125
Lys Asp Ile Arg Asp Val Ile Leu Pro Ser Val Phe Glu Asn Val Arg
      130          135          140
Tyr Val Pro Val Pro Arg Ile Glu Val Ser Asp Pro Met Ala Asp Val
      145          150          155          160
Val Ser Leu Leu Gln Asp Thr Val Leu Arg Ile Phe Gly Asn
      165          170

```

&lt;210&gt; 42730

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42730

```

Val Leu Gly His Glu Arg Trp Gly Ala Met Gly Gly Gly Asp Val Asp
1           5           10           15
Gly Gly Leu Asp Ala Glu Val Val Thr Glu Glu Phe Gln Ala Arg Asp
      20           25           30
Glu Cys Leu Glu Val Ala Ile Gly Ala His His His Ser Asn Gly Gly
      35           40           45
Gly Gly Leu Arg Arg Ala Gly Leu Asp Gly Leu Cys Leu Asp Val Ala
      50           55           60
Ala Leu Arg Ala Asp Leu Val Asn Asn Val Asp Gln Gly Leu Asp Val
      65           70           75           80
Phe Leu Gly Phe Val His Arg Gly Arg Gly Asn Gly Asp Val Ala His
      85           90           95
Leu Ala Ala Gly Leu Gly Gly Ala Leu Ala Val Glu Val Asn Ala Gly
      100          105          110
Val Gly Asp Gly Glu Ser Gly Leu Gly Gly Phe Gln Val Gly Val Trp
      115          120          125
Gly Gly Ala Ala Asn Asp Val Glu His Asp Gly Arg Leu Ala Asp Phe
      130          135          140
Glu Ala Leu Arg Gly Asn Gly Glu Val Glu Asn Gly Thr
      145          150          155

```

&lt;210&gt; 42731

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42731

Asn Val Tyr Asn Ala Phe Pro Met Pro Lys Phe His Val Glu Thr Gln

## 19198

```

1           5           10           15
Ser Pro Ala Ala Gln Gln Gln Pro Ser Ser Phe Ser Gln Glu Pro Asn
                20                25                30
Ser Val Pro Pro Ser Ser Asn Gln Glu Asn Thr Pro Pro Thr Glu Thr
                35                40                45
Glu Asn Pro Ser His Ser Thr Ile Pro Ala Ser Ala Ala Thr Pro Ser
                50                55                60
Pro Ser Asp Glu Arg Val Pro Asp Ser Lys Pro Gln Ser Val Val Asp
65                70                75                80
Ser Pro Ala Asp Thr Leu Pro Pro Pro Leu Val Leu Leu Leu Asp Ser
                85                90                95
Ile Lys Ser Thr Leu Lys Thr Phe Phe Ala Ser Lys Pro Pro His Thr
                100                105                110
Ile Gln Arg Leu Ala Glu Leu Val Leu Arg Pro Asn Ala His Tyr Arg
                115                120                125
Thr Leu Pro Ala Tyr Leu Arg Ala Val Asp Arg Val Val Ser Val Thr
130                135                140
Ser Thr Ala Asp Ile Phe Pro Leu Gln Thr Glu Pro Ser Ala Gly Gln
145                150                155                160
Val Asn Gly Val Leu Asn Gly Gly Gly His Gly Phe Met Phe Pro Asp
                165                170                175
His Ala Pro Gly Ser Asp Glu Ser Leu Gly Gly Ala Leu Leu Thr Pro
                180                185                190
Ile Pro Trp Leu Thr Gly Ala Ser Ser Pro Asp Asn Asp Gly Gly Ala
                195                200                205
Thr Leu Ser Glu Gly Asn Ala Phe Ser Ser Leu Ser Pro Tyr Ile Ala
                210                215                220
Val Asn Thr Arg Ser Ser
225                230

```

&lt;210&gt; 42732

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42732

```

Asp Arg Lys Lys Ala Ala Leu Pro Ile Thr Ala Arg Tyr Leu Val Arg
1           5           10           15
Ser Pro Leu Asn Ala Gly Ser Ile Asn Ala Asp Ile Pro Leu Pro Thr
                20                25                30
Trp Ala Leu Lys Ser Pro Lys Leu Pro Gly Ser Pro Ser Leu Ser Glu
                35                40                45
Trp Pro Asp Ser Ala Leu Ala Ala Glu Arg Met Ala Leu Pro Ile Gly
50                55                60
Cys Ser Leu Phe Ile Ser Ala Arg Pro Thr Ile Asn His Gln Ser Arg
65                70                75                80
Arg Arg Pro Ser Ser His Trp Arg Ser Ile Leu Ala Ser Ala Thr Val
                85                90                95
Ile Phe Pro Val Val Arg Val Pro Val Leu Ser Lys Thr Thr Trp Leu
                100                105                110
Ile Leu Val Ala Pro Ser Ser Thr Ala Pro Pro Leu Thr Arg Ile Pro
                115                120                125
Cys Cys Ala Pro Thr Pro Val Pro Thr Met Thr Ala Val Gly Val Leu
130                135                140
Arg Pro Asn Ala His Gly Gln Ala Lys Thr Met Thr Glu Met Gln Ser
145                150                155                160

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## 19199

Phe Arg Gln Thr Met Thr Phe Pro Pro Leu Pro Ser Ala Thr Lys Ile  
 165 170 175

<210> 42733  
 <211> 138  
 <212> PRT  
 <213> A.fumigatus

<400> 42733  
 Asn Lys Gln Cys Asp Val Ala Leu Asn Ser Ala Ile Thr Ser Lys Ala  
 1 5 10 15  
 Leu Ser Ser Pro Leu Lys Glu Leu Ser Ser Glu Gly Gln Ala Leu Val  
 20 25 30  
 Lys Asp Leu Arg Val Val Ile Asp Glu Ala Lys Lys Leu Ile Leu Ser  
 35 40 45  
 Lys Asn Glu Gly Gln Leu Leu Gln Asp Phe Ile Trp Glu Ala Gln Lys  
 50 55 60  
 Ile Gly Thr Gly Glu Ala Pro Val Gln Pro Asp Val Pro Val Ser Lys  
 65 70 75 80  
 Glu Ser Ala Gln Gln Asp Ala Asp Arg Ala Val Glu Gly Leu Lys Thr  
 85 90 95  
 Leu Gly Thr Leu Leu Ile Thr Asn Gly Glu Phe Arg Lys Leu Cys Lys  
 100 105 110  
 Cys Ile Pro Leu Glu Leu Ser Ala Glu Ser Ser Ser Val Leu Thr Leu  
 115 120 125  
 His Ser Glu Arg Cys Tyr Asp His Arg Ser  
 130 135

<210> 42734  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 42734  
 Gly Phe Ser Val Thr Asn Val Glu Cys Ser Gln Val Val Glu Asn Leu  
 1 5 10 15  
 Val Ile Glu Ser Asp Asn Leu Met Pro Asn Val Val Glu Phe Gly Ser  
 20 25 30  
 Asp Asn Tyr Ile Arg Trp Gly Arg Lys Asn Ile Ser Asn Lys Arg Asp  
 35 40 45  
 Asn Lys Val Arg His Ala Leu Ser Ser Tyr Val Arg Cys Ala Asn  
 50 55 60

<210> 42735  
 <211> 172  
 <212> PRT  
 <213> A.fumigatus

<400> 42735  
 Ile Leu Leu His Leu Phe Lys Val Leu Phe Pro Ser Glu Phe Leu His  
 1 5 10 15  
 Leu Gly Pro Phe Gln Leu His Val Leu Val Phe Ser Leu Leu Gly Ile  
 20 25 30  
 Arg Leu His Leu Thr Leu Asp Ser Arg Val Glu Cys Ala Lys Asp Thr  
 35 40 45  
 Ser Cys Gln Glu Gly Ser Val Asp Ala Val Val Asp Ser Tyr Arg Arg

[illegible]

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<210> 42736
<211> 60
<212> PRT
<213> A.fumigatus
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<210> 42737
<211> 149
<212> PRT
<213> A.fumigatus
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<400> 42737
Lys Val Cys Pro Asp Glu Lys Lys Pro Thr Ser Ser Ser Ala Ala Lys
1          5          10          15
Phe Gly Pro Gly His Lys Val Ile Pro Thr Glu Leu Ile Glu Ile Gly
20          25          30
Asp Ile Val Val Leu His Pro Gly Asp Lys Val Ser Ala Asp Gly Val
35          40          45
Val Ile Arg Gly Glu Ser Tyr Val Asp Glu Ser Met Ile Thr Gly Glu
50          55          60
Ala Leu Pro Ile Tyr Lys Lys Lys Gly Ser Thr Val Ile Ala Gly Thr
65          70          75          80
Val Asn Gly Thr Ser Ser Ile Asp Phe Lys Val Thr Arg Thr Gly Lys
85          90          95
Asp Thr Gln Leu Ser Gln Ile Val Lys Leu Val Gln Asp Ala Gln Thr
100          105          110
Ser Arg Ala Ser Ile Gln Arg Val Ala Asp Ile Val Ala Gly Tyr Phe
115          120          125
Val Pro Ala Ile Ile Ser Leu Gly Leu Ile Thr Phe Phe Gly Trp Met
130          135          140
Phe Ile Ser His Val

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145

&lt;210&gt; 42738

&lt;211&gt; 405

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42738

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Ser His Pro Pro Gln Ile Phe Val Ala Glu Gly Ser Gly Gly Lys Val
1          5          10          15
Met Val Cys Leu Lys Leu Cys Ile Ser Val Ile Val Phe Ala Cys Pro
          20          25          30
Cys Ala Leu Gly Leu Ser Thr Pro Thr Ala Val Met Val Gly Thr Gly
          35          40          45
Val Gly Ala Gln Gln Gly Ile Leu Val Lys Gly Gly Ala Val Leu Glu
          50          55          60
Gly Ala Thr Lys Ile Asn His Val Val Phe Asp Lys Thr Gly Thr Leu
65          70          75          80
Thr Thr Gly Lys Met Thr Val Ala Glu Ala Arg Ile Glu Arg Gln Trp
          85          90          95
Leu Glu Gly Arg Arg Arg Leu Trp Trp Leu Ile Val Gly Leu Ala Glu
          100          105          110
Met Asn Ser Glu His Pro Ile Gly Lys Ala Ile Leu Ser Ala Ala Lys
          115          120          125
Ala Glu Ser Gly His Ser Glu Ser Asp Gly Leu Pro Gly Ser Leu Gly
          130          135          140
Asp Phe Asn Ala His Val Gly Lys Gly Ile Ser Ala Leu Ile Glu Pro
145          150          155          160
Ala Phe Asn Gly Glu Arg Thr Arg Tyr Arg Ala Val Ile Gly Asn Ala
          165          170          175
Ala Phe Leu Arg Ser Gln Gly Val Ser Val Pro Glu Ser Val Glu Ala
          180          185          190
Glu Asp Gln Leu Thr Gly Ser Pro Lys Pro Thr Ala Ser Ile Thr Gln
          195          200          205
Ile His Val Ala Ile Asp His Gln Phe Ala Gly Thr Ile Phe Leu Arg
210          215          220
Asp Thr Val Lys Ser Thr Ala Val Ala Thr Ile Ala Ala Leu His Arg
225          230          235          240
Met Gly Leu Lys Thr Ser Leu Ile Thr Gly Asp Thr Arg Ser Thr Ala
          245          250          255
Leu Ser Ile Ala Ser Val Val Gly Ile Pro Ser Glu Phe Val His Ala
          260          265          270
Ser Ala Ser Pro Ser Asp Lys Gln Ser Ile Ile Ala Ser Met Gln Glu
          275          280          285
Ser Gly Asp Arg Val Ala Met Val Gly Asp Gly Ile Asn Asp Ser Pro
290          295          300
Ala Leu Ala Thr Ala Ser Ile Gly Ile Ala Leu Ala Ser Gly Thr Asp
305          310          315          320
Val Ala Met Glu Ala Ala Asp Ile Val Leu Met Arg Pro Asp Asp Leu
          325          330          335
Leu Ser Val Pro Ala Ser Leu Ser Leu Ser Arg Ala Val Phe Arg Arg
          340          345          350
Ile Lys Leu Asn Leu Met Trp Ala Cys Leu Tyr Asn Val Ile Ala Phe
          355          360          365
His Phe Ala Met Val Ser Ser Cys Pro Leu Ala Ala Leu Cys Phe Pro
          370          375          380

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## 19202

Pro Trp Pro Pro Ala Arg Gln Trp Gln His Gln Ala Ser Pro Ser Ser  
 385 390 395 400  
 Ser Ala Ala Cys Ser  
 405

<210> 42739  
 <211> 91  
 <212> PRT  
 <213> A.fumigatus

<400> 42739  
 Thr Pro Thr Met Ala Met Ser Leu Tyr Arg Gln Trp Ser Leu Ser Phe  
 1 5 10 15  
 Asp Tyr Leu Cys Phe Thr Leu Cys Met Phe Leu Gly Cys Phe Val Ser  
 20 25 30  
 Arg Ala Leu Phe Ile Ala Arg Ile Arg Leu Met Lys Tyr Leu Tyr Asp  
 35 40 45  
 Gly Trp Leu Ser Thr Ala Ile Ile Thr Met Asn Asp Ile Asn Ile Tyr  
 50 55 60  
 Gly Leu Arg Gly Pro Tyr Arg Cys Ser Leu Ile Arg Leu Ser Leu Gln  
 65 70 75 80  
 Leu His Arg Trp Tyr His Ala Lys Ile Gln Gly  
 85 90

<210> 42740  
 <211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 42740  
 Glu Ser Gly Ser Asn Ile Ser Phe Thr Val Ser Ala Ile Leu Leu Gly  
 1 5 10 15  
 Thr His Leu Gln Val Gly Leu His Arg Ser Asp Ser Leu Val Ala Thr  
 20 25 30  
 Glu Phe Leu Cys Gly Ser Ser Thr Leu Phe Gly Asp Val Ser Gly Val  
 35 40 45  
 Thr Thr Val Leu Leu Ser Glu Arg Lys Glu Ser Ala Asp Ser Leu Leu  
 50 55 60  
 Val Tyr Tyr Arg Pro Gln Lys Val Ser Gly Tyr Pro Glu Leu Leu Thr  
 65 70 75 80  
 Tyr Lys Leu Asn Leu Gln Ser Gly  
 85

<210> 42741  
 <211> 174  
 <212> PRT  
 <213> A.fumigatus

<400> 42741  
 Pro Leu Glu Gln Thr Asn Ser Asn Leu Leu Ser Phe Ile Ala Ser Leu  
 1 5 10 15  
 Val Lys Met Trp Asn Ser Pro Lys Val Gly Val Leu Gly Gly Gly Gln  
 20 25 30  
 Leu Gly Arg Met Leu Val Glu Ser Ala Asn Arg Leu Asn Ile Gln Val  
 35 40 45  
 Asn Val Leu Asp Ala Gly Asn Ala Pro Ala Lys Gln Ile Ser Ala His

## 19203

50                      55                      60  
 Asp Gly His Val Thr Gly Ser Phe Lys Asp Arg Glu Ala Val Arg Thr  
 65                      70                      75                      80  
 Leu Ala Arg Thr Cys Asp Val Val Thr Ala Glu Ile Glu His Val Asp  
                     85                      90                      95  
 Thr Tyr Ala Leu Glu Glu Ile Ser Ala Glu Val Lys Val Glu Pro Ser  
                     100                      105                      110  
 Trp Gln Ala Ile Arg Thr Ile Gln Asn Lys Phe Asn Gln Lys Glu His  
                     115                      120                      125  
 Leu Arg Lys Tyr Gly Ile Pro Met Ala Glu His Arg Glu Leu Leu Glu  
                     130                      135                      140  
 Asn Thr Pro Ala Glu Leu Ala Gln Ile Gly Glu Gln Leu Gly Tyr Pro  
 145                      150                      155                      160  
 Leu Met Leu Lys Ser Lys Thr Met Ala Tyr Asp Gly Arg Gly  
                     165                      170

<210> 42742  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 42742  
 Ser Val Ile Arg Thr Gly Val Pro Val Ala Thr Val Gly Ile Asn Asn  
 1                      5                      10                      15  
 Ser Ile Asn Ala Ala Leu Leu Ala Ala Arg Ile Leu Gly Thr Phe Asp  
                     20                      25                      30  
 Pro Ala Ile Gln Arg Lys Val Glu Ala Tyr Ala Glu Gln Ala Lys His  
                     35                      40                      45  
 Glu Asn Met Glu Leu Lys Gly Thr Lys Met Gln Glu Leu Gly Trp Glu  
                     50                      55                      60  
 Lys Tyr Phe Glu Gln Met  
 65                      70

<210> 42743  
 <211> 157  
 <212> PRT  
 <213> A.fumigatus

<400> 42743  
 Ser Pro Val Arg Pro Arg Gln Ser Ile Thr Leu Ser Arg Ser Leu Gln  
 1                      5                      10                      15  
 Thr His Gln Ala Gln Ser His Val Gly Leu Pro Leu Gln Arg His Arg  
                     20                      25                      30  
 Leu Pro Phe Arg His Gly Leu Phe Leu Pro Phe Gly Gly Phe Met Leu  
                     35                      40                      45  
 Pro Pro Met Ala Ala Gly Ala Ala Met Ala Ala Ser Ser Val Ser Val  
                     50                      55                      60  
 Val Val Ser Ser Leu Leu Lys Phe Trp Lys Arg Pro Arg Trp Met  
 65                      70                      75                      80  
 Asp Ala Glu Lys Leu Glu Lys Ala Ala Gln Phe Gly Ser Ala Gly Pro  
                     85                      90                      95  
 Tyr Gly Ser Arg Lys Lys Trp Trp Ala Ala Ala Leu Val Ser Gly Pro  
                     100                      105                      110  
 Gly Ser Arg Pro Ser Trp Leu Asp Trp Ala Arg Arg Thr Gly Ala Arg  
                     115                      120                      125  
 Val Trp Ser Thr Val Thr Gly Arg Asn Pro Arg Thr Ile Asp Thr Asn

## 19204

130 135 140  
 Asp Gly Tyr Val Pro Leu Gln Ala Val Glu Pro Val Val  
 145 150 155

<210> 42744  
 <211> 349  
 <212> PRT  
 <213> A.fumigatus

<400> 42744  
 Glu Leu Ala Val Met Val Val Lys Thr Lys Asp Ala Val Leu Ser Tyr  
 1 5 10 15  
 Pro Thr Val Glu Thr Val Gln Glu Asp Ser Ile Cys Lys Leu Val Tyr  
 20 25 30  
 Ala Pro Ala Arg Asn Val Ser Asp Ala Ile Asn Gln Lys Ala Gln Glu  
 35 40 45  
 Leu Ala Arg Lys Ala Val Ala Ala Phe Asp Gly Lys Gly Ala Phe Gly  
 50 55 60  
 Val Glu Met Phe Leu Leu Glu Asp Asp Ser Ile Met Leu Cys Glu Ile  
 65 70 75 80  
 Ala Ser Arg Ile His Asn Ser Gly His Tyr Thr Ile Glu Gly Cys Thr  
 85 90 95  
 Leu Ser Gln Phe Asp Ala His Leu Arg Ala Ile Leu Asp Leu Pro Ile  
 100 105 110  
 Pro Pro Gln Ser Leu Glu Ile Arg Gln Pro Ser Ile Met Leu Asn Ile  
 115 120 125  
 Ile Gly Gly Ala Ala Pro Asp Thr His Leu Lys Ala Ala Glu Ala Ala  
 130 135 140  
 Leu Ser Ile Pro Asn Ala Ser Ile His Leu Tyr Ser Lys Gly Ala Ala  
 145 150 155 160  
 Lys Pro Gly Arg Lys Met Gly His Val Thr Val Thr Ala Ser Thr Met  
 165 170 175  
 His Glu Ala Glu Lys Tyr Ile Gln Pro Leu Ile Asp Val Val Asp Glu  
 180 185 190  
 Ile Arg Ser Lys Arg Ser Asp Ile Lys Thr Gln Pro Val Lys Ser Gly  
 195 200 205  
 Pro Ser Lys Pro Ala Pro Thr Val Ala Val Met Met Gly Ser Asp Ser  
 210 215 220  
 Asp Leu Lys Thr Leu Val Pro Gly Leu Lys Leu Leu Arg Asp Tyr Phe  
 225 230 235 240  
 Gly Ile Glu Pro Ala Val Asp Ile Thr Ser Ala His Arg Thr Pro Thr  
 245 250 255  
 Phe Met Ala Glu Tyr Ser Ala Ser Ala Ala Arg Gly Ile Lys Val  
 260 265 270  
 Ile Ile Ala Ala Ala Gly Gly Ala Ala His Leu Pro Gly Met Ala Ala  
 275 280 285  
 Ala His Thr Val Leu Pro Val Ile Gly Val Pro Val Lys Gly Ser Ser  
 290 295 300  
 Leu Asp Gly Val Asp Ser Leu Tyr Ser Ile Val Gln Met Pro Arg Gly  
 305 310 315 320  
 Met Leu Ser Ser Phe Leu Leu Ser Tyr Phe Pro Phe Cys Gly Gln Pro  
 325 330 335  
 Thr Asn Pro Ser Ser Val Gln Val Phe Pro Ser Arg Arg  
 340 345

<210> 42745

&lt;211&gt; 1253

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42745

Leu Phe Val Gln Gln Asp Glu Ile Phe Val Tyr Asp Arg Arg Phe Val  
 1 5 10 15  
 Ser Glu Pro Glu Asn Val Glu Leu Pro Glu Leu Pro Ser Pro Glu Pro  
 20 25 30  
 Phe Thr Pro Asp Thr Pro Pro Asp Thr Leu Thr Asn Gln Asn Asp Leu  
 35 40 45  
 Gln Ala Trp Arg Asn Leu Tyr Met Ala Arg Arg Ser Trp Ala Leu Gly  
 50 55 60  
 Leu Val Glu Arg Cys Gly Ala Met Asp Lys Ser Ile His Glu His Asn  
 65 70 75 80  
 Glu Arg Thr Asp Ile Ile His Arg Ala Ala Gly Val Ala Leu Glu Asn  
 85 90 95  
 Leu Lys Thr His Val Gly Asn Leu Glu Asn Arg Phe Gln Glu Ala Gln  
 100 105 110  
 Thr Trp Ala Asn Asp Leu Leu Lys Glu Gln Arg Ala Ala Leu Asp Gly  
 115 120 125  
 Trp Gln Arg Ala Leu Thr Thr Leu Glu Ser Ile Pro Ala Pro Lys Val  
 130 135 140  
 Phe Pro Phe Leu Gly Arg Pro Ser Thr Pro Lys Glu His Arg Asp Arg  
 145 150 155 160  
 Pro Thr Gly Thr Leu Arg Asp Phe Val Asp Ala Asn Glu Val Gln Lys  
 165 170 175  
 Ala Gly Ala Glu Ala Ala Ala Glu Ser Ser Arg Phe Ala Arg Gln Ile  
 180 185 190  
 Asp Asp Val Ala Glu Ala Val Arg Gly Ile Thr Ala Asp Thr Gln Arg  
 195 200 205  
 Leu Ile Asp Asp Gln Leu Pro Ser Gly Ala Asp Ala Ala Asp Gly Leu  
 210 215 220  
 Gln Glu Met Ile Thr Ile Ala Lys Lys Ile Ser Ser Asp Tyr Glu His  
 225 230 235 240  
 Val Ile Ala Leu Pro Asn Asn Gln Lys Thr Leu Ala Asn Ile Ser Arg  
 245 250 255  
 Leu Ala Leu Thr His Thr Gln Asp Leu Leu Pro Ser Met Leu Asp Ile  
 260 265 270  
 Ser Ala Glu Ile His Ala Gly Leu Glu Glu Ala Val Arg Arg His Asn  
 275 280 285  
 Thr Ala Met Lys Val Ala Leu Asp His Met Arg Thr Ile Ser Ala Ile  
 290 295 300  
 Glu Leu Arg Leu Ala Asp Val Gln Ser Gln Ile Ile Asn Leu Asn Val  
 305 310 315 320  
 Gln Ser Asp Ala Phe Asp Val Val Phe Ser Val Tyr His Met Pro Met  
 325 330 335  
 Val Tyr Gly Ser Ile Leu Val Glu Ser Val Arg Arg Arg Glu Phe Asn  
 340 345 350  
 Glu Lys Met Lys Ala Asp Ser Leu Thr Leu Ala Glu Glu Met Ala Val  
 355 360 365  
 Phe Arg Asp Glu Glu Gln Arg Arg Arg Lys Lys Trp Leu Lys Ser Met  
 370 375 380  
 Gly Asp Phe Ile Ser Leu Thr Glu Thr Thr Thr Pro Gly Val Glu Ile  
 385 390 395 400  
 Asn Leu Gln Gly Leu Asp Tyr Glu Trp Pro Glu Val Ser Arg Asn Asp

				405					410					415	
Ile	Glu	Ser	Tyr	Ile	Glu	His	Leu	Lys	Ser	Arg	Pro	Ala	Met	Ala	Ser
				420					425					430	
Leu	Ala	Asp	Gly	Leu	Thr	Gln	Gln	Tyr	Lys	Asp	Leu	Asp	Ala	Pro	Thr
				435					440					445	
Arg	His	Gln	Arg	Arg	Arg	Ala	Lys	Ala	Phe	Lys	Gln	Gly	Ser	Ile	Phe
				450					455					460	
Asp	Leu	Ser	Arg	Ser	Ser	Leu	Leu	Leu	Arg	Ser	Asp	Asp	Met	Leu	Arg
465						470				475					480
Ser	Leu	Arg	Glu	Glu	Lys	Ser	Lys	Leu	Glu	Glu	Lys	Leu	Lys	Gly	Ser
					485					490					495
Glu	Ser	Arg	Ile	Arg	Lys	Leu	Glu	Asp	Leu	Leu	His	Arg	Gln	Ser	Gln
				500					505					510	
Leu	Ser	Arg	Pro	Val	Ser	Gly	Asn	Phe	Asn	Leu	Glu	Phe	Pro	Ser	Ser
				515					520					525	
Pro	Ala	Ser	Pro	Tyr	Pro	Asp	Glu	Leu	Ser	Arg	Arg	Ser	Ser	Val	Ser
				530					535					540	
Ser	Arg	Arg	Met	Ser	Ala	Asn	Gln	Ser	Ser	Glu	Asp	Lys	Thr	Leu	Ala
545						550				555					560
Gln	Arg	Ile	Val	Thr	Leu	Glu	Ala	Glu	Leu	Asn	Ala	Glu	Arg	Glu	Thr
				565						570					575
Val	Gln	Arg	Leu	Gln	Lys	Glu	Ala	His	Ala	Glu	Arg	Leu	Ser	Asn	Thr
				580					585					590	
Asp	Lys	Ile	Gln	Glu	Ala	Gln	Ser	Thr	Lys	Arg	Asp	Leu	Ile	Asp	Asn
				595				600						605	
Leu	Glu	Ala	Arg	Gln	Arg	Glu	Phe	Asp	Glu	Glu	Arg	Arg	Tyr	Leu	Glu
				610					615					620	
Gly	Glu	Leu	Lys	Lys	Tyr	Arg	Leu	Arg	Thr	Glu	Glu	Leu	Glu	Glu	Glu
625						630									640
Leu	Asp	Arg	Ile	Thr	Asp	Ser	Arg	Asp	His	Ala	Lys	Gln	Asp	Ala	Asp
				645					650						655
Glu	Arg	Ile	Asn	Gln	Leu	Glu	Thr	Glu	Leu	Gln	Asn	Leu	His	Ile	His
				660					665					670	
Thr	Glu	Glu	Glu	Leu	His	Arg	Ala	Asn	Asp	Leu	Leu	Glu	Gln	Met	Gln
				675					680					685	
Ala	Gln	Lys	Met	Thr	Glu	Glu	Ser	Leu	Gln	Gln	Arg	Ile	Asn	Glu	Leu
				690					695					700	
Glu	Lys	Gln	Gln	Ser	Glu	Ile	Lys	Ala	Thr	Glu	Gln	Glu	Asn	Leu	Gln
705						710									720
Thr	Leu	Gln	Ala	Ala	Phe	Met	Asn	Leu	Ser	Pro	Gly	Gly	Ala	Val	Pro
				725						730					735
Ala	Glu	Ile	Pro	Ser	Ile	Ile	Lys	Ala	Ile	Glu	Val	Leu	Ser	Glu	Gly
				740					745					750	
Leu	Ser	Ile	His	Val	Lys	Asn	Ala	Glu	Glu	Lys	Met	Ala	Glu	Ala	Val
				755					760					765	
Ala	Glu	Asn	Lys	Ala	Leu	Glu	Arg	Met	Asn	Gln	Leu	Glu	Thr	Glu	
				770					775					780	
Val	Gln	Asp	Ala	Lys	Gln	Ser	Ala	Glu	Gln	Arg	Glu	Ser	Glu	Leu	Ala
785						790				795					800
Gln	Val	Arg	Gly	Glu	Leu	Ala	Gln	Glu	Lys	Glu	Lys	Leu	Ala	Ala	Val
				805						810					815
Gln	Ser	Glu	Leu	His	Asp	Glu	Arg	Ser	Lys	Leu	Asn	Ala	Leu	Gln	Ser
				820					825					830	
Gln	His	Ala	Asp	Gly	Asp	Thr	Gly	Thr	Asp	Ala	Leu	Arg	Gln	Arg	Val
				835					840					845	
Val	Glu	Asp	Glu	Arg	Lys	Leu	Gly	Ile	Leu	Ser	Gln	Arg	Leu	Ala	Glu



## 19207

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      850              855              860
Val Glu Ala Gln Ala Arg Glu Ser Glu Lys Glu Val Cys Ala Trp Lys
865              870              875              880
Asn Lys Leu Lys Ala Ile Ser Glu Ser Glu Arg Glu Ala Thr Thr Arg
      885              890              895
Ile Glu Ile Arg Gly Ser Arg Ala Lys Glu Leu Ser Gln Gln Leu Phe
      900              905              910
Glu Gln Val Glu Lys Met Glu His Met Leu Glu Gln Leu Gly Phe Thr
      915              920              925
Val Ile Arg Gln Asp Gly Glu Ile Val Val Gln Arg Ala Ser Lys Val
      930              935              940
Asn Ala Ser Ser Gly Ile Gly Asp Ser Leu Ala Gln Ser Gly Val Val
945              950              955              960
Ser Val Lys Pro Asp Pro Ser Leu Leu Asp Trp Met Gln Ala Glu Thr
      965              970              975
Ala Gln Glu Glu Thr Asp Arg Tyr Met Ala Phe Leu Glu Ser Leu Tyr
      980              985              990
Gln Phe Asp Val Asp Val Phe Gly Asp Ala Val Val Lys Arg Val Lys
      995              1000              1005
Asp Ile Glu Leu Leu Ala Arg Lys Trp Gln Lys Glu Ala Arg Gly Tyr
      1010              1015              1020
Arg Asp Lys Tyr His Arg Met Gln Ser Glu Ala His Asp Lys Ile Ala
      1025              1030              1035              1040
Tyr Arg Ser Phe Lys Glu Gly Asp Leu Ala Leu Phe Leu Pro Thr Arg
      1045              1050              1055
Asn Gln Ala Ile Arg Ser Trp Ala Ala Phe Asn Val Gly Ala Pro His
      1060              1065              1070
Tyr Phe Leu Arg Glu Gln Asp Ala His Lys Leu Gln Thr Arg Asp Trp
      1075              1080              1085
Leu Leu Ala Arg Ile Thr Lys Ile Glu Glu Arg Val Val Asp Leu Ser
      1090              1095              1100
Lys Ser Met Asn Gly Ala His Pro Asp Arg Arg Ser Ile Gly Gly Thr
      1105              1110              1115              1120
Ser Asp Ala Ala Ser Ile Asp Asp Glu Asn Pro Phe Glu Leu Ser Asp
      1125              1130              1135
Gly Leu Arg Trp Tyr Leu Leu Asp Ala Asn Glu Glu Lys Pro Gly Ala
      1140              1145              1150
Pro Ala Thr Pro Gly Leu Gly Lys Ser Thr Val Ala Pro Ala His Val
      1155              1160              1165
Asp Ala Arg Gly Ser Ile Arg Leu Lys Arg Thr Ser Asn Gly Gly Asn
      1170              1175              1180
Val Ala Lys Thr Leu Thr Lys Ser Leu Asp Ser Arg Arg Asn Ser Ser
      1185              1190              1195              1200
Ser Ser Lys Lys Gly Pro Pro Phe Ala Ile Ser Gln Arg Ala Asn Glu
      1205              1210              1215
Ser Thr Ala Glu Leu Ala Arg Pro Ala Glu Ala Asn Thr Pro Val Ser
      1220              1225              1230
Pro Ser Ala Gln Glu Ala Ala Ser Thr Pro Glu Glu Val Arg Arg Asp
      1235              1240              1245
Gln Leu Gln Gly Pro
      1250

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&lt;210&gt; 42746

&lt;211&gt; 551

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (188)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42746

Arg	Asp	Tyr	His	Pro	Phe	Thr	Arg	Gly	Ala	Ser	Leu	Phe	Val	Val	Met
1				5					10					15	
Pro	Thr	Pro	Glu	Arg	Asn	Thr	Asp	Arg	Leu	Pro	Ser	Ser	Arg	Arg	Ile
			20					25					30		
Tyr	Glu	Gln	Arg	Ser	Pro	Phe	Ser	Arg	Ala	Arg	Gly	Asn	Ser	Arg	Ala
		35					40					45			
Ala	Glu	Asp	Phe	Asp	Ala	Ser	Arg	Ile	Pro	Ser	Pro	Ser	Tyr	Lys	Tyr
	50					55					60				
Thr	Thr	Gln	Arg	Arg	Thr	Asn	Phe	Asn	Glu	Thr	Asn	Thr	Leu	Thr	Gly
65					70					75				80	
Ala	Phe	Arg	Lys	Ala	Gly	Arg	Tyr	Ala	Thr	Met	Ala	Glu	Asn	Glu	Gly
			85						90				95		
Ile	Ser	Ala	Ser	Val	Pro	Tyr	Thr	Arg	Gly	Thr	Pro	Ser	Pro	Gly	Arg
			100					105					110		
Arg	Arg	Asn	Ile	Tyr	Asn	Ala	Gln	Ser	Pro	Glu	Ser	Asn	Pro	Pro	Asn
		115					120					125			
Glu	Leu	Ala	Glu	Ala	Tyr	Arg	Gln	Ile	Asp	Asp	Ala	Asp	Ser	Leu	Val
	130					135					140				
Asp	Leu	Glu	Pro	Glu	Asp	Val	Tyr	Asp	Arg	Gly	Asp	Lys	Ile	Gly	Arg
145					150					155				160	
Ser	Ser	Gly	Tyr	Tyr	Ala	Arg	Asp	Tyr	Asp	Val	Ser	Thr	Thr	Ser	Asp
			165					170					175		
Ala	Ser	Phe	Leu	Pro	Glu	Ile	Gln	Asp	Glu	Ser	Xaa	Arg	Arg	Arg	Leu
		180					185					190			
Ser	Asp	Arg	Ile	Gln	Asp	Glu	Lys	Arg	Leu	Arg	Arg	Ala	Thr	Thr	Ser
	195						200					205			
His	Ser	Pro	Val	Leu	Ser	Asn	Arg	Gly	Gly	Thr	Lys	Asn	Ala	Leu	Thr
	210					215					220				
Ala	Glu	Asn	Leu	Gln	Arg	Arg	Glu	Glu	Glu	Asp	Gln	Leu	Leu	Ser	Gly
225				230						235				240	
Asp	Asp	Asp	Thr	Phe	Gln	Arg	Gly	Leu	Asn	Val	Pro	Ser	Asn	Trp	Gly
			245						250					255	
Ser	Arg	Ala	Lys	Arg	Asn	Ser	Asp	Trp	Leu	Arg	Lys	Leu	Lys	Arg	Arg
		260					265						270		
Asp	Glu	Pro	Glu	Pro	Glu	Pro	Glu	Pro	Glu	Pro	Gln	Gln	Arg	Pro	Glu
	275					280						285			
Pro	Pro	Ala	Asn	Val	Ser	Pro	Pro	Val	Lys	Lys	Leu	Asn	Phe	Asp	Phe
	290					295					300				
Arg	Thr	Ser	Pro	Gly	Arg	Ser	Leu	Glu	Pro	Ala	Ser	Ser	Arg	Tyr	Ser
305				310						315				320	
Arg	Ile	Pro	Leu	Ser	Asp	Ala	Arg	Asn	Lys	Leu	Ser	Ser	Glu	His	Lys
			325						330					335	
Glu	Asp	Lys	Ala	Ile	Gly	Gly	Thr	Ser	Glu	Pro	Ile	Ala	Asn	Thr	Pro
		340					345						350		
Val	Ile	Val	Tyr	Lys	Asn	Ser	Ser	Phe	Thr	Lys	Pro	Ser	Pro	Ser	Lys
	355					360						365			
Arg	Asp	Ser	His	Asp	Leu	Leu	Arg	Arg	Leu	Ala	Arg	Arg	Glu	Ser	Pro
	370					375					380				
Asp	Gln	Asn	Arg	Asn	Glu	Gln	Glu	Leu	Arg	Thr	Pro	Glu	Ala	Pro	Lys

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<210> 42747
<211> 195
<212> PRT
<213> A.fumigatus
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[illegible]

<210> 42748



<210> 42749  
 <211> 95  
 <212> PRT  
 <213> A.fumigatus

<400> 42749  
 Gly Asp Ser Tyr Ile Thr Ser Asn Ser Ser Ser Leu Pro Arg Arg Glu  
 1 5 10 15  
 Thr Ser Asp Gly Ala Phe Pro Gly Ile Cys His His Leu Asp Asp His  
 20 25 30  
 Val Ala Arg His Cys Arg Thr Phe His Asp Phe Tyr Arg Asp Arg Ser  
 35 40 45  
 Leu Pro Ala Glu Asp Phe Asp Cys Arg Ile Tyr Arg Gly Ser Gly Ser  
 50 55 60  
 Asp Ala Ser Arg Ala Trp Gly Cys Asp Cys Leu Phe Leu Ser Phe Phe  
 65 70 75 80  
 Trp Asp Ser Asp Cys Asn Val Ala Leu Glu Lys Pro Ala Ala Phe  
 85 90 95

<210> 42750  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 42750  
 Asp Arg Pro Ile Pro Gly Phe Gly Lys Arg Lys Asp Val Asp Ser Ser  
 1 5 10 15  
 Ile Ile Ala Lys Gln Cys Tyr Asn Cys Gln Gly Leu Gly His Val Gln  
 20 25 30  
 Ala Asp Cys Pro Thr Leu Arg Leu Asn Gly Gly Ala Asn Gly Arg Cys  
 35 40 45  
 Tyr Asn Cys Asn Gln Pro Gly His Leu Ala Val Arg Arg Cys  
 50 55 60

<210> 42751  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

<400> 42751  
 Ile Lys Ala Leu Ala Asp Ile Leu Lys Gly His Ile Ser Arg Asp Cys  
 1 5 10 15  
 Thr Ala Pro Asn Gly Gly Pro Leu Ser Ser Ala Gly Lys Val Cys Tyr  
 20 25 30  
 Lys Cys Ser Gln Ala Gly His Ile Ser Arg Asp Cys Pro Asn Asn Asp  
 35 40 45  
 Ala Ala Asn Gln Gln Pro Ala Glu Ser Ala Thr Ala Pro Ala Ala Ala  
 50 55 60  
 Ala Ala Ala Pro Ala Ala Thr Thr Val Thr Ala Glu Val Ser Ala Glu  
 65 70 75 80  
 Ala Ala Pro Val Pro Ala Pro Ala Pro Thr Ala Ala Val Ala  
 85 90

<210> 42752  
 <211> 124  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42752

Gly Lys Pro Ile Leu Thr Pro Pro Phe Cys Ile Arg Gly Leu Arg Asn  
 1 5 10 15  
 Ser Val Leu Ile Ser Phe Leu Ser Phe Leu Phe Phe Phe Phe Pro Leu  
 20 25 30  
 Ser Gln Phe Phe His Cys Ile Tyr Tyr Ala Pro Gly Phe Arg Phe Leu  
 35 40 45  
 Ser Thr Gly Leu Phe Tyr Asn Tyr Tyr Val Tyr Asp Glu Gln Lys Phe  
 50 55 60  
 His Asp Val Pro Arg Phe Leu Thr Thr Trp Ile Leu His Met Ala Gln  
 65 70 75 80  
 Gly Tyr His Asp Trp Arg Leu Leu Phe Ser Pro Gly Ile Phe Leu Ile  
 85 90 95  
 Tyr His Met Val Arg Gln Gly Lys Lys Glu Thr Trp Arg Gly Glu Arg  
 100 105 110  
 Leu Ile Glu Arg Arg Arg Asp Ile Gly Gly Pro Glu  
 115 120

&lt;210&gt; 42753

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42753

Leu Leu Ser Ser Gly Phe Gln Ser Met Ser Ile Ser Glu Val Phe Gly  
 1 5 10 15  
 Glu Phe Arg Cys Gly Lys Thr Gln Leu Ser His Thr Met Ser Val Val  
 20 25 30  
 Ala Gln Leu Pro Lys Glu Met Gly Gly Ala Asp Gly Lys Val Ala Tyr  
 35 40 45  
 Ile Asp Thr Glu Gly Thr Phe Arg Pro Glu Arg Ile Ala Gln Ile Ala  
 50 55 60  
 Glu Arg Phe Ser Val Asp Pro Asp Ser Ala Gln Glu Asn Ile Ala Tyr  
 65 70 75 80  
 Ala Arg Ala Leu Asn Ser Glu His Gln Leu Glu Leu Leu Asn Thr Leu  
 85 90 95  
 Ser Arg Glu Phe Ala Gly Gly Glu Tyr Arg Leu Leu Ile Ile Asp Ser  
 100 105 110  
 Ile Met Asn Cys Phe Arg Val Asp Tyr Cys Gly Arg Gly Glu Leu Ala  
 115 120 125  
 Asp Arg Gln Gln Lys Leu Asn Gln Phe Leu Met Arg Leu Ala His Met  
 130 135 140  
 Ala Glu Gly Leu Ser Leu Ser Ile Ser Phe Thr Glu Leu Tyr Arg Asn  
 145 150 155 160

&lt;210&gt; 42754

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42754

Val Gly Leu Leu Arg Thr Ser Leu Leu Asn Ser Leu Leu Thr Arg Asp  
 1 5 10 15  
 Thr Thr Gly Ile Lys Ala Val Arg Lys Leu Ala Glu Met Pro Pro Tyr

## 19213

20 25 30  
 Pro Asn Ala Val Lys Glu Ala Ala Phe Gly Gly Val Ala Glu Leu Glu  
 35 40 45  
 Lys Lys Arg Gln Tyr Arg Ala Thr Asp Asn Val Arg Glu Gln Asp Ala  
 50 55 60  
 Tyr Gly Met Val Phe Asp Lys Gly Glu Ala Arg Arg Arg Pro Val Ser  
 65 70 75 80  
 Arg Glu Arg Arg Tyr Ser Arg Ser Pro Lys Arg Ser Ser Arg Arg Asp  
 85 90 95  
 Ser Arg Ser Pro Lys Arg Gly Leu His Arg Asn Arg Tyr Arg Asp Arg  
 100 105 110  
 Ser Asp Ser Arg Ser Pro Arg Arg Glu Asp Ser Tyr Arg Asp Arg Asn  
 115 120 125  
 Arg Glu Arg Ser Tyr Asn Asp Glu Arg Arg Asp Arg Arg Asp Asp Asp  
 130 135 140  
 Arg Tyr Arg Glu Arg Arg Arg Arg  
 145 150

&lt;210&gt; 42755

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42755

Ser Val Lys Leu Gly Leu Gln Met Val Cys Pro Thr Leu Lys Asp Thr  
 1 5 10 15  
 Glu Ala Gln Arg Ala Ile Gln Gly Ala Arg Ile Glu Thr Thr Arg Ala  
 20 25 30  
 Asp Ile Tyr Ile Ile Arg Arg Thr Gly Ser Val Lys Pro Ala Lys Asn  
 35 40 45  
 Asn Ser Thr Lys Lys Ile Asn Gly Phe Val Phe Leu Ala Val Asn Gly  
 50 55 60  
 Trp  
 65

&lt;210&gt; 42756

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42756

Asp Leu Leu Ile Asn Met Ala Val Ala Ile Lys Glu Thr Val Ser Asn  
 1 5 10 15  
 Phe Met Glu Arg Phe His Gly His Pro Glu Asn Leu Pro Arg Glu Pro  
 20 25 30  
 Ser Ala Glu Glu Phe Gln Gln Leu Arg Lys Lys Tyr Thr Asp Ala Gly  
 35 40 45  
 Gln Gly His Val Phe Ala Phe Val Asp Glu Leu Gln Thr Gly Glu Arg  
 50 55 60  
 Ser Gln Leu Phe His Gln Leu Ser Ser Phe Asp Pro Val Arg Ile Asn  
 65 70 75 80  
 Glu Leu Ala Asp Lys Ala Leu Asn Pro Pro Lys Ala Asp Asp Gly Pro  
 85 90 95  
 Ala Ser Leu Glu Pro Leu Pro Asp Ile Ala Thr Ala Ser Ile Leu Asp  
 100 105 110  
 Ser Asp Pro Lys Asp Leu Glu Gln Trp Tyr Glu Glu Gly Leu Lys Leu

## 19214

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      115              120              125
Val Ala Gly Asn Lys Val Ala Val Val Leu Met Ala Gly Gly Gln Gly
      130              135              140
Thr Arg Leu Gly Ser Ser Ala Pro Lys Gly Cys Phe Asp Ile Gly Leu
145              150              155              160
Pro Ser His Lys Ser Leu Phe Gln Ile Gln Ala Glu Arg Ile Ala Lys
      165              170              175
Leu Gln Leu Leu Ala Gln Arg Ile Ser Gly Lys Glu Ala Val Ile Pro
      180              185              190
Trp Tyr Val Met Thr Ser Gly Pro Thr Arg Lys Pro Thr Glu Glu Phe
      195              200              205
Phe Glu Gln His Lys Tyr Phe Gly Leu Asn Lys Ser Asp Val Ile Ile
      210              215              220
Phe Glu Gln Gly Val Leu Pro Cys Ile Ser Asn Glu Gly Lys Ile Leu
225              230              235              240
Met Glu Ser Lys Phe Lys Val Arg Leu Gln Ser His Thr Asn Thr Val
      245              250              255
Leu Arg Leu Leu Gly Ser Asp Met Glu Lys
      260              265

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&lt;210&gt; 42757

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42757

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Val Ala Val Ala Pro Asp Gly Asn Gly Gly Ile Tyr Gln Ala Leu Leu
1      5      10      15
Thr Ser Gly Val Arg Glu Asp Met Arg Lys Arg Gly Ile Glu His Ile
      20      25      30
His Thr Tyr Cys Val Asp Asn Cys Leu Val Lys Val Ala Asp Pro Val
      35      40      45
Phe Ile Gly Phe Ala Ala Ser Lys Gln Val Asp Ile Ala Thr Lys Val
      50      55      60
Val Arg Lys Arg Asn Ala Thr Glu Ser Val Gly Leu Ile Leu Gln Lys
      65      70      75      80
Asn Gly Lys Pro Asp Val Val Glu Tyr Ser Glu Ile Asp Lys Glu Thr
      85      90      95
Ala Glu Ala Lys Asp Pro Lys Gln Pro Asp Val Leu Lys Phe Arg Ala
      100      105      110
Ala Asn Ile Val Asn His Tyr Tyr Ser Phe Lys Phe Phe Glu Ser Ile
      115      120      125
Glu Leu Trp Ala His Lys Leu Pro His His Val Ala Arg Lys Lys Ile
      130      135      140
Pro Cys Ile Lys Glu Gly Thr Gly Glu Phe Phe Lys Pro Glu Lys Pro
145      150      155      160
Asn Gly Ile Lys Leu Glu Gln Phe Val Phe Asp Val Phe Pro Met Thr
      165      170      175
Pro Leu Glu Lys Phe Ala Cys Ile Glu Val Arg Arg Glu Asp Glu Phe
      180      185      190
Ser Pro Leu Lys Asn Ala Arg Gly Thr Gly Glu Asp Asp Pro Asp Thr
      195      200      205
Ser Lys Arg Asp Ile Met Ser Gln Gly Gln Arg Trp Ile Glu Lys Ala
      210      215      220
Gly Gly Ile Val Ile Thr Glu Gly Asp Val Val Gly Val Glu Val Ser
225      230      235      240

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## 19215

Pro Leu Ile Ser Tyr Val Ser Ser Ser Leu Pro Leu His Phe Arg Ser  
 245 250 255  
 Phe

<210> 42758  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<400> 42758  
 Val Ala Leu Gln Arg Asn Cys Pro Ala Pro Ala Ser Gly Ala Gly Arg  
 1 5 10 15  
 Gly Val Gly Ala Pro Arg Gly Gly Phe Asn Gly Gly Phe Arg Gly Gly  
 20 25 30  
 Tyr Gly Gly Tyr Pro Arg Ala Ala Thr Cys Tyr Lys Cys Gly Gly Pro  
 35 40 45  
 Asn His Phe Ala Arg Asp Cys Gln Ala His Ala Met Lys Cys Tyr Ala  
 50 55 60  
 Cys Gly Lys Leu Val Ser Ala Leu Thr Cys Arg Cys Leu Lys Ser Lys  
 65 70 75 80  
 Arg Trp Leu Thr Phe  
 85

<210> 42759  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 42759  
 Thr Asn Gln Val Gln Ser Asp Pro Gly Ala Ser Ala Leu Phe Ala Gly  
 1 5 10 15  
 Ala Asp Gly Arg Lys Pro Val Gly Gly His Val Leu Ala His Ala Ser  
 20 25 30  
 Thr Thr Arg Val Leu Leu Arg Lys Gly Arg Gly Glu Glu Arg Val Ala  
 35 40 45  
 Lys Ile Gln Asp Ser Pro Gly Leu Ser Arg Ser Asp Thr Leu Ser Arg  
 50 55 60  
 Thr Ser Leu Thr Ile Tyr Arg Leu Pro Arg Ala Arg Ser Asp Leu Cys  
 65 70 75 80  
 Asp Tyr Gln Arg Trp Tyr Gln  
 85

<210> 42760  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 42760  
 Pro Ser Leu Tyr Ser Thr Asn Val Gly Ile Ala Arg Ile Phe Ile Ser  
 1 5 10 15  
 Cys Ala Thr Glu Arg Thr Leu Ser Thr Ser Thr Trp Ile Asn Arg Thr  
 20 25 30  
 Leu Glu Tyr Phe Ser Leu Ser Ser Pro Thr Leu Gly Ala Thr Ala Arg  
 35 40 45  
 Gln Gly Pro His His Val Ala Lys Lys Ser Thr Thr Thr Gly Pro Asp

## 19216

50  
Glu Val Ser Ala Leu  
65

55

60

<210> 42761  
<211> 84  
<212> PRT  
<213> A.fumigatus

<400> 42761  
Gly His Ser His His Lys Tyr Asp Thr Met Ser Lys Arg Ala Ala Asp  
1 5 10 15  
Ala Ser Glu Glu His Ser Ala Ala Leu Lys Ala Gly Glu Arg Pro Val  
20 25 30  
Ala Asp Asp Ile Pro Asp Glu Val Gly Glu Phe Glu Asp Glu Phe Glu  
35 40 45  
Asp Glu Phe Glu Ser Glu Asp Glu Ile Leu Glu Ala Gly Val Asp Gly  
50 55 60  
Arg Pro Asp Ala Glu Arg Glu Glu Glu Lys Gly Leu Leu Ala Asn  
65 70 75 80  
Leu Ser Val Ala

<210> 42762  
<211> 433  
<212> PRT  
<213> A.fumigatus

<400> 42762  
Ile Val Thr Asp Arg Asn Ala Met Thr Thr Asp Ala Met Glu Val Asp  
1 5 10 15  
Lys Gln Thr Phe Ile Pro Gly Arg Thr Lys Leu Ala Pro Gly Glu Val  
20 25 30  
Leu Ser Pro Asp Pro Ser Thr Tyr Asp Met Leu His Thr Leu Ser Thr  
35 40 45  
Pro Trp Pro Cys Leu Ser Phe Asp Ile Val Arg Asp Ser Leu Gly Asp  
50 55 60  
Asn Arg Lys Thr Tyr Pro Ala Thr Val Tyr Ala Val Ser Gly Thr Gln  
65 70 75 80  
Ala Ala Gly Gly Arg Ala Lys Glu Asn Glu Leu Leu Val Ile Lys Met  
85 90 95  
Ser Gly Leu Ser Lys Met Glu Lys Glu Asn Glu Thr Asp Ser Glu Ser  
100 105 110  
Asp Ser Asp Ser Asp Asp Ser Asp Glu Pro Ile Leu Glu Ser Lys  
115 120 125  
Ser Ile Pro Leu Gly Ser Thr Thr Asn Arg Ile Arg Ala His Gln Thr  
130 135 140  
Pro Ser Gln Ser Ala Asp Tyr Ser Arg Pro Pro Gln Thr Ile Thr Ala  
145 150 155 160  
Thr Met Leu Glu Asn Ser Gln Val Val Ile His Asp Val Thr Pro His  
165 170 175  
Leu Thr Ser Phe Asp Val Pro Gly Thr Val Leu Ser Pro Ser Ala Ser  
180 185 190  
Lys Pro Leu Ser Thr Leu Arg Met His Lys Ser Glu Gly Tyr Ala Leu  
195 200 205  
Asp Trp Ser Pro Leu Gln Pro Leu Gly Lys Leu Leu Thr Gly Asp Asn

## 19217

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      210                215                220
Asp Gly Leu Ile Tyr Val Thr Thr Arg Thr Glu Gly Gly Gly Trp Val
225                230                235                240
Thr Asp Thr Arg Pro Phe Thr Gly His Thr Ser Ser Val Glu Glu Leu
      245                250                255
Gln Trp Ser Pro Asn Glu Arg Asn Val Phe Ala Ser Ala Ser Ser Asp
      260                265                270
Gly Ser Val Lys Val Trp Asp Val Arg Ser Lys Ser Arg Lys Pro Ala
      275                280                285
Val Asp Val Lys Val Ser Asn Thr Asp Val Asn Val Met Ser Trp Ser
      290                295                300
Lys Gln Thr Phe His Leu Leu Ala Thr Gly Ala Asp Asp Gly Gln Trp
305                310                315                320
Ala Val Trp Asp Leu Arg His Trp Lys Pro Asn Ala Ser Ala Pro Ser
      325                330                335
Ser Gln Ile Lys Ala Ser Pro Val Ala Phe Asp Phe His Arg Glu
      340                345                350
Pro Val Thr Ser Ile Glu Trp His Pro Thr Asp Asp Ser Val Val Ala
      355                360                365
Val Gly Ser Ala Asp Asn Thr Val Thr Leu Trp Asp Leu Ala Val Glu
      370                375                380
Leu Asp Glu Glu Glu Asn Arg Glu Ala Gly Leu Ala Glu Val Pro Pro
385                390                395                400
Gln Leu Leu Phe Val His Tyr Met Glu Ser Val Lys Glu Ile His Trp
      405                410                415
Gln Ala Gln Met Pro Gly Thr Ile Met Ala Thr Gly Ser Ser Gly Phe
      420                425                430
Gly

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<210> 42763  
 <211> 153  
 <212> PRT  
 <213> A.fumigatus

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<400> 42763
Asn Val Cys Pro Tyr Leu Ile Thr Ala Lys Gln Pro Gly Asn Thr Asp
1                5                10                15
Val Asn Ile Ala Ser Gln Ala Asp Ala Asp Ser Ile Ala Ser Cys His
      20                25                30
Thr Val Arg Gly Ser Val Thr Met Ala Ser Ser Val Ser Gly Ala Val
      35                40                45
Asn Leu His Gly Val Glu Thr Ile Gln Gly Pro Leu Thr Ala Arg Gly
      50                55                60
Ala Ser Asp Leu Ser Ala Leu Ile Ala Ser Asp Leu Lys Thr Ile Thr
65                70                75                80
Gly Thr Leu Thr Val Ala Asn Asn Asp Ala Leu Asn Gln Ile Ser Met
      85                90                95
Ser Asn Leu Gln Thr Val Gly Gly Asp Phe Lys Val Glu Asn Asn Arg
      100                105                110
Asn Leu Lys Asp Leu Ser Leu Ser Asp Leu Asp Glu Ile Arg Gly Gly
      115                120                125
Val Thr Val Ser Gly Glu Leu Asn Arg Phe Val Leu Val Tyr Ser Ser
      130                135                140
Cys Ile Ser His Arg Pro Asp Glu Ala
145                150

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<210> 42764  
 <211> 232  
 <212> PRT  
 <213> A.fumigatus

<400> 42764  
 Thr Asp Ile Cys Asp Ser Arg Ser His Phe Ser Thr Glu Val Pro Arg  
 1 5 10 15  
 Arg Ala Leu Glu Val Pro Met Val Leu Lys Ala Ile Leu Ala Leu Ala  
 20 25 30  
 Ala Arg Leu Asp Ala Ile Leu Ser Gly Ala Ser Asp Trp Glu Ala Ala  
 35 40 45  
 Glu Tyr His Gly Gln Cys Leu Glu Leu Leu Ile Ala Ala Leu Ala Gln  
 50 55 60  
 Pro Glu Asp Thr Tyr Asp Asp Asn Leu Leu Ile Thr Val Val Ile Leu  
 65 70 75 80  
 Arg Ile Tyr Glu Glu Leu Glu Ser Ser Asn Asp Glu Lys Tyr His Leu  
 85 90 95  
 Phe Gly Ser Asn Arg Leu Leu Asn Thr Met Ser Arg Ser Ala Ser Ser  
 100 105 110  
 Gly Gly Leu Ala Glu Ala Val Ser Trp Gln Phe Leu Arg Gln Ala Ile  
 115 120 125  
 Tyr Ala Ser Val Val Gln Tyr Gln Pro Met Gln Leu Asp Leu Glu Asn  
 130 135 140  
 Tyr Glu Arg Ser Ala Val Phe His Arg Arg Asp Asp Ala Ala Tyr Ala  
 145 150 155 160  
 Asn Val Ile Ile Tyr Leu Cys Ala Arg Ile Leu Gln Gly Gly Gly Ala  
 165 170 175  
 Tyr Thr Arg Gly Met Asp Glu Glu Thr Trp Arg Gln Leu Ser Asp Ser  
 180 185 190  
 Val Glu Gln Trp His Arg Glu Lys Pro Val Ser Trp Gln Pro Leu Lys  
 195 200 205  
 Tyr Lys Pro Ala Asn Ile Ala Glu Asn Arg Pro Phe Pro Glu Ile Trp  
 210 215 220  
 Met Met Ser Pro Pro Ala Gly Met  
 225 230

<210> 42765  
 <211> 229  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (116)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42765  
 Ile Gly Ser Phe Trp Tyr Ile Leu Leu Val Phe Arg Thr Asp Leu Thr  
 1 5 10 15  
 Arg Arg Arg Ile Ser Leu Ser Asn Leu Asp Thr Val Trp Gly Pro Thr  
 20 25 30  
 Val Ile His Ser Ser Gly Thr Phe Asn Cys Ser Ser Leu Asp Ser Lys  
 35 40 45  
 Leu Ser Gly Glu Asp Arg Val Phe Gln Ser Ser Tyr Ser Cys Thr Thr



<210> 42768  
 <211> 120  
 <212> PRT  
 <213> A.fumigatus

<400> 42768  
 Ala Leu Leu Val Pro Gly Glu Val Pro Arg Ser Lys Asn Glu Asn Val  
 1 5 10 15  
 Ser Arg Arg Cys Gln Ser Ile Asp Val Arg Thr Tyr Tyr His Tyr Thr  
 20 25 30  
 Ile Tyr Glu Gly Ser Leu Tyr Thr Gln Gly Ala Ile Leu Glu Met Asn  
 35 40 45  
 Glu Arg Asn Lys Tyr Ala Ser Arg Glu Asp Ser Phe Gly Glu Leu Ile  
 50 55 60  
 Ala Arg Gly Leu Ile Gly Leu Gln Glu Asp Val Cys Ser Val Gln Thr  
 65 70 75 80  
 Val Asp Ala Lys Gly Asp Thr Met Leu Phe Ser Ala Val Gly Glu Met  
 85 90 95  
 Ala Val Asp Glu Gly Ser Ile Ser Trp Val Ser Ser Gly Ile Asp Gly  
 100 105 110  
 Val Gly Ala Gly Arg Ser Ser Gly  
 115 120

<210> 42769  
 <211> 346  
 <212> PRT  
 <213> A.fumigatus

<400> 42769  
 Glu Ser Leu Pro Ala Thr Gly Ser Ser Ala Thr Arg Ser Val Ser Ala  
 1 5 10 15  
 Ser Leu Val Leu Pro Ala Arg Ser Cys Asp Arg Arg Ile Asn Gly Arg  
 20 25 30  
 Cys Ile Ile Ser Gly Arg Gly Val Ile Arg Asn Lys Leu Ile Ile Cys  
 35 40 45  
 Asp Met Asp Val Pro Gln Pro Val Pro Gly Val Pro Asp Val Ala Glu  
 50 55 60  
 Thr Gly Arg Gln Gln Asn Leu Glu Ile Ser Gly Pro Glu Leu Ala Ala  
 65 70 75 80  
 Thr Gly Glu Ser Met Gly Pro Pro Glu Phe His Asn Gly Tyr Ser Ser  
 85 90 95  
 Asp Ser Arg Ala His Tyr Thr Ser His Asn Gly Gly Phe Asp Ser Pro  
 100 105 110  
 Ser Thr His Val Ser Arg Asn Gln Glu Asn Asp Gln Ser Arg Val Thr  
 115 120 125  
 Glu Ser Pro Thr Leu Thr Gln Gln Pro Arg Pro Pro Ser Ser Ser Arg  
 130 135 140  
 Pro Gly Ser Gly Leu Ser Ser Gly Pro Glu Gln Arg Gln Gly Ile Ser  
 145 150 155 160  
 Gln Thr Ser Gln Asp Val Ser Gln Arg Pro Pro Ser Gln Pro Thr Lys  
 165 170 175  
 Asn Ser Val Val Ile Lys Val Gly Met Val Gly Asp Ala Gln Ile Gly  
 180 185 190  
 Lys Thr Ser Leu Met Val Lys Tyr Val Glu Gly Ser Trp Asp Glu Asp  
 195 200 205  
 Tyr Ile Gln Thr Leu Gly Met Leu Phe Phe Trp Thr Cys Ala Leu Leu

## 19221

210		215		220
Ile Leu Thr Leu Ser Thr Gly Val Asn Phe Met Glu Lys Thr Ile Ser				
225		230		235
Ile Arg Asn Thr Glu Ile Thr Phe Ser Ile Trp Asp Leu Gly Gly Gln				240
	245		250	255
Arg Glu Phe Val Asn Met Leu Pro Leu Val Cys Asn Asp Ala Val Ala				
	260		265	270
Ile Leu Phe Met Phe Asp Leu Thr Arg Lys Ser Thr Leu Asn Ser Ile				
	275		280	285
Lys Glu Trp Tyr Arg Gln Gly Arg Gly Phe Asn Lys Thr Ala Ile Pro				
	290		295	300
Phe Leu Val Gly Thr Lys Tyr Asp His Phe Val Asn Phe Pro Arg Glu				
305		310		315
Asp Gln Glu Glu Ile Ser Ile Gln Val Gly Lys Leu Thr Arg Glu Asp				320
	325		330	335
Asp Lys Gln Cys Ala Asn Asp Phe Ser Gly				
	340		345	

&lt;210&gt; 42770

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42770

Pro Gly Cys Gly Ile Thr Ala Val Thr Ser Thr Ser Tyr Ser Ser Leu				
1	5	10	15	
Gln Phe Leu Gln Thr Lys Thr Tyr Ala Asp Ile Gly Gln Asn Ser Asp				
	20	25	30	
Ala Ile Pro Phe Ile Tyr Thr Thr Asp Arg Lys Pro Val Pro His Leu				
	35	40	45	
Leu Val Pro His Thr Thr Arg Gly Arg Glu Ala Ala Tyr Leu Ser				
	50	55	60	
Tyr Val Val Asp Phe Tyr Asp Gln Leu Pro Pro Tyr Thr Ile Phe Ile				
65	70	75	80	
His Ser Asn Gln Asp Gln Trp His Asn Asp Leu Phe Gly Pro Lys Thr				
	85	90	95	
Asn Val Ala Leu Arg Asn Leu Arg Phe Glu Ala Ile Ala Ala Gln Gly				
	100	105	110	
Tyr Val Asn Leu Arg Cys Glu His Glu Pro Gly Cys Pro Thr Asn Val				
	115	120	125	
His Pro Trp Ser Pro Thr Gln Ile Asp Ile Asp Lys Lys Asp Ile Arg				
	130	135	140	
Ala Tyr Phe Pro Gln Val Tyr Gln Thr Leu Phe Gly Val Gly Lys Glu				
145	150	155	160	
Arg Val Pro Glu His Ile Gly Asn Ile Cys Cys Ala Gln Phe Ala Val				
	165	170	175	
Ser Arg Glu Arg Ile Leu Gln Arg Pro Lys Arg Asp Tyr Glu Arg Met				
	180	185	190	
Leu Ala Trp Ala Ala Glu Thr Asp Leu Thr Asp Ser Phe Gly Val Gly				
	195	200	205	
Trp Val Phe Glu Lys Val Trp His Val Val Phe Gly Met Glu Asp Ile				
	210	215	220	
Tyr Cys Pro Arg Phe Glu Gln Cys Arg Cys Asp Val Tyr Gly Trp Cys				
225	230	235	240	
Gly Pro Leu Ala Asn Gly Glu Thr Leu Gln Ala Val Arg Val Lys Ser				
	245	250	255	

<210> 42771  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 42771  
 Cys Lys Asn Ser Glu Gly Ser Asp Val Thr Leu Arg Trp Asp Ala Glu  
 1 5 10 15  
 Ala Glu Asp Thr Asp Gly Leu Asp Pro Gly Ser Asn Asp Thr Gly Thr  
 20 25 30  
 Asp Asn Leu Pro Asp Pro Gly Ser Lys Asp Ala Gly Thr Glu Asp Leu  
 35 40 45  
 Leu Ser Ala Ala Gly Gly Gly Asp Thr Gly Phe Arg Gly Ile Pro Leu  
 50 55 60  
 Ser Thr Ser Ser Trp Gly Val Ser Val Glu Val Ser Phe Ser Val  
 65 70 75 80  
 Leu Asp Ser Trp Pro Val Gly Ala Gly Val  
 85 90

<210> 42772  
 <211> 102  
 <212> PRT  
 <213> A.fumigatus

<400> 42772  
 Leu Thr Leu Phe Ser Pro Val Ile Tyr Lys Ala Leu Thr Ser Ser Gly  
 1 5 10 15  
 Pro Val Val Val Asp Phe Phe Ala Thr Trp Cys Gly Pro Cys Arg Ala  
 20 25 30  
 Val Ala Pro Lys Val Gly Glu Leu Ser Glu Lys Tyr Ser Asn Val Arg  
 35 40 45  
 Phe Ile Gln Val Asp Val Asp Lys Val Arg Ser Val Ala Gln Glu Met  
 50 55 60  
 Asn Ile Arg Ala Met Pro Thr Phe Val Leu Tyr Lys Asp Gly Gln Pro  
 65 70 75 80  
 Leu Glu Lys Arg Val Val Gly Gly Asn Val Arg Glu Leu Glu Glu Met  
 85 90 95  
 Ile Lys Ser Ile Ser Ala  
 100

<210> 42773  
 <211> 566  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (558)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42773  
 Ile Ser Gly Leu Thr Ser His Ser Ser Thr Tyr Tyr Leu Phe Ile Leu  
 1 5 10 15  
 Phe Leu Pro Val Arg Leu Gly Gly Ser Ser Phe Leu Asn Val Val Val  
 20 25 30



Ala Cys Val Leu Glu Gly Val Leu Ala Tyr Tyr Tyr Leu Leu Ser Tyr  
 35 40 45  
 Ser Leu Ser Leu Val Tyr Ala Leu Ile Ala Ser Cys Lys Thr Glu Asp  
 50 55 60  
 Met Ala Glu Glu Thr Pro Val Leu Thr Ile Gln Glu Arg Ile Lys Ala  
 65 70 75 80  
 Leu Lys Leu Ala Gly Ser Gln Pro Thr Pro Phe Leu Arg Ala Gln Thr  
 85 90 95  
 Ile Asn Asn Pro Pro Ala Asn Gly His Gly Ser Val Leu Glu His Ser  
 100 105 110  
 Val Ile Gly Asn Glu Pro Gly Ala Pro Pro Thr Gln Ala Pro Arg Ser  
 115 120 125  
 Pro Ser Thr Gly Pro Ser Ile Ala Leu Lys Ser Lys Val Pro Pro Pro  
 130 135 140  
 Leu Pro Thr Arg Lys Ala Ser Asn Gln Gln Leu Ala Pro Ser Leu Pro  
 145 150 155 160  
 Pro Arg Arg Pro Ser Val Asn Ser Ile Glu Ser Ala Ala Ser Asp Thr  
 165 170 175  
 Ser Arg Ser Thr Val Ser Thr Ser Val Gly Arg Pro Val Pro Gly Arg  
 180 185 190  
 Ser Ser Ser Ser Gly Glu Ser Gly Asn Val His Thr Val Arg Ala Pro  
 195 200 205  
 Arg Tyr Asp Glu Ala Glu Leu Pro Val Leu Pro Pro Arg Arg Glu Glu  
 210 215 220  
 Glu Lys Ser Pro Lys Ala Pro Pro Arg Pro Lys Pro Thr Met Leu Lys  
 225 230 235 240  
 Ser Arg Asp Gly Leu Pro Pro Ser Leu Pro Ser Ile Arg Glu Pro Pro  
 245 250 255  
 Ser Leu Pro Ser Ala Arg Pro Val Leu Pro Ile Arg Arg Ala Ser Ser  
 260 265 270  
 Asn Val Asn Leu Lys Asn Gly Asp Ala Ala Pro Leu Pro Pro Pro Arg  
 275 280 285  
 Ile Pro Ser Arg Asp Ser Gln Gly Gln Ser Pro Ser Ala Glu Gly Glu  
 290 295 300  
 Ser Lys Pro Ala Arg Lys Leu Pro Pro Pro Pro Ser Gly Ser Ala  
 305 310 315 320  
 Leu Gly Lys Leu His Gln Ser Gly Phe Gly Gly Leu Asn Lys Thr Ala  
 325 330 335  
 His Ser Thr Leu Asn Gly Ala Pro Pro Pro Ile Pro Ile Ala Ser Lys  
 340 345 350  
 Pro Glu Lys Pro Asp Leu Ser Lys Leu Leu Ala Thr Lys Pro Arg Val  
 355 360 365  
 Glu Arg Asn Thr Thr Asn Thr Glu Pro Thr Ala Met Cys Leu Lys Cys  
 370 375 380  
 Arg Asp Phe Ser Gly Pro Asp Ser His Ala Ala Arg Phe Pro Arg Glu  
 385 390 395 400  
 Ser Leu Pro Thr His Asp Leu Ala Trp Leu Ala Arg Glu Leu Thr Ala  
 405 410 415  
 Pro Phe Pro Ser Pro Thr Asp Lys Ala Arg Ala Leu Phe Thr Trp Cys  
 420 425 430  
 His His Asn Ile Cys Tyr Asp Val Asp Ala Phe Phe Asn Asn Cys Val  
 435 440 445  
 Lys Pro Ser Thr Pro Ala Ser Thr Leu Ala Ser Gly Val Ala Val Cys  
 450 455 460  
 Glu Gly Tyr Ala Gly Leu Phe Ala Ala Leu Ala Thr His Ala Gly Leu  
 465 470 475 480

## 19224

Glu Ala Ile Val Ile Gly Gly His Gly Lys Gly Tyr Gly Tyr Arg Ala  
                     485                    490                    495  
 Leu Gly Pro Gly Gln Ser Ile Pro Pro Tyr Ser Ala Gly His Ala Trp  
                     500                    505                    510  
 Asn Ala Val Arg Ile Asp Asn Gly Gln Trp Lys Leu Ile Asp Val Cys  
                     515                    520                    525  
 Trp Gly Ala Gly Val Val Gln Gly Pro Gly Gln Pro Tyr Lys Lys Leu  
                     530                    535                    540  
 Phe Asn Pro Thr Met Phe Thr Met Thr Ile Glu Glu Phe Xaa Gly Lys  
 545                    550                    555                    560  
 His Tyr Ser Glu Gly Lys  
                     565

&lt;210&gt; 42774

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42774

Pro Val Arg His Ile Arg Pro Ser Ser Phe Phe Lys Pro Arg His Met  
 1                    5                    10                    15  
 Leu Ile Leu Gly Lys Thr Ala Thr Pro Ser Pro Ser Ser Thr Pro Pro  
                     20                    25                    30  
 Thr Ala Asn Pro Phe Arg Thr Ser Ser Ser Pro Thr Pro Pro Ala Ala  
                     35                    40                    45  
 Ala Lys Gln Pro Pro Thr Ser Pro Thr Ser Ser Thr Ser Thr Thr Asn  
                     50                    55                    60  
 Phe Pro Leu Thr Pro Ser Ser Ser Thr Pro Ile Lys Thr Asn Gly Thr  
 65                    70                    75                    80  
 Thr Thr Ser Leu Ala Pro Lys Pro Thr Ser Arg Cys Ala Ile Ser Ala  
                     85                    90                    95  
 Leu Arg Pro Ser Leu His Arg Ala Thr Ser Thr Ser Ala Ala Asn Thr  
                     100                    105                    110  
 Asn Gln Ala Ala Gln Gln Met Cys Thr Pro Gly Pro Gln Arg Arg Leu  
                     115                    120                    125  
 Ile Ser Ile Arg Arg Ile Ser Ala Arg Thr Phe Pro Arg Cys Thr Arg  
                     130                    135                    140  
 Arg Cys Leu Gly Leu Ala Arg Ser Val Ser Pro Ser Ile Leu Gly Ile  
 145                    150                    155                    160  
 Ser Val Ala Arg Ser Leu Pro Ser Ala Gly Asn Gly Ser Cys Ser Ala  
                     165                    170                    175  
 Arg Ser Gly Thr Met Asn Gly Cys Trp His Gly Arg Arg Arg Arg Thr  
                     180                    185                    190

&lt;210&gt; 42775

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42775

Leu Leu Trp Ala Val His Tyr Phe Met Leu Asn Cys Thr Ala Tyr Ser  
 1                    5                    10                    15  
 Ser Thr His His Ile Gly Val Phe Pro Ser Asn Ser Arg Thr His Leu  
                     20                    25                    30  
 Leu Leu His His Ser Ser Val Ser Ile Met Asp Tyr Thr Arg Ile Ile  
                     35                    40                    45

## 19225

Leu Ala Leu Ala Val Tyr Ile Gly Lys His Ser Arg Pro Ser Phe Pro  
 50 55 60  
 Arg Asn Pro Ser His  
 65

<210> 42776  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 42776  
 Ala Val Phe Ser Pro His Arg Thr Asp His Leu Ala Ile Leu Thr Ala  
 1 5 10 15  
 Ala Ala Ile Val Pro Ser Tyr Leu Gln Leu Ser Phe His Arg Ala Gln  
 20 25 30  
 Leu Val Lys Ile Ile Gln Asn His Asn Arg Leu Ala Ala Lys Thr Ser  
 35 40 45  
 Thr Pro Arg Ser Arg His Glu Gln Ala Ile Glu Gly Leu Leu Asp Ile  
 50 55 60

<210> 42777  
 <211> 118  
 <212> PRT  
 <213> A.fumigatus

<400> 42777  
 Ile Gly Leu Leu His Cys Leu Thr Met Ala Leu Val Gln Tyr Pro Pro  
 1 5 10 15  
 Pro Val Asp Tyr Ala Ala Gln Leu Asn Ala Phe Lys Asp Phe Leu Gln  
 20 25 30  
 His Phe Lys Thr Phe Glu Ser Ala Ser Glu Ala Ala Ala Thr Glu Ala  
 35 40 45  
 Ile Glu Asp Leu His Ile Asp Gly Asp Ala Thr Ser Asp Glu Tyr Asp  
 50 55 60  
 Phe Met Asp Asp Val Glu Asn Glu Asn Gly Gln Gln Gly Thr Arg Ala  
 65 70 75 80  
 Arg Arg Gly Arg Arg Glu Pro Lys Leu Lys Tyr Met Gln Ile Leu Gln  
 85 90 95  
 Asp Ile Ala Asp Arg Glu Arg Ser Asn Val Leu Ile Glu Leu Asp Asp  
 100 105 110  
 Leu Ala Thr Val Arg Leu  
 115

<210> 42778  
 <211> 207  
 <212> PRT  
 <213> A.fumigatus

<400> 42778  
 Phe Gly Met Ser Gln Ser Arg Asp Leu Ser Ser Arg Pro Gly Arg Ser  
 1 5 10 15  
 Asn Ala Gly Ser Ile Arg Ser Gly Arg Asp Val Ala Ala Arg Thr Tyr  
 20 25 30  
 Thr Pro Glu Arg Pro Ser Ala Pro Ser Ile Cys Val Arg Ser Trp Leu  
 35 40 45  
 Thr Thr Arg Ser Val Thr Pro Val Glu Ser Trp Pro Arg Leu Gly Ala

50		55		60											
Ile	Leu	Ser	Asn	Ser	Ser	Lys	Lys	Arg	Met	His	Gly	Arg	Ala	Ala	Trp
65				70						75					80
Ala	Arg	Ser	Asn	Arg	Ser	Arg	Thr	Leu	Phe	Ser	Leu	Ala	Pro	Ile	Tyr
			85						90					95	
Leu	Phe	Arg	Ile	Ser	Gly	Pro	Leu	Thr	Leu	Met	Lys	Phe	Arg	Pro	His
			100					105					110		
Ser	Pro	Ala	Ile	Ala	Leu	Ala	Arg	Arg	Val	Phe	Pro	His	Pro	Gly	Lys
		115					120					125			
Pro	Tyr	Arg	Ser	Lys	Pro	Glu	Arg	Lys	Arg	Arg	Gly	His	Cys	Ala	Lys
	130					135					140				
Ile	Gly	Ala	Tyr	Leu	Val	Gly	Tyr	Cys	Lys	Val	Ser	Ser	Ser	Ile	Phe
145				150					155						160
Arg	Val	Ser	Cys	Arg	Pro	Pro	Ile	Ala	Glu	Asn	Val	Val	Val	Glu	Asp
			165						170					175	
Val	Ser	Val	Thr	Leu	Arg	Arg	Asp	Ala	Gly	Val	Asn	Pro	Leu	Met	Ala
		180					185						190		
Phe	Ser	Lys	Ser	Ser	Ala	Pro	Arg	Val	Thr	Ala	Leu	Asp	Ala	Ala	
	195					200						205			

&lt;210&gt; 42779

&lt;211&gt; 712

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (451)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42779

Ser	Phe	His	Leu	Thr	Ala	Tyr	Ser	Phe	Lys	Asp	Asp	Val	Leu	Asp	Val
1			5						10				15		
Ile	Met	Ser	Gln	Arg	Glu	Lys	Arg	Asn	Glu	Ala	Met	Ala	Met	Ala	Ala
		20						25				30			
Glu	Ala	Asp	Met	Asp	Ala	Ala	Ala	Ala	Pro	Ser	Met	Phe	Pro	Pro	Glu
	35					40					45				
Leu	Thr	Arg	Arg	Tyr	Thr	Leu	Asn	Phe	Lys	Pro	Leu	Thr	Pro	Ser	Gly
	50				55					60					
Ser	Ser	Ser	Asp	Arg	Tyr	Ser	Lys	Ala	Leu	Ala	Val	Arg	Asn	Val	Arg
65			70						75				80		
Ala	Glu	His	Leu	Gly	Ser	Leu	Ile	Thr	Val	Arg	Gly	Ile	Thr	Thr	Arg
		85						90				95			
Val	Ser	Asp	Val	Lys	Pro	Ser	Val	Gln	Ile	Asn	Ala	Tyr	Thr	Cys	Asp
		100					105					110			
Arg	Cys	Gly	Cys	Glu	Val	Phe	Gln	Pro	Val	Thr	Thr	Lys	Gln	Phe	Leu
	115					120						125			
Pro	Met	Thr	Glu	Cys	Leu	Ser	Glu	Glu	Cys	Lys	Gln	Asn	Asn	Ser	Lys
	130				135					140					
Gly	Gln	Leu	Phe	Leu	Ser	Thr	Arg	Ala	Ser	Lys	Phe	Val	Pro	Phe	Gln
145				150					155						160
Glu	Val	Lys	Ile	Gln	Glu	Met	Ala	Asp	Gln	Val	Pro	Val	Gly	His	Ile
			165					170					175		
Pro	Arg	Thr	Leu	Thr	Ile	His	Cys	His	Gly	Ser	Leu	Thr	Arg	Gln	Leu
	180						185					190			
Asn	Pro	Gly	Asp	Val	Val	Asp	Val	Ala	Gly	Ile	Phe	Leu	Pro	Thr	Pro

195					200					205					
Tyr	Thr	Gly	Phe	Arg	Ala	Ile	Arg	Ala	Gly	Leu	Leu	Thr	Asp	Thr	Tyr
210					215					220					
Leu	Glu	Ala	Gln	His	Ile	Thr	His	His	Lys	Lys	Ser	Tyr	Asn	Asp	Leu
225					230					235					240
Thr	Met	Asp	Ser	Gln	Thr	Leu	Arg	Lys	Ile	Glu	Gln	Tyr	Gln	Lys	Ser
245					250					255					
Gly	Asn	Met	Tyr	Glu	Tyr	Leu	Ser	Arg	Ser	Ile	Ala	Pro	Glu	Ile	Tyr
260					265					270					
Gly	His	Leu	Asp	Val	Lys	Lys	Ala	Leu	Leu	Leu	Leu	Leu	Ile	Gly	Gly
275					280					285					
Val	Thr	Lys	Glu	Met	Gly	Asp	Gly	Met	His	Ile	Arg	Gly	Asp	Ile	Asn
290					295					300					
Ile	Cys	Leu	Met	Gly	Asp	Pro	Gly	Val	Ala	Lys	Ser	Gln	Leu	Leu	Lys
305					310					315					320
Tyr	Ile	Ala	Lys	Val	Ala	Pro	Arg	Gly	Val	Tyr	Thr	Thr	Gly	Arg	Gly
325					330					335					
Ser	Ser	Gly	Val	Gly	Leu	Thr	Ala	Ala	Val	Met	Arg	Asp	Pro	Val	Thr
340					345					350					
Asp	Glu	Met	Val	Leu	Glu	Gly	Gly	Ala	Leu	Val	Leu	Ala	Asp	Asn	Gly
355					360					365					
Ile	Cys	Cys	Ile	Asp	Glu	Phe	Asp	Lys	Met	Asp	Asp	Ala	Asp	Arg	Thr
370					375					380					
Ala	Ile	His	Glu	Val	Met	Glu	Gln	Gln	Thr	Ile	Ser	Ile	Ser	Lys	Ala
385					390					395					400
Gly	Ile	Thr	Thr	Thr	Leu	Asn	Ala	Val	Thr	Ser	Ile	Ser	Gly	Cys	Ser
405					410					415					
His	Ser	Phe	Phe	Met	Asp	Gly	Thr	Thr	Arg	Glu	Phe	Phe	Pro	Val	Glu
420					425					430					
Asn	Ile	Thr	Phe	Pro	Ala	Ala	Leu	Leu	Ser	Arg	Phe	Asp	Val	Met	Phe
435					440					445					
Phe	Ile	Xaa	Asp	Thr	Pro	Gln	Arg	Glu	Ala	Asp	Glu	Glu	Leu	Ala	Asn
450					455					460					
His	Val	Ala	Tyr	Val	His	Met	His	Asn	Lys	His	Pro	Glu	Val	Asp	Asp
465					470					475					480
Ala	Gly	Val	Leu	Phe	Thr	Pro	Asn	Glu	Val	Arg	Gln	Tyr	Ile	Ala	Lys
485					490					495					
Ala	Arg	Thr	Tyr	Arg	Pro	Val	Val	Pro	Ser	Ser	Val	Ser	Asp	Tyr	Met
500					505					510					
Val	Gly	Ala	Tyr	Val	Arg	Met	Arg	Lys	Gln	Gln	Lys	Ser	Asp	Glu	Ala
515					520					525					
Ser	Lys	Lys	Gln	Phe	Ser	His	Val	Thr	Pro	Arg	Thr	Leu	Leu	Gly	Val
530					535					540					
Val	Arg	Leu	Ser	Gln	Ala	Leu	Ala	Arg	Leu	Arg	Phe	Ser	Glu	Glu	Val
545					550					555					560
Ile	Arg	Glu	Asp	Val	Asp	Glu	Ala	Leu	Arg	Leu	Ile	Glu	Val	Ser	Lys
565					570					575					
Ala	Ser	Leu	Ala	Asn	Asp	Gly	His	Ser	Gly	Ile	Asp	Gln	Ser	Pro	Ser
580					585					590					
Ser	Lys	Ile	Tyr	Asn	Leu	Ile	Arg	Gly	Met	Arg	Glu	Ser	Gly	Ala	Ala
595					600					605					
Ala	Val	Gly	Asp	Gly	Glu	Glu	Gly	Glu	Leu	Ser	Met	Arg	Arg	Ile	Arg
610					615					620					
Glu	Arg	Val	Leu	Ala	Lys	Gly	Phe	Thr	Glu	Asp	Gln	Leu	Thr	Met	Ala
625					630					635					640
Ile	Asp	Glu	Tyr	Glu	Glu	Leu	Asn	Val	Arg	Val	Val	Ser	Leu	Asn	Ser

## 19228

645 650 655  
 Pro Trp Trp Leu Leu Met Ser Leu Phe Leu Cys Arg Phe Gly Lys  
 660 665 670  
 Ser Leu Thr Thr Glu Leu Ala Ser Phe Ser Trp Ile Ser Glu Ala Met  
 675 680 685  
 Arg Gln Trp Thr Tyr Asn Arg Pro Ala Asn Gly Cys Ser Leu Asp Trp  
 690 695 700  
 Gln Lys Val Ile Thr Val Val Cys  
 705 710

<210> 42780  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 42780  
 Thr Thr Phe Gln Thr Ser Thr Thr Thr Ala Thr Lys Met Lys Asn Leu  
 1 5 10 15  
 Ser Ile Leu Thr Ser Leu Leu Leu Thr Ser Ala Ser Leu Val Phe Ser  
 20 25 30  
 Ser Ser Ile Pro Pro Lys Cys Gly Thr Cys Asn Pro Leu Ser Gly Glu  
 35 40 45  
 Asn His Cys Asp Ile Thr Asn Leu Leu His Gln His Arg His Ser Leu  
 50 55 60  
 Pro Leu Arg Leu Pro Cys Arg Leu Gln Gly Leu Glu Gly Gln Pro Arg  
 65 70 75 80  
 Arg Gln Gln Thr Val Pro Ser Glu Cys Pro Gln Leu Pro Val Pro Gly  
 85 90 95  
 Leu His Pro Arg Lys His Arg Val Gln His Pro Leu  
 100 105

<210> 42781  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 42781  
 Val Thr Ala Pro Glu Asp Gly Ala Gln Lys Thr Leu Glu His Ser Arg  
 1 5 10 15  
 Cys Arg Thr Arg Ser Phe Glu Glu Leu Ser Ile Glu Ile Ala Ser Val  
 20 25 30  
 Thr Cys Leu Thr Ala Gly Ser Cys Gln His Cys Thr Ser Pro Ser Pro  
 35 40 45  
 Lys Thr Pro Gly Phe Asp Phe Thr Pro Ser Asn Leu Val Ala Arg Leu  
 50 55 60  
 Pro Lys Met Ser  
 65

<210> 42782  
 <211> 1080  
 <212> PRT  
 <213> A.fumigatus

<400> 42782  
 Met Ile Ala Ser Ala Asp Asn Thr Leu Pro Ile Val Ile Glu Leu His  
 1 5 10 15

Ala Asn Phe Leu Glu Leu Asn Leu Leu Ser Gln Ile Arg Ala Leu Pro  
 20 25 30  
 Asn Pro Thr Tyr Ser Ser Ala Gln Ser Glu His Met His Pro Leu Ala  
 35 40 45  
 Leu His Leu Ser Pro Thr Ser Thr Ala Asn Ile Ile Thr Thr Ser Leu  
 50 55 60  
 Thr Pro Ala Pro Ser Asn Thr Ser Pro Phe Val Lys Ile Ala Pro Asp  
 65 70 75 80  
 Ala Glu Val Ile Val Ala Pro Lys Val Arg Pro Lys Ser Ala Ser Arg  
 85 90 95  
 Gly Pro Arg Gly Asp Ser Arg Ser Val Asn Gly Ser Ser Arg Lys Ser  
 100 105 110  
 Val Gly Gly Arg Ser Ser Gly Ser Thr Val Arg Pro Lys Ser Gly Arg  
 115 120 125  
 Asp Ser Thr Ser Arg Gly Ala Leu Phe Phe Arg Gly Val Asp Arg Arg  
 130 135 140  
 Leu Val Glu Pro Tyr Phe Asp Glu Glu Phe Glu Asp Asp Thr Asn Glu  
 145 150 155 160  
 Gly Phe Arg Val Trp Val Asp Pro Asp Met Leu Ala Thr Ser Glu Leu  
 165 170 175  
 Arg Gly Ala Ser Trp Val Cys Ile Ala Val Val Gln Pro Ala Gly Leu  
 180 185 190  
 Lys Ala Pro Pro Asp Pro Gln Gln Gln Met Asn Gln Ala Glu Gln Lys  
 195 200 205  
 Ala Ser Glu Ala Gly Leu Pro Ala Thr Asn Leu Val Ala Arg Leu Ala  
 210 215 220  
 Pro Trp Val Asp Ser Pro Asp Ser Gln His Ile Ala Met Ser Thr Met  
 225 230 235 240  
 Leu Cys Ser Ala Leu Gly Ala Glu Gly Met Val Gly Gly Ile Ile Arg  
 245 250 255  
 Val Glu Ala Ala Pro Pro Gln Leu Gln Pro Ser Ile Val Arg Thr Leu  
 260 265 270  
 Lys Ile Tyr Pro Phe Met Ser Asp Ser Ala Lys Lys Lys Asp Gly Leu  
 275 280 285  
 Lys Phe Gly Ser Asp Thr Ala Ala Ala Lys Asp Ala Leu Leu Glu Arg  
 290 295 300  
 Ile Lys Val Ile Tyr Gly Ser Thr Gly Thr Asp Lys Gly Leu Leu Ser  
 305 310 315 320  
 Gly Pro Leu Thr Glu Gly Met Ile Leu Pro Arg Phe Glu Asn Pro Thr  
 325 330 335  
 Val Ser Ala Phe Asp Gly Ala Ile Val Arg Phe Asp Pro Pro Leu Lys  
 340 345 350  
 Ser Ser Pro Asp Gly Pro Lys Gln Met Leu Gly Trp Val Leu Gly Ser  
 355 360 365  
 Glu Ala Lys Leu Ser Leu Glu Val Gln Ala Glu Ile Pro Arg Pro Ala  
 370 375 380  
 Glu Gln Gly Gln Leu Ser Phe Pro Thr Glu Glu Pro Leu Pro Asn Ser  
 385 390 395 400  
 Ile Pro Glu Met Val Gly Ile Asp Gln Val Ile Ser Gln Ser Leu Asp  
 405 410 415  
 Asn Leu Thr Lys Ser Ser Ser Val Leu Val Thr Gly Gly Leu Gly Ser  
 420 425 430  
 Gly Lys Thr Ala Leu Thr His Leu Leu Ala His Arg Leu Arg Lys Asp  
 435 440 445  
 His Leu Phe Asn Val Lys Tyr Phe Ser Cys Arg Lys Leu Val Thr Asp  
 450 455 460

Glu Thr Arg Ile Ser Asn Ile Lys Glu Thr Leu Asn Arg Leu Phe Met  
 465 470 475 480  
 Ser Ala Ser Trp Cys Ala Arg Leu Gly Gly Gln Ser Val Val Ile Leu  
 485 490 495  
 Asp Asp Leu Asp Lys Leu Cys Pro Val Glu Thr Glu Leu Gln Val Gly  
 500 505 510  
 Gly Asp Asn Gly Arg Ser Arg Gln Asn Ser Glu Val Ile Cys Ser Met  
 515 520 525  
 Gly Arg Glu Tyr Cys Ser Met Asn Ser Ser Val Val Leu Leu Ala Thr  
 530 535 540  
 Ala Gln Ser Lys Glu Ser Leu Asn Asn Val Ile Ile Gly Gly His Val  
 545 550 555 560  
 Val Arg Glu Ile Ile His Leu Arg Ala Pro Asp Lys Glu Gly Arg Arg  
 565 570 575  
 Lys Val Leu Glu Lys Leu Thr Ser His Asp Arg Ala Ser Thr Ser Leu  
 580 585 590  
 Thr Asn Gly His Ala Arg Thr Ala Ser Ala Ser Thr Gln Asp Ser Trp  
 595 600 605  
 Leu Asp Pro Ser Asn Pro Gly Ser Arg Pro Ser Ser Ala Gly Ala Asp  
 610 615 620  
 Gly Phe Val Leu Ala Arg Asp Ile Asp Phe Leu Asp Leu Ala Gly Lys  
 625 630 635 640  
 Thr Asp Gly Tyr Met Pro Gly Asp Leu Val Leu Leu Val Ala Arg Ala  
 645 650 655  
 Arg Asn Glu Ala Leu Ile Arg Ser Val Arg Asp Pro Gln Ala Ala Ser  
 660 665 670  
 Lys Ala Val Thr Leu Gly Ala Glu Asp Phe Glu Asn Ala Ile Arg Gly  
 675 680 685  
 Phe Thr Pro Ala Ser Leu Arg Asn Val Thr Leu Thr Ser Ser Thr Thr  
 690 695 700  
 Thr Phe Ser Ala Ile Gly Gly Leu His Glu Thr Arg Lys Met Leu Leu  
 705 710 715 720  
 Glu Thr Leu Gln Tyr Pro Thr Lys Tyr Ala Pro Ile Phe Ala Gln Cys  
 725 730 735  
 Pro Leu Arg Leu Arg Ser Gly Leu Leu Tyr Gly Phe Pro Gly Cys  
 740 745 750  
 Gly Lys Thr Leu Leu Ala Ser Ala Ile Ala Gly Glu Cys Gly Leu Asn  
 755 760 765  
 Phe Ile Ser Val Lys Gly Pro Glu Ile Leu Asn Lys Tyr Ile Gly Ala  
 770 775 780  
 Ser Glu Lys Ser Val Arg Asp Leu Phe Glu Arg Ala Gln Ala Ala Arg  
 785 790 795 800  
 Pro Cys Ile Leu Phe Phe Asp Glu Phe Asp Ser Ile Ala Pro Lys Arg  
 805 810 815  
 Gly His Asp Ser Thr Gly Val Thr Asp Arg Val Val Asn Gln Leu Leu  
 820 825 830  
 Thr Gln Met Asp Gly Ala Glu Gly Leu Ser Gly Val Tyr Val Leu Ala  
 835 840 845  
 Ala Thr Ser Arg Pro Asp Leu Ile Asp Pro Ala Leu Leu Arg Pro Gly  
 850 855 860  
 Arg Leu Asp Lys Ser Leu Leu Cys Asp Met Pro Asn His Ser Asp Arg  
 865 870 875 880  
 Leu Asp Ile Ile Arg Ala Val Ser Thr Lys Leu Val Met Asp Ala Glu  
 885 890 895  
 Val Ala Ala Arg Met Asp Glu Ile Ala Ala Arg Thr Asp Gly Phe Ser  
 900 905 910



Country	Year	Population (millions)	GDP (billion USD)	Urban population (%)	Life expectancy (years)	Infant mortality (per 1,000 live births)	Health expenditure (billion USD)	Health expenditure (% of GDP)
Algeria	2000	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2001	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2002	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2003	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2004	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2005	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2006	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2007	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2008	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2009	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2010	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2011	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2012	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2013	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2014	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2015	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2016	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2017	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2018	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2019	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2020	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2021	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2022	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2023	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2024	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2025	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2026	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2027	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2028	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2029	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2030	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2031	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2032	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2033	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2034	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2035	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2036	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2037	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2038	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2039	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2040	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2041	29.0	10.0	55.0	70.0	10.0	0.5	0.5
Algeria	2042	29.0</						

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<210> 42783
<211> 117
<212> PRT
<213> A.fumigatus
```

[illegible]

<400> 42784

Glu Pro Pro Arg Thr Ile Gln Ala Asp Asn Thr Tyr Ile Lys Leu Phe  
 1 5 10 15  
 Val Phe Val Asp Arg His Cys Glu Leu Ile Leu Cys Glu Ala Phe Gly  
 20 25 30

## 19232

Lys Asn Ala Phe Pro Asn Pro Ser His Ala Lys Phe Thr Leu Phe Thr  
 35 40 45  
 Val Pro Asn Ser Gly Ser Thr Ala Leu Ala His Thr Ala Asn Glu Ile  
 50 55 60  
 Val Asp Leu Ala Thr Gly Ala Leu Val Tyr Ala Gly Met Thr Val Ile  
 65 70 75 80  
 Gly Gln

&lt;210&gt; 42785

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42785

Gln Arg Thr Gln Gly Leu Thr Cys Leu Val Ser Gln Asn Ile Tyr Gln  
 1 5 10 15  
 Gly Leu Gln Leu Tyr Val Leu Gly Lys Phe Gln Leu Glu Lys Leu Cys  
 20 25 30  
 Cys His Val Gln Asn Tyr Arg Ile Thr Cys Asn Tyr Val Val Ala Pro  
 35 40 45  
 Val Val Leu Leu Leu Gly Lys His Pro Ile Val Glu Gln Tyr His  
 50 55 60

&lt;210&gt; 42786

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42786

Gly Arg Val Pro Asn Gly Val Lys Val Gln Arg Val Val Phe Cys Pro  
 1 5 10 15  
 Pro Trp Ala Arg Asn Ser Pro Asp Trp Leu Arg Pro Trp His Leu Gly  
 20 25 30  
 Ser Gln Ser Gly Lys Ala Ala Ala Gln Thr Asp Glu Ser Asp Lys Thr  
 35 40 45  
 Ser Lys Glu Ser Gln Ala Cys Glu Gln Leu Ser Gln Ala Leu Gly Gly  
 50 55 60  
 Val Thr Ile Ile Gln Lys Gly Pro His Asp Val Ile Ser Asn Gly Val  
 65 70 75 80  
 Thr Thr Leu Ile Ser Asp Leu Lys Gly Gly Leu Lys Arg Ser Gly Gly  
 85 90 95  
 Gln Gly Asp Thr Leu Thr Gly Ser Leu Gly Thr Leu Leu Ala Trp Arg  
 100 105 110  
 Ala Ala Tyr His Asn Lys Leu Trp Asp Ser Gly Glu Gln Glu Asn Pro  
 115 120 125  
 Lys Glu Ala Gln Ser Lys Gln Asp Val Leu Ala Glu Leu Glu Ser Glu  
 130 135 140  
 Asn Lys Arg Met Ser Pro Ala Thr Thr Leu Leu Val Ala Trp Ala  
 145 150 155 160  
 Gly Ser Gly Ile Thr Arg Glu Cys Ser Arg Arg Ala Phe Asn Ala Lys  
 165 170 175  
 Gly Arg Ser Leu Gln Ala Ser Asp Leu Thr Asp Glu Val His Glu Ser  
 180 185 190  
 Phe Leu Glu Leu Ile Gly Glu Pro Glu Ala Ser Arg Thr His Leu  
 195 200 205

<210> 42787  
 <211> 219  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (41)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 42787

```

Arg Thr Ser Phe Gly Val Asn Lys Thr Pro Ala Ser Ser Thr Ser Gly
1      5      10      15
Cys Leu Leu Cys Met Trp Thr Tyr Ala Thr Trp Leu Ala Asn Ser Ser
20      25      30
Ser Ala Ser Arg Cys Gly Val Ser Xaa Met Lys Asn Met Thr Ser Lys
35      40      45
Arg Glu Ser Asn Ala Ala Gly Lys Val Met Phe Ser Thr Gly Lys Asn
50      55      60
Ser Arg Val Val Pro Ser Ile Lys Lys Glu Trp Leu Gln Pro Glu Met
65      70      75      80
Glu Val Thr Ala Phe Arg Val Val Val Met Pro Ala Leu Glu Met Glu
85      90      95
Met Val Cys Cys Ser Ile Thr Ser Trp Ile Ala Val Arg Ser Ala Ser
100     105     110
Ser Ile Leu Ser Asn Ser Ser Ile Gln Gln Met Pro Leu Ser Ala Lys
115     120     125
Thr Arg Ala Pro Pro Ser Ser Thr Ile Ser Ser Val Thr Gly Ser Leu
130     135     140
Ile Thr Ala Ala Val Arg Pro Thr Pro Leu Leu Pro Arg Pro Val Val
145     150     155     160
Tyr Thr Pro Arg Gly Ala Thr Leu Ala Ile Tyr Phe Ser Asn Cys Asp
165     170     175
Leu Ala Thr Pro Gly Ser Pro Ile Arg Gln Ile Leu Met Ser Pro Arg
180     185     190
Ile Cys Met Pro Ser Pro Ile Ser Phe Val Thr Pro Pro Ile Ser Arg
195     200     205
Arg Ser Lys Ala Phe Phe Thr Ser Arg Trp Pro
210     215

```

<210> 42788  
 <211> 214  
 <212> PRT  
 <213> A.fumigatus

<400> 42788

```

Thr Val Ile Tyr Ile Asp Ala Asp Thr Lys Arg Gln Tyr Thr Tyr Gln
1      5      10      15
Asp Val Lys Glu Thr Ala Leu Ala Phe Gly Asn Gly Leu Lys Ala Val
20      25      30
Leu Asp Trp Lys Lys Gly Asp Val Leu Ala Leu Phe Thr Pro Asn Cys
35      40      45
Ile Asp Thr Pro Ala Val Met Trp Gly Thr His Trp Ala Gly Gly Val
50      55      60
Val Ser Pro Ala Asn Pro Ala Tyr Thr Val Glu Glu Leu Ala Phe Gln

```

## 19234

```

65              70              75              80
Leu Lys Asn Ser Gly Ala Lys Ala Leu Ile Thr Gln Met Ala Leu Leu
      85              90              95
Pro Val Ala Arg Ala Ala Ala Lys Gln Ala Gly Ile Thr Glu Asp Arg
      100             105             110
Ile Ile Leu Ile Gly Asp Glu Arg Asp Ser Gln Ala Lys Phe Lys His
      115             120             125
Phe Ser Ser Ile Arg Asn Ile Ser Gly Ala Thr Arg Tyr Arg Lys Thr
      130             135             140
Lys Ile Asn Pro Ala Thr Asp Leu Ala Phe Leu Val Tyr Ser Ser Gly
145             150             155             160
Thr Thr Gly Val Pro Lys Gly Val Met Leu Ser His Arg Asn Ile Val
      165             170             175
Ala Asn Ser Leu Gln Leu Ala Ala Gly Glu Ala Lys Gln Leu Ser Trp
      180             185             190
Asn Gly Gly Ala Asp Gly Lys Gly Asp Arg Ile Leu Ala Phe Leu Pro
      195             200             205
Phe Tyr His Ile Tyr Gly
      210

```

&lt;210&gt; 42789

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42789

```

Trp Leu Ala Ala Asn Met Val Val Ser Ser Phe Ala Ile Gly Val Leu
1              5              10              15
Gly Lys Ser Leu Phe Asp Leu Gly Phe Val Asp Ala Ile Leu Thr Cys
      20              25              30
Leu Phe Phe Asn Leu Leu Gly Val Leu Thr Val Cys Phe Phe Ser Cys
      35              40              45
Phe Gly Ala Ala Phe Gly Leu Arg Gln Met Val Leu Ser Arg Phe Trp
      50              55              60
Phe Gly Trp Gly Pro Thr Lys Phe Ser Met Tyr Phe Phe Ala
65              70              75

```

&lt;210&gt; 42790

&lt;211&gt; 422

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42790

```

Pro Phe Ala Ser Ser His Ala Ser Val Leu Pro Ser Gly Tyr Gly Arg
1              5              10              15
Trp Cys Phe Arg Gly Ser Gly Ser Ala Gly Gly Pro Pro Ser Ser Val
      20              25              30
Cys Ile Phe Leu His Asn Leu Thr Tyr Cys Leu Phe Lys Val Ala Gly
      35              40              45
Ala Asp Ile Leu Val Pro Ser Val Ala Ile Leu Asn Val Leu Ala Cys
      50              55              60
Val Gly Trp Ser Ala Ala Asn Ala Ile Val Gly Ala Gln Leu Ile Asn
65              70              75              80
Ala Val Asn Gly Asn Val Pro Gly Phe Ala Ala Ile Leu Ile Ile Ala
      85              90              95
Ile Cys Thr Phe Val Ile Thr Phe Ala Gly Tyr Lys Val Val His Ala

```

## 19235

100 105 110  
 Tyr Glu Tyr Trp Ser Trp Ile Pro Thr Phe Ile Val Phe Met Ile Val  
 115 120 125  
 Leu Gly Thr Phe Ala His Ser Gly Asp Phe Arg Asn Leu Pro Met Glu  
 130 135 140  
 Val Gly Thr Ser Glu Met Gly Gly Val Leu Ser Phe Gly Ser Thr Val  
 145 150 155 160  
 Tyr Gly Phe Ala Thr Gly Trp Thr Ser Tyr Ala Ala Asp Tyr Thr Val  
 165 170 175  
 Tyr Gln Pro Ala Asn Arg Ser Arg Arg Lys Ile Phe Leu Ser Ala Trp  
 180 185 190  
 Ile Gly Leu Ile Ile Pro Leu Leu Phe Cys Gln Met Leu Gly Ile Ala  
 195 200 205  
 Val Met Thr Ala Thr Gly Ile Asp Asp Gly Asn Asn Lys Tyr Gln Met  
 210 215 220  
 Gly Tyr Asp Ala Ser Gly Asn Gly Gly Leu Leu Asn Ala Val Leu Glu  
 225 230 235 240  
 Pro Leu Gly Gly Phe Gly Lys Phe Cys Leu Val Ile Leu Ala Leu Ser  
 245 250 255  
 Ile Ile Ala Asn Asn Cys Pro Asn Ile Tyr Ser Val Ala Leu Thr Leu  
 260 265 270  
 Gln Val Leu Ser Arg Tyr Ser Gln Arg Val Pro Arg Phe Val Trp Val  
 275 280 285  
 Phe Leu Gly Ser Cys Ala Ser Val Ala Ile Ala Ile Pro Gly Tyr Ser  
 290 295 300  
 His Phe Glu Thr Val Leu Glu Asn Phe Met Asn Phe Ile Ala Tyr Trp  
 305 310 315 320  
 Leu Ser Ile Tyr Ser Gly Ile Ala Leu Thr Asp His Phe Leu Phe Lys  
 325 330 335  
 Arg Gly Phe Gly Gly Tyr Arg Pro Glu Ile Tyr Asp Lys Arg Asp Lys  
 340 345 350  
 Leu Pro Leu Gly Ile Ala Ala Ser Ile Ala Phe Gly Phe Gly Val Ala  
 355 360 365  
 Gly Met Ile Thr Gly Met Ser Gln Ser Trp Trp Val Gly Pro Ile Ala  
 370 375 380  
 Leu His Ala Gly Gln Ala Pro Phe Gly Gly Asp Val Gly Phe Glu Leu  
 385 390 395 400  
 Gly Phe Ala Phe Ser Ala Val Met Tyr Ala Val Leu Arg Pro Ile Glu  
 405 410 415  
 Ile Lys Ile Phe Gly Arg  
 420

&lt;210&gt; 42791

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42791

Ser Phe Phe Phe Ser Phe Phe Ser Ser Arg Ala Ala Asp Trp Ala Asp  
 1 5 10 15  
 Asp Glu Glu Phe Asp Asp Pro Ser Ala Leu Pro Ala Gln Gln Val Thr  
 20 25 30  
 Thr Asn Lys Asp Gly Thr Lys Thr Val Val Ser Tyr Arg Phe Asn Asp  
 35 40 45  
 Glu Gly Lys Lys Val Lys Val Thr Arg Arg Ile Lys Thr Thr Val Val  
 50 55 60

## 19236

Arg Glu His Val Asn Pro Gln Val Ala Glu Arg Arg Ser Trp Ala Lys  
 65 70 75 80  
 Phe Gly Leu Glu Lys Gly His Ala Ala Gly Pro Ser Phe Asp Thr Thr  
 85 90 95  
 Ser Val Gly Glu Asn Ile Val Phe Arg Pro Ser Val Asn Trp Arg Val  
 100 105 110  
 Gln Ala Ala Glu Ala Glu Lys Ala Gly Pro Glu Lys Gly Ser Ile Lys  
 115 120 125  
 Asp Gln Leu Lys Asp Lys Lys Val Lys Cys Arg Ile Cys Ser Gly Glu  
 130 135 140  
 His Phe Thr Ala Arg Cys Pro Phe Lys Asp Thr Met Ala Pro Val Asp  
 145 150 155 160  
 Glu Thr Ala Ala Ala Gly Ala Glu Pro Gly Ala Asp Asp Val Pro Ala  
 165 170 175  
 Ala Gly Gly Leu Gly Ala Gly Thr Ser Tyr Val Pro Pro His Leu  
 180 185 190  
 Arg Lys Gly Ala Ala Ala Gly Gly Glu Arg Met Ala Gly Lys Tyr Glu  
 195 200 205  
 Lys Asp Asp Leu Ala Thr Leu Arg Val Thr Asn Val Ser Phe Thr Ser  
 210 215 220  
 Cys Pro Ser Ala Leu His Pro Ser Ile Ile Phe Trp Asn Lys Tyr  
 225 230 235

&lt;210&gt; 42792

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42792

Val Ser Glu Leu Ala Glu Glu Ser Glu Leu Arg Asp Leu Phe Glu Arg  
 1 5 10 15  
 Phe Gly Arg Val Thr Arg Val Phe Leu Ala Arg Asp Arg Glu Thr Gln  
 20 25 30  
 Arg Ala Lys Gly Phe Ala Phe Ile Ser Phe Ala Asp Arg Thr Asp Ala  
 35 40 45  
 Ala Arg Ala Cys Glu Lys Met Asp Gly Cys Thr Phe Ser Ser Pro Leu  
 50 55 60  
 Ala Ser Phe Phe Leu Ser Phe Tyr Glu Ile Gln Leu Leu Ile Ser Phe  
 65 70 75 80  
 Pro Phe Cys Ser Trp Leu Pro Ser Phe Asp Pro Pro Arg Arg Val Arg  
 85 90 95  
 Lys Glu Gly Asp Leu Asn Ser Cys Phe Leu Ile Ser Phe His Gly Pro  
 100 105 110  
 Trp Val Phe Ser Ser Gly Arg Ala Arg Phe Met Thr Arg Asp Leu Pro  
 115 120 125  
 Pro Phe Ser Leu Tyr Cys Met Thr Arg Ser Ile Met Met Ile Ile Arg  
 130 135 140  
 Arg His Ala Ser Cys Gly Leu Leu Ala Arg Gly Ala Arg Pro Leu Asp  
 145 150 155 160  
 Thr Lys Lys Ser Tyr Arg Phe Arg Gly Phe Ile Phe Ser Pro Phe Ser  
 165 170 175  
 Ser Glu Trp Lys Arg Pro Lys Met Arg Lys Ser Cys His Ser Leu  
 180 185 190

&lt;210&gt; 42793

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42793

```

Pro Leu Phe Cys Pro Pro Ala Thr Leu Leu Gln Ser Pro Phe Leu Glu
1      5      10      15
Gly Ser Val Thr Ser Asp Ser Asp Tyr Thr Gly Ala Pro Arg Gln Phe
      20      25      30
Ala Gly Pro Thr Gly Phe Ser Met Asp Asp Glu Asp Asn Arg Arg Arg
      35      40      45
Asn Gly Ala Ile Gly Pro Ser Leu Ala Gln Ser Val Ser Ile Pro Ala
      50      55      60
Thr Asn Gly Leu Arg Tyr Ser Thr Gln Gln Ser Ala Met Gln Asp Val
65      70      75      80
Ala

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&lt;210&gt; 42794

&lt;211&gt; 405

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42794

```

Arg Leu Ser Leu Met Leu Tyr Ala Ser Phe Gln Gly His Phe Leu Leu
1      5      10      15
His Gln Ala Leu Ser Ile His Ile Gln Pro Ala Arg His Thr Arg Glu
      20      25      30
Cys Arg Thr Phe Gly His Asn Val Cys Leu His Cys Arg Ser Ser Leu
      35      40      45
Leu Pro Val Asn Thr Pro Ser Val Glu Ala Ile Leu Met Ile Leu Thr
      50      55      60
Ser Pro Pro Ser Gln Pro Pro Pro Gly Leu Ser Ser Ala Leu Gln Ser
65      70      75      80
Gln Gly Gln Gly Leu Ser Ser Ser Ser Ser Ile Leu Gly Arg His Glu
      85      90      95
Asn Tyr Ala Ala Gln Tyr Ala Leu Gln Arg Gly Ser Thr Cys Pro Ser
      100      105      110
Leu Ser Ser Leu Ser Glu Met Ser Arg Ile Ser Ser Tyr Thr Ser Thr
      115      120      125
Pro Arg Gly Leu Asp His Ser Phe Asp Ala Pro His Asn Leu Phe Phe
      130      135      140
Gly Gln Thr Gly Asn Ile Tyr Met Asp Ser Gln Gln Arg Leu Pro Gln
145      150      155      160
Pro Val Ala Asp Ala Pro Pro Phe His Glu Thr Asp Ile Leu Leu Pro
      165      170      175
Ile Val Ala Gly Ser Gln Ala Ile Lys Pro Asp Ile His Ala Lys Ile
      180      185      190
His Lys Gly Phe Phe Gln Val Asp Asp Lys Trp Thr Cys Tyr Arg Arg
      195      200      205
Asn Tyr Phe Ser Val Ser Cys Ser Phe Ser Leu His Pro Trp Thr Arg
210      215      220
Ala Pro Leu Tyr Leu Lys Leu Ser Asp Gln Thr Thr Glu Arg Ile Leu
225      230      235      240
Lys Phe Ser Met Cys Ile Ser Ala Val Val Asn Ala Gln Tyr Gly Glu
      245      250      255
Thr Arg Glu Leu Val Gln His Thr Pro Lys Arg Asp Lys Gln Ser Glu

```

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<210> 42795
<211> 80
<212> PRT
<213> A.fumigatus
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<210> 42796
<211> 76
<212> PRT
<213> A.fumigatus
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<210> 42797  
<211> 284



&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42797

Gln Arg Ser Gly Lys Arg Ser Met Pro Ile Leu His Glu His Phe Ala  
 1 5 10 15  
 Pro Gly Ser Gln Ile Lys Glu Met Gln Ala His Thr Asp Met Val Thr  
 20 25 30  
 Ala Ile Asp Phe Asp Tyr Pro Phe Gly Thr Met Val Ser Ala Ala Leu  
 35 40 45  
 Asp Asp Thr Val Arg Val Trp Asp Leu Asn Thr Gly Arg Cys Thr Gly  
 50 55 60  
 Phe Leu Glu Gly His Asn Ala Ser Val Arg Cys Leu Gln Val Glu Asp  
 65 70 75 80  
 Asn Ile Val Ala Thr Gly Ser Met Asp Ala Ser Val Lys Leu Trp Asp  
 85 90 95  
 Leu Ser Arg Ala Arg Thr Val Thr Arg Asp Asn Arg Leu Asn Lys Pro  
 100 105 110  
 Ser Glu Gly Gly Glu Asp Asp Asn Ala Ser Asp Ala Phe Ser Leu  
 115 120 125  
 Phe Ser Ala Thr Thr Leu Glu Asp Cys Tyr Val Phe Ser Leu Asp Ala  
 130 135 140  
 His Val Asp Glu Val Thr Ala Leu His Phe Arg Gly Asn Thr Leu Ile  
 145 150 155 160  
 Ser Gly Ser Ala Asp Lys Thr Leu Arg Gln Trp Asp Leu Val Lys Gly  
 165 170 175  
 Arg Cys Val Gln Thr Leu Asp Val Leu Trp Ala Ala Ala Gln Ala Ser  
 180 185 190  
 Thr Leu Ala Ala Asp Thr Gln Trp Arg Pro Ser Gly Arg Leu Pro Asp  
 195 200 205  
 Ala Ser Ala Asp Phe Val Gly Ala Leu Gln Cys Phe Asp Ala Ala Leu  
 210 215 220  
 Ala Cys Gly Thr Ala Asp Gly Met Val Arg Leu Trp Asp Leu Arg Ser  
 225 230 235 240  
 Gly Gln Val His Arg Ser Leu Val Gly His Thr Gly Pro Ile Thr Cys  
 245 250 255  
 Leu Gln Phe Asp Glu Val His Leu Val Thr Gly Ser Gln Asp Arg Ser  
 260 265 270  
 Ile Arg Val Ser Leu Leu Ser Val Cys Leu Phe Ser  
 275 280

&lt;210&gt; 42798

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42798

Leu Gln Ile Trp Asp Leu Arg Met Gly Ser Ile Phe Asp Ala Tyr Ala  
 1 5 10 15  
 Tyr Asp Lys Pro Ile Thr Ser Met Met Phe Asp Thr Lys Arg Ile Val  
 20 25 30  
 Ala Ala Ala Gly Glu Asn Val Val Lys Val Tyr Asp Lys Ala Asp Gly  
 35 40 45  
 His His Trp Asp Cys Gly Ala Gly Val Gly Ala Asp Glu Ser Gly Pro  
 50 55 60  
 Ala Pro Ala Thr Val Glu Arg Val Arg Leu Lys Asp Gly Tyr Leu Leu

[illegible]

<400> 42801															
Cys	Met	Leu	Ile	Leu	Leu	Gln	His	Val	Gln	Ser	Arg	His	Ile	Glu	Ala
1				5					10					15	
Phe	Gly	Arg	Lys	Val	Thr	Ser	Thr	Ala	Gly	His	Leu	Met	Gly	Pro	Ile
			20					25					30		
Thr	Asp	Ser	Ser	Asn	Gly	Ser	His	Tyr	His	Thr	Ala	Met	Ala	Asp	Ile
		35					40					45			
His	Arg	Glu	Leu	Arg	Arg	Pro	Thr	Thr	Gln	Arg	Lys	Val	Phe	Ser	Leu
	50					55					60				
Thr	Gln	Thr	Ser	Pro	Thr	Asp	Leu	Val	Arg	Ser	Lys	Leu	Ser	Thr	Ser
65					70					75					80

## 19241

Glu Ile Gln Ser Arg Ala Leu Ser Ser Val Pro Asp Glu Leu Leu Ala  
                     85                    90                    95  
 Asn Ile Pro Glu Asp Ser Ser Ser Tyr Ser Leu Phe Glu Gly Phe Lys  
                     100                    105                    110  
 Ala Thr Gln Asp Asp His Glu Phe Arg Lys Ala His Arg Arg Arg Ser  
                     115                    120                    125  
 Ser Lys Gly Lys Lys Leu Leu Lys Asp Gly Glu Ala Ala Gly Ala Leu  
                     130                    135                    140  
 Pro Ser Ala Pro Thr Asp Leu Lys Lys Glu Arg Asp Leu Leu Ser Arg  
 145                    150                    155                    160  
 Arg Leu Asp Leu Met Gly Val Arg Lys Asn Met Cys Ser Ser Glu Ile  
                     165                    170                    175  
 His Glu Ile Asp Asn Lys Ile Ala Asn Leu His Asn Ile Arg Lys Ile  
                     180                    185                    190  
 Val Leu Asp Arg Leu Ala Ala Leu Glu Met Glu Glu Ala Glu Leu Glu  
                     195                    200                    205  
 His Gln Cys Gly Leu Trp  
                     210

&lt;210&gt; 42802

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42802

Leu Gly Arg Phe Gly Arg Arg Gly Phe Gly Cys Val Phe His Val Arg  
 1                    5                    10                    15  
 Ile His Leu Ser Glu Thr Thr Phe Thr Phe Ser Lys Glu Ser Glu Thr  
                     20                    25                    30  
 Ala Phe Tyr Lys Tyr Cys Leu Ser Lys Leu Val Thr Leu Pro Ser Ala  
                     35                    40                    45  
 Ala Asn Asn Ala Gln Gly Asn Ala Arg Cys Leu Ser Tyr Thr Asn Thr  
                     50                    55                    60  
 Ser Arg Pro Asp His Arg Ser Arg Lys Cys Lys Pro Ile Leu Thr Trp  
 65                    70                    75                    80

&lt;210&gt; 42803

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42803

Thr Cys Lys Ser Thr Arg Tyr Phe His Leu Phe Phe Glu Asp Arg Glu  
 1                    5                    10                    15  
 Glu Leu Gly Leu Leu Val Gln Asp Lys Pro Val Ile Lys Asp Leu Thr  
                     20                    25                    30  
 Ser Tyr Leu Gln Arg Lys Ala Ser Ser Asn Pro Ser Leu Ala Pro Leu  
                     35                    40                    45  
 Ser Gln Leu Leu Ser Gln Ser Pro Ile Pro Pro Ile Gly Leu Ile Leu  
                     50                    55                    60  
 Thr Glu Arg Leu Ile Asn Met Pro Ala Glu Val Val Pro Pro Met Tyr  
 65                    70                    75                    80  
 Asn Met Leu Leu Glu Glu Ile Ala Trp Ala Ile Glu Asp Lys Glu Pro  
                     85                    90                    95  
 Tyr Asn Phe Ser His Tyr Leu Ile Val Ser Lys Thr Tyr Glu Glu Val  
                     100                    105                    110

## 19242

Glu Ser Lys Leu Asp Met Glu Glu Ser Arg Pro Gln Lys Lys Lys Lys  
 115 120 125  
 Lys Ser Gly Ser Asn Val Glu Arg Phe Phe Phe His Pro Glu Asp Glu  
 130 135 140  
 Val Phe Glu Arg His Ala Ile Cys Ser Gly Ser Ile Glu Tyr Thr His  
 145 150 155 160  
 Lys His Asp Asp Gly Leu Ser Asp Ser Lys Arg Ala Phe Gln Asp Leu  
 165 170 175  
 Gly Ile Lys Thr Ser Gly Ser Leu Ile Leu Ile Asp Gly Pro Lys Leu  
 180 185 190  
 Glu Ala Ala Val Lys Asp Val Thr Asp Tyr Val Lys Pro Pro Val  
 195 200 205

&lt;210&gt; 42804

&lt;211&gt; 753

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42804

Phe Leu Phe Gln Leu Thr Ser His Arg Lys Arg Tyr Thr Ala Val Gln  
 1 5 10 15  
 Ser His Leu Lys Gln Met Pro Pro Lys Arg Thr Arg Arg Ala Gly Ala  
 20 25 30  
 Ala Ala Arg Ser Glu Ala Ser Ile Ile Phe Gly His Ser Ser Pro Ser  
 35 40 45  
 Val Ser Asn Gln Pro Leu Pro Asp Val Pro Thr Gln Pro Ser Trp Ala  
 50 55 60  
 Tyr Gly Ser Pro Ala Ala Pro Val Leu Pro Arg Arg Leu Val Ala Lys  
 65 70 75 80  
 Asp Ile Gly Leu Ala Glu Val Ala Glu Ser Ile Asp Gln Thr Ile Arg  
 85 90 95  
 Asp Ala Glu Lys Arg Asp Arg Arg Asn Asp Pro Asp Glu Ala Asn Asp  
 100 105 110  
 Thr Asp Asp Arg Pro His Met Asn Thr Arg Ser Arg Arg Pro Ser  
 115 120 125  
 Ala Ala Asn Ala Ser Pro Val Arg Arg Arg Thr Lys Arg Glu Pro Thr  
 130 135 140  
 Pro Asp Gln Val Gln Leu Leu Asp Ala Leu Arg Glu Ala Thr Val Ser  
 145 150 155 160  
 Pro Asn Gln Arg Asn Gly Glu Asn Glu Thr Gln Ala Glu Arg Ser Thr  
 165 170 175  
 Ala Thr Pro Thr Pro Pro Ile Pro His Thr Leu Ser Thr Met Ser Ser  
 180 185 190  
 Pro Thr Ser Gln Ile Leu Pro Asp Pro Lys Tyr Pro Ser Leu Pro Ile  
 195 200 205  
 Glu Gln Leu Tyr Pro Ser Pro Leu Gln Arg Ile Gly Ser Pro Thr Arg  
 210 215 220  
 Asn Asp Ala Ser Leu Glu Met Ser Gln Asn Thr Gly Ile Asp Asp Asn  
 225 230 235 240  
 Glu Ser Val Ile Ser Trp Met Val Glu Arg Asp Ile His Asp Asp Asp  
 245 250 255  
 Leu Gln Arg Thr Arg Ser Ala Arg Tyr Arg Arg Glu Pro Val Gly Lys  
 260 265 270  
 Asn Ile Thr Ala Pro Pro Arg Arg Phe Ser Gly Leu Ala Phe Ala Asn  
 275 280 285  
 Glu Thr Ile Val Glu Glu Asp Glu Pro Asp Ser Arg Leu Ser Val Ser

290	295	300
Lys Thr Pro Gln Glu Ser Thr Val Glu Ser Glu Ala Gln Ser Asp His		
305	310	315
Gln Thr Glu Ser Asp Gln Pro Leu Val Ser Leu Glu Pro Gln Lys Glu		
	325	330
Pro Pro Pro Gln Val Glu Glu Val Ser Ser Ala Pro Ala Arg Thr Ile		
	340	345
Ile Pro Asn Phe Phe Thr Lys Asp Gln Ser Phe Asn Asn Ser Thr Thr		
	355	360
Gln Pro Ser Asp Gln Ser Phe Thr Asp His Ala Arg Ser Thr Ala Ala		
	370	375
Asp Ser Phe Ile Pro Arg Ile Ser Val Ser Leu Pro Trp Thr Gln Ile		
385	390	395
Leu Arg Leu Ser Gly Ala Ile Leu Leu Thr Ala Ile Ser Leu Leu Thr		
	405	410
Ile Tyr Ser Phe Ser Asp Ser Ile Ala Asn Ile Pro His Asp Ile Ala		
	420	425
Ser His Phe Pro Phe Arg Asn Pro Ala Pro Ser Ile Ser Leu Asn Ile		
	435	440
Ser Asp Ile Glu Ala Leu Asn Ser Leu Asn Asn Gln Val Met Arg Leu		
	450	455
Gly Ala Gln Val Ser Ser Ile Ser Lys Glu Leu Ser Val Val Lys Ser		
465	470	475
Glu Val Lys Asn Val Gly Gly Pro Thr Thr Ile Ile Glu Pro Val Lys		
	485	490
Val Pro Lys Lys Pro Asn Phe Leu Ser Ile Gly Thr Gly Val Leu Ile		
	500	505
Asp Pro Arg Met Thr Ser Pro Thr Tyr Gly Glu Lys Lys Ser Arg Leu		
	515	520
Pro Lys Trp Leu Arg Asp Arg Ala Ser Val Trp Gly Glu Ala Pro Arg		
	530	535
Pro Lys Pro Asn Pro Pro Leu Thr Ala Leu Val Pro Trp Asp Ser Val		
545	550	555
Gly Asp Cys Trp Cys Ser Ala Pro Arg Asn Gly Val Ser Gln Leu Ala		
	565	570
Leu His Leu Ser Arg Pro Ile Val Pro Glu Glu Val Val Val Glu His		
	580	585
Ile Pro Lys His Ala Thr Leu Asn Pro Gly Ala Ala Pro Lys Asp Met		
	595	600
Glu Leu Trp Val Gln Tyr Thr Ile Asn Lys Ser Thr Ser Gly Glu Leu		
	610	615
Pro Thr Asp Ala Gly Ser Ala Gly Trp Tyr Lys Ser Tyr Leu Asn Trp		
625	630	635
Leu Leu Ser Phe Glu Ser Gly Val Leu Glu Thr Glu Tyr Gln Ser Pro		
	645	650
Met Leu Ser Glu Arg Phe Ser Leu His Asp Tyr Ile Met Ser Tyr Leu		
	660	665
Arg Pro Ala Tyr His Asn Glu Pro Glu Ser Ala Tyr Trp Asn Ala Thr		
	675	680
Thr Leu Gly Pro Thr Phe Tyr Arg Val Gly Lys Trp Lys Tyr Asp Ile		
	690	695
His Gly Gln His His Val Gln Glu Phe Ser Leu Asp Ala Ile Ile Asp		
705	710	715
Gln Pro Asp Ile Arg Val Asp Arg Val Ala Phe Arg Val Asn Ser Asn		
	725	730
Trp Gly Ala Asn Phe Thr Cys Phe Tyr Arg Leu Lys Leu Tyr Gly His		

740

745

750

Leu

&lt;210&gt; 42805

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42805

```

Val Phe Thr Val Gly Gly Phe Leu Asn Val Val Ser Ala Ala Trp Ile
1          5          10          15
Asn Trp Phe Asn Ala Ile Leu Phe Ala Ala Leu Leu Val Leu Glu Leu
20          25          30
Phe Leu Met Pro Glu Thr Leu Tyr Pro Arg Thr Ile Met Leu Gln Arg
35          40          45
Met Pro Arg Asp Gly His Lys Pro Pro Ala Ser Ser Asp Ile Glu Gln
50          55          60
Ser Pro Thr Asp Glu Lys Thr Gly Ser Met Ala Thr Ala Ala Arg Pro
65          70          75          80
Ala Ile Pro Arg Thr Arg Glu Leu Gly Phe Phe Asn Val Arg Pro Val
85          90          95
Pro Gly Met Arg His Pro Lys Pro Trp Asp Ser Val Val Arg Phe Val
100         105         110
Leu Thr Phe Arg Phe Pro Val Ile Val Thr Ser Val Ile Gly Tyr Cys
115         120         125
Phe Leu Trp Tyr Trp Trp Ile Leu Ser Val Ile Thr Met Val Pro Ala
130         135         140
Ala Tyr Ala Ser Tyr Thr Pro Leu Ile Gln Gly Leu Leu Phe Leu Gly
145         150         155         160
Leu Phe Leu Gly Thr Val Thr Ser Glu Ile Cys Cys Ser Gly Arg Leu
165         170         175
Ser Asp Tyr Ile Val Asp Arg Leu Ala Lys Arg Asn Gly Ser Val Arg
180         185         190
Val Ala Glu Met Arg Leu Trp Leu Ala Tyr Pro Ala Ile Leu Ile Thr
195         200         205
Ala Gly Glu Leu Ile Val Pro Leu Ala Cys Thr Asn Gly Gly
210         215         220

```

&lt;210&gt; 42806

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42806

```

Leu Arg Phe Lys Lys Phe Leu Leu Cys Phe Ser Arg Leu Glu Asp Thr
1          5          10          15
Ile Thr Phe His Leu Ile Glu Arg Val Gln Phe Pro Leu Asn Lys Thr
20          25          30
Ile Tyr Ile Pro Gly Gly Val Lys Ile Pro Gly Asp Glu Val Ser Leu
35          40          45
Met Asp Tyr Leu Leu Arg Glu Gln Glu Arg Leu Gln Ser Arg Val Arg
50          55          60
Arg Tyr Glu Ser Pro Asp Glu Tyr Pro Phe Phe Pro Glu Val Leu Glu
65          70          75          80
Lys Pro Ile Leu Gln Pro Leu Glu Tyr Pro Lys Ile Leu His Asp Asn

```

Variable	Mean	Standard deviation	Minimum	Maximum	Skewness	Kurtosis	Jarque-Bera	Probability
Age	34.5	10.5	20	55	-0.1	3.0	0.1	0.9
Gender	0.5	0.5	0	1	0.0	3.0	0.1	0.9
Married	0.7	0.4	0	1	0.0	3.0	0.1	0.9
Children	1.5	1.0	0	4	0.0	3.0	0.1	0.9
Religion	0.5	0.5	0	1	0.0	3.0	0.1	0.9
Education	12.5	2.0	8	16	0.0	3.0	0.1	0.9
Occupation	0.5	0.5	0	1	0.0	3.0	0.1	0.9
Income	1000	500	0	2000	0.0	3.0	0.1	0.9
Assets	5000	2000	0	10000	0.0	3.0	0.1	0.9
Liabilities	2000	1000	0	4000	0.0	3.0	0.1	0.9
Net Worth	3000	1500	0	6000	0.0	3.0	0.1	0.9
Debt Ratio	0.4	0.2	0	1	0.0	3.0	0.1	0.9
Equity Ratio	0.6	0.2	0	1	0.0	3.0	0.1	0.9
Capital Ratio	0.7	0.2	0	1	0.0	3.0	0.1	0.9
Debt to Equity Ratio	0.6	0.3	0	1	0.0	3.0	0.1	0.9
Debt to Capital Ratio	0.8	0.4	0	1	0.0	3.0	0.1	0.9
Debt to Net Worth Ratio	0.6	0.3	0	1	0.0	3.0	0.1	0.9
Equity to Net Worth Ratio	0.4	0.2	0	1	0.0	3.0	0.1	0.9
Capital to Net Worth Ratio	0.5	0.2	0	1	0.0	3.0	0.1	0.9
Debt to Assets Ratio	0.4	0.2	0	1	0.0	3.0	0.1	0.9
Equity to Assets Ratio	0.6	0.2	0	1	0.0	3.0	0.1	0.9
Capital to Assets Ratio	0.7	0.2	0	1	0.0	3.0	0.1	0.9
Debt to Liabilities Ratio	0.4	0.2	0	1	0.0	3.0	0.1	0.9
Equity to Liabilities Ratio	0.6	0.2	0	1	0.0	3.0	0.1	0.9
Capital to Liabilities Ratio	0.7	0.2	0	1	0.0	3.0	0.1	0.9
Debt to Income Ratio	0.4	0.2	0	1	0.0	3.0	0.1	0.9
Equity to Income Ratio	0.6	0.2	0	1	0.0	3.0	0.1	0.9
Capital to Income Ratio	0.7	0.2	0	1	0.0	3.0	0.1	0.9
Debt to Assets Ratio	0.4	0.2	0	1	0.0	3.0	0.1	0.9
Equity to Assets Ratio	0.6	0.2	0	1	0.0	3.0	0.1	0.9
Capital to Assets Ratio	0.7	0.2	0	1	0.0	3.0	0.1	0.9
Debt to Liabilities Ratio	0.4	0.2	0	1	0.0	3.0	0.1	0.9
Equity to Liabilities Ratio	0.6	0.2	0	1	0.0	3.0	0.1	0.9
Capital to Liabilities Ratio	0.7	0.2	0	1	0.0	3.0	0.1	0.9
Debt to Income Ratio	0.4	0.2	0	1	0.0	3.0	0.1	0.9
Equity to Income Ratio	0.6	0.2	0	1	0.0	3.0	0.1	0.9
Capital to Income Ratio	0.7	0.2	0	1	0.0	3.0	0.1	0.9

```
<210> 42807
<211> 86
<212> PRT
<213> A.fumigatus
```

```
<210> 42808
<211> 140
<212> PRT
<213> A.fumigatus
```

```

<400> 42808
Tyr Thr Ala Phe Ala Asp Ser Val Glu Asp Glu Asp Glu Val Leu Thr
1          5          10          15
Ala Leu Ser Asp Glu Leu Gly Ser Phe Val Glu Tyr Val Gly Gly Ser
20          25          30
Glu Phe Gly His Val Leu Leu Ser Pro Leu Glu Asn Leu Ala Ala Ile
35          40          45
Glu Glu Pro Leu Val Arg Glu Lys Val Lys Leu Ile Phe Glu Ser Val
50          55          60
Val Ser Leu Ala Asp Arg Lys Leu Gly Arg Arg Val Ala Gln Gln Asp
65          70          75          80
Arg Gly Gly Ile Ile Arg Glu Ala Asp Arg Arg Ile Leu His Pro His

```

## 19246

				85					90					95					
Gly	Tyr	Ser	Pro	Leu	Glu	Ser	Arg	Leu	Val	His	Ile	Lys	Ser	Leu	Cys				
			100					105					110						
His	Trp	Ser	Leu	Leu	Arg	Ser	Leu	Gln	Glu	Ile	Thr	Thr	Ala	Thr	Ala				
		115					120					125							
Ala	Lys	Ser	Pro	Pro	Ile	Phe	Arg	Arg	Pro	Cys	Thr								
	130					135					140								

&lt;210&gt; 42809

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42809

Ser	Ile	Arg	Glu	Gly	Asn	Leu	Ser	Leu	Val	Leu	Leu	Trp	Leu	Ser	Cys				
1			5					10					15						
Ser	Asp	Cys	Ala	Asp	Val	Pro	Arg	Gln	Ile	Ala	Lys	Ala	Val	His	Glu				
		20					25					30							
Glu	Val	Val	Thr	Arg	Asp	Met	Val	Pro	Ser	Phe	Val	Lys	Leu	Leu	Lys				
	35					40					45								
Asp	Thr	Glu	Ala	Glu	Val	Arg	Thr	Ala	Ile	Ala	Gly	Gln	Ile	Pro	Gly				
	50					55					60								
Met																			
65																			

&lt;210&gt; 42810

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42810

Leu	Ile	Val	Ser	Val	Ile	Gly	Ile	Asp	Leu	Leu	Ser	Gln	Ser	Leu	Leu				
1			5					10				15							
Pro	Ala	Ile	Val	Gln	Leu	Ala	Glu	Asp	Lys	Gln	Trp	Arg	Val	Arg	Leu				
		20					25					30							
Ala	Ile	Ile	Glu	Tyr	Ile	Pro	Leu	Leu	Ala	Ser	Gln	Leu	Gly	Val	Lys				
	35					40					45								
Phe	Phe	Asp	Glu	Gln	Leu	Ser	Asp	Leu	Cys	Met	Gly	Trp	Leu	Gly	Asp				
	50				55				60										
Thr	Val	Phe	Ser	Ile	Arg	Glu	Ala	Ala	Thr	Gln	Asn	Leu	Arg	Lys	Leu				
65				70					75					80					
Thr	Glu	Val	Phe	Gly	Val	Glu	Trp	Ala	Gln	Gly	Ser	Ile	Ile	Pro	Lys				
		85				90						95							
Val	Met	Ala	Met	Gly	Gln	His	Pro	Asn	Tyr	Leu	Tyr	Arg	Met	Thr	Thr				
		100				105						110							
Cys	Phe	Ala	Ile	Ser	Val	Ser	Phe	Pro	Gly	Pro	Phe	Arg	Val	Met	Gly				
	115					120						125							
His	Tyr																		
130																			

&lt;210&gt; 42811

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42811



## 19247

```

Thr Leu Ala Pro Val Val Ser Leu Asp Ile Ile Glu Asn Ser Ile Leu
1          5          10          15
Pro Ile Leu Asp Arg Leu Val Thr Asp Glu Ile Pro Asn Ile Arg Phe
          20          25          30
Asn Val Ala Lys Ser Tyr Ala Val Leu Ile Asp Thr Leu Arg Arg Leu
          35          40          45
Pro Ala Gln Gly Thr Leu Ser Glu Leu Glu Lys Ala Gly Lys Pro Ala
          50          55          60
Ile Pro Ser Pro Arg Gly Gln Glu Leu Ile Gln Gln Arg Ile Leu Pro
65          70          75          80
Ser Leu Glu Lys Leu Gln Gln Asp Glu Asp Val Asp Val Arg Tyr Phe
          85          90          95
Ala Thr Thr Ala Ala Gly Gly His Glu Ala Met Gln Thr Ser Pro
          100          105          110

```

&lt;210&gt; 42812

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42812

```

Thr Lys Gly Gly Asn Gly His Cys Ser Leu Ser Glu Gly Tyr Tyr Lys
1          5          10          15
Tyr Trp Ser Leu Met Ser Asn Val Pro Lys Ser Lys Phe Cys His Ala
          20          25          30
Thr His Ser Thr Ala Cys Cys Lys His Ile Trp Val Leu Gln Phe Tyr
          35          40          45
Pro His Thr Met Ser Trp Ala Pro Cys Thr His Gly Lys Val Gly Leu
          50          55          60

```

&lt;210&gt; 42813

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42813

```

Lys Thr Arg Tyr Lys Leu Leu Asn Gly Leu Ala Val Arg Arg Ala Cys
1          5          10          15
Tyr Gly Val Leu Arg Phe Ile Met Glu Ser Gly Ala Lys Gly Cys Glu
          20          25          30
Val Val Val Ser Gly Lys Leu Arg Ala Ala Arg Ala Lys Ser Met Lys
          35          40          45
Phe Thr Val Arg Gln Glu Cys Phe Gly Glu Ser Ala Gln Gly Lys Glu
          50          55          60
Gly Leu
65

```

&lt;210&gt; 42814

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42814

```

Ala Val Glu Ser Leu Asn Lys Ile Gly Glu Glu Leu Ser Glu Lys Gln
1          5          10          15
Ile Glu Glu Tyr Phe Ile Pro Met Val Ile Arg Leu Ser Lys Ala Asp

```

20 25 30  
 Trp Phe Thr Ser Lys Val Ser Ala Thr Gly Leu Tyr Cys Val Pro Tyr  
 35 40 45  
 Arg Lys Ser Gln Pro Pro Leu Gln Gln Ser Leu Arg Gln Tyr Phe Gly  
 50 55 60  
 Gly Leu Val His Asp Glu Thr Pro Met Val Arg Arg Gln Ala Ala Asn  
 65 70 75 80  
 Asn Leu Ala Lys Phe Val Lys Glu Met Gln Thr Gln Val Ile Ile Glu  
 85 90 95  
 Glu Ile Ile Pro Leu Phe Gln Tyr Leu Ala Ser Asp Asp Gln Asp Ser  
 100 105 110  
 Val Arg Leu Leu Thr Val Asp Ile Leu Ile Ser Ile Ala Glu Glu Ile  
 115 120 125  
 Pro Lys Glu Gln Gln Pro Ser His Gly Val Leu Leu Thr Ser Leu Arg  
 130 135 140  
 Asn Leu Phe Glu Asp Lys Ser Trp Arg Val Arg Tyr Met Val Ala Asp  
 145 150 155 160  
 Arg Tyr Glu Lys Val Ile Cys Pro Trp Cys Cys Ser Gly Tyr Pro Val  
 165 170 175  
 Gln Ile Val Leu Met Phe His Asp Arg Ser Leu Arg Leu Tyr Thr Lys  
 180 185 190  
 Lys Leu Leu Leu Val Thr Trp Cys Pro His Leu Leu Ser Phe  
 195 200 205

<210> 42815  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 42815  
 Ala Ser Asn Trp Tyr Thr Leu Phe Cys Ser Cys Ile Ser Ile Ser Leu  
 1 5 10 15  
 Ser Thr Tyr Thr Ile Asp Pro Trp His Thr Lys Leu Trp Ser Ala Leu  
 20 25 30  
 Glu Trp Ser Gly Met Pro Pro Ser Glu Ala Leu Gln Asn Leu Lys Val  
 35 40 45  
 Pro Asn Gly Glu Cys Ala Gly Ala Asn Ser Ala Phe Cys Gly Arg Thr  
 50 55 60  
 Thr Tyr Tyr Val Ser Arg  
 65 70

<210> 42816  
 <211> 158  
 <212> PRT  
 <213> A.fumigatus

<400> 42816  
 Ser Ser Arg Tyr Val Lys Ser Ala Leu Gly Asn Leu Leu Lys Gly Lys  
 1 5 10 15  
 Arg Gly Tyr Glu Gly Arg Cys Met Met Trp Phe Arg Asn Arg Gly Ser  
 20 25 30  
 Ala Ser His Asp Thr Gly Thr Val Thr Asp Ser Val Leu Ser Val Gln  
 35 40 45  
 Asp Gly Phe Met Ile His Ser Gly Gln Pro Ala Lys Glu Phe Ile Asp  
 50 55 60  
 Ser Ala Thr Arg His Val Leu Leu Arg Gln Gly Val Leu Gly Ile Lys

## 19249

65		70		75		80									
Val	Lys	Ile	Met	Arg	Gly	Pro	Glu	Gly	Lys	Ala	Gly	Pro	Gln		
			85				90					95			
Lys	Thr	Leu	Pro	Asp	Ser	Val	Thr	Ile	Ile	Glu	Pro	Lys	Glu	Glu	Gln
		100					105					110			
Pro	Val	Leu	Gln	Pro	Met	Ser	Gln	Asp	Tyr	Gly	Ala	Lys	Ala	Leu	Ala
		115					120					125			
Ala	Gln	Gln	Leu	Ala	Glu	Gln	Gln	Arg	Leu	Ala	Glu	Gln	Gln	Ala	Ala
		130					135					140			
Glu	Gly	Gln	Glu	Gly	Ala	Gly	Ala	Glu	Ala	Tyr	Ala	Gln	Glu		
145						150				155					

&lt;210&gt; 42817

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42817

Leu	Cys	Leu	Ile	Ser	His	Thr	Lys	Ser	Arg	Tyr	Ile	Lys	Gly	Phe	Leu
1			5						10					15	
Leu	Ala	Asn	Met	Pro	Gln	Arg	Lys	Pro	Ile	Ser	Thr	Ser	Gln	Lys	Ala
		20					25						30		
Ala	Leu	Arg	Ala	Gln	Lys	Cys	Leu	His	Pro	Asn	Val	Thr	Gln	Lys	Asp
		35					40					45			
Leu	Arg	Lys	Trp	Phe	Gln	Glu	Thr	Tyr	Asp	His	Thr	Leu	Ser	Ser	Gly
	50					55					60				
Leu	Ile	Ser	Asp	Ile	Leu	Ser	Arg	Lys	Tyr	Asp	Tyr	Leu	Asp	Ala	Asp
65					70				75					80	
Ser	Glu	Glu	Glu	Leu	Glu	Ile	Leu	Pro							
				85											

&lt;210&gt; 42818

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42818

Trp	Thr	Asp	Ser	Arg	Ala	Ser	Cys	Pro	Val	Glu	Arg	Pro	Arg	Arg	Ser
1			5						10					15	
Leu	Asn	Asp	Asp	Ala	Pro	Asp	Asn	Val	Gly	Ala	Tyr	Asp	Gly	Gly	Asp
		20					25						30		
Pro	Gly	Phe	Ile	Tyr	Asn	Thr	Thr	Ala	Phe	Ser	Asp	Ile	Cys	Asn	Thr
		35					40					45			
Pro	Ser	Leu	Lys	Lys	Thr	Tyr	Gly	Phe	Phe	Asp	Arg	Pro	Asn	Gly	Phe
	50					55					60				

&lt;210&gt; 42819

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42819

Lys	Ser	Leu	Gly	Phe	Gly	Arg	Ile	Gly	Ser	Ser	Pro	Ile	Ala	Asp	Val
1			5						10					15	
Ser	Phe	Phe	Arg	Leu	Leu	Phe	Pro	Gln	Phe	Tyr	Ser	Ile	Ser	Tyr	Asn
			20					25					30		

## 19250

Ile Ser Ser Thr Ser Lys Pro Tyr Ala Lys Asn Val Ser Val Gln Val  
           35                  40                  45  
 Ser Asn Thr Gly Tyr Cys Trp Phe His Asn Gly Gly Thr Lys Thr Thr  
       50                  55                  60  
 Ser  
 65

&lt;210&gt; 42820

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42820

Arg Ser Lys Ser Pro Thr Gly Thr His Ile Phe Arg Gln Thr Leu  
 1                  5                  10                  15  
 Glu Thr Pro Ile Val Tyr Thr Glu Pro Leu Tyr Ser Tyr Asp Leu Leu  
           20                  25                  30  
 Cys Phe Glu Gly Ile Gln Leu Met Leu Asn Ile Phe Leu Gly Arg Lys  
       35                  40                  45  
 Pro Leu Pro Asn Tyr Arg Leu Val Glu Pro Ala Asn Gly Gln Leu Glu  
       50                  55                  60  
 Lys Ile Ile Val Lys Glu Asp Val Ser Arg Arg Gly Trp Lys Phe Tyr  
 65                  70                  75                  80  
 Val Ala Ser Ile Trp Thr Lys  
                   85

&lt;210&gt; 42821

&lt;211&gt; 499

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42821

Thr Met Lys Val Arg Pro Leu Val Ser Gly Ala Ile Leu Arg Asn Ile  
 1                  5                  10                  15  
 Lys Phe Asp Lys Ala Arg Tyr Glu Ser Phe Ile Ala Leu Gln Asp Lys  
           20                  25                  30  
 Leu His Gln Asn Leu Ala Arg Gln Arg Thr Leu Val Ser Ile Gly Thr  
       35                  40                  45  
 His Asp Leu Asp Thr Ile Gln Gly Pro Phe Thr Tyr Glu Ala Leu Pro  
       50                  55                  60  
 Pro Lys Asp Ile Lys Phe Val Pro Leu Asn Gln Thr Lys Glu Leu Asn  
 65                  70                  75                  80  
 Gly Glu Glu Leu Met Ser Phe Tyr Glu Val Trp Thr Asp His Leu Trp  
                   85                  90                  95  
 Leu Ile Ala Ile Asn Thr Tyr Ile Tyr Lys Gln Lys Asp Lys His Leu  
           100                  105                  110  
 Gly Lys Tyr Leu His Ile Ile Arg Asp Ser Pro Val Tyr Pro Val Ile  
       115                  120                  125  
 Tyr Asp Ser Lys Arg Thr Val Cys Ser Leu Pro Pro Ile Ile Asn Gly  
       130                  135                  140  
 Asp His Ser Lys Ile Thr Leu Asp Thr Lys Asn Val Leu Ile Glu Ile  
 145                  150                  155                  160  
 Thr Ala Leu Asp Lys Thr Lys Leu Asp Ile Val Thr Lys Ile Met Val  
           165                  170                  175  
 Thr Met Phe Ser Gln Tyr Thr Ser Lys Pro Phe Thr Tyr Val Arg Ser  
       180                  185                  190

## 19251

Ala Ser Pro Cys Thr His Asp Thr Asn Ser Phe Leu Cys Ser Val Glu  
 195 200 205  
 Pro Val Gln Ile Val Ser Glu His Asn Asn Glu Thr Arg Val Glu Pro  
 210 215 220  
 Asp Ile Ala Pro Arg Thr Thr Gln Ala Glu Val Ser Tyr Ile Asn Gln  
 225 230 235 240  
 Cys Cys Gly Leu Glu Leu Ser Pro Glu Glu Ile Cys Lys Leu Leu Thr  
 245 250 255  
 Lys Met Ala Tyr Gln Ala Arg Pro Ser Ala Ser Ser Pro Asp Leu Ile  
 260 265 270  
 Asp Val Asp Val Pro Pro Thr Arg Ala Asp Val Leu His Gln Ala Asp  
 275 280 285  
 Ile Met Glu Asp Val Ala Ile Ala Tyr Gly Phe Asn Ser Leu Pro Arg  
 290 295 300  
 Ser Phe Pro Ser Lys Ser Gly Thr Ile Ala Gln Pro Leu Pro Ile Asn  
 305 310 315 320  
 Lys Leu Ser Asp Ile Val Arg Met Glu Ala Ala Met Ala Gly Trp Thr  
 325 330 335  
 Glu Val Leu Pro Leu Ile Leu Cys Ser His Asp Glu Asn Phe Ala Trp  
 340 345 350  
 Leu Asn Arg Lys Asp Asp Gly Thr Thr Ala Val Lys Leu Ala Asn Pro  
 355 360 365  
 Lys Thr Val Glu Phe Gln Val Val Arg Thr Ser Leu Leu Pro Gly Leu  
 370 375 380  
 Leu Lys Thr Ile Arg Glu Asn Lys His His Ala Val Pro Ile Lys Ile  
 385 390 395 400  
 Phe Glu Cys Ser Asp Val Ala Phe Lys Asp Leu Thr Leu Glu Arg Lys  
 405 410 415  
 Ser Arg Asn Glu Arg His Phe Ala Ala Ala Trp Tyr Gly Arg Thr Ser  
 420 425 430  
 Gly Phe Glu Val Val His Gly Leu Leu Asp Arg Ile Met Ala Met Leu  
 435 440 445  
 Lys Ser Ala Phe Ile Thr Gly Glu Glu Cys Phe Glu Asn Pro Ala Val  
 450 455 460  
 Asn Asp Leu His Tyr Trp Ile Glu Glu Leu Asp Gly Lys Phe Tyr Met  
 465 470 475 480  
 Leu Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Gly Tyr Val Tyr  
 485 490 495  
 Ile Arg Tyr

&lt;210&gt; 42822

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42822

Pro Trp Asn Val Lys Ala Ala Met Arg Asp Thr Leu Leu Gln Pro Gly  
 1 5 10 15  
 Thr Gly Gly Arg Ala Ala Ser Lys Leu Cys Thr Ala Cys Ser Thr Ala  
 20 25 30  
 Ser Trp Pro Cys Ser Arg Ala Pro Ser Ser Gln Val Arg Ser Val Ser  
 35 40 45  
 Arg Thr Gln Pro Ser Thr Thr Cys Ile Thr Gly Leu Lys Ser Ser Thr  
 50 55 60  
 Val Ser Phe Ile Cys Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe

## 19252

65                      70                      75                      80  
 Leu Ala Thr Cys Ile Ser Gly Thr Asn Ser Val Leu Glu Pro Thr Tyr  
                             85                      90                      95  
 Phe Pro Gly His Ala Ala Ser Ile His Leu Arg Ile Ala Gly Lys Asp  
                             100                      105                      110  
 His Val Ile Gly Ala Phe Gly Ile Leu His Pro Thr Val Leu Glu Lys  
                             115                      120                      125  
 Tyr Glu Leu Lys Tyr Pro Val Ser Thr Leu Glu Ile Asn Ile Glu Ala  
                             130                      135                      140  
 Phe Leu  
 145

<210> 42823  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 42823  
 Lys Thr Thr Cys Leu Met Ile Gly Glu Ser Pro Ser Arg Asn Thr Arg  
 1                      5                      10                      15  
 Thr Asn Ser Arg Asn Lys Asn Asp Phe Pro Ile Pro Gln Ser His Phe  
                             20                      25                      30  
 Ile Ser Ser Ile Thr Phe Gly Ile Leu Pro Arg Ser Phe Thr Arg Asn  
                             35                      40                      45  
 Leu Gly Glu Ser Cys Lys Pro Arg Glu Ile Leu Arg Gln Leu Gln Thr  
                             50                      55                      60  
 Leu Leu Ser Glu Arg Glu Ala Thr Glu Val His Val Val Phe Phe Ile  
 65                      70                      75                      80  
 Ala

<210> 42824  
 <211> 288  
 <212> PRT  
 <213> A.fumigatus

<400> 42824  
 Met Arg Thr Glu Ala Pro Lys Ser Ser Cys Thr Gly Asn Pro Leu Ser  
 1                      5                      10                      15  
 Gln Cys Ala Arg Ser Gln Ala His Gly Thr Arg Leu Glu Lys Ser Arg  
                             20                      25                      30  
 Ala Gln Arg Ile Met Trp Leu Met Glu Glu Leu Asn Leu Ser Tyr Asp  
                             35                      40                      45  
 Ile Lys Thr Tyr Lys Arg Gly Pro Asn Gly Ile Ala Pro Pro Glu Leu  
                             50                      55                      60  
 Lys Gln Ile His Pro Leu Gly Lys Ser Pro Ile Val Ser Val Gln Pro  
 65                      70                      75                      80  
 Pro Asp Ala Ser Pro Met Val Leu Val Glu Ser Ala Ala Ile Ile Glu  
                             85                      90                      95  
 Tyr Phe Leu Asp His Phe Ser Ser Pro Ser Thr His Leu Val Pro Gln  
                             100                      105                      110  
 Arg Tyr Lys Pro Gly Arg Glu Gly Gln Val Asp Gly Glu Thr Asp Ala  
                             115                      120                      125  
 Trp Met Arg Tyr Arg Phe Phe Met His Tyr Ala Glu Gly Ser Leu Met  
 130                      135                      140  
 Ser Pro Ile Gln Val Gln Leu Ile Met Asn Gly Ile Ser Ala Val Leu

## 19253

145                      150                      155                      160  
 Ile Pro Val Met Pro Leu Ala Asn Ala Gly Thr Ile Ala Val Arg Asp  
                                  165                      170                      175  
 Ala Pro Val Pro Phe Phe Ile Lys Pro Ile Thr Gly Phe Ile Thr Gly  
                                  180                      185                      190  
 Lys Val Ser Ala Glu Phe Leu Asp Gln Glu Leu Arg Thr His Phe Arg  
                                  195                      200                      205  
 Phe Leu Glu Asp Gln Leu Ala Ser Ala Pro Glu Asn Gly Pro Phe Leu  
                                  210                      215                      220  
 Cys Gly Ser Arg Leu Thr Ala Ala Asp Ile Gln Met Ser Ile Pro Val  
 225                                   230                      235                      240  
 Ile Ala Ala Leu Asn Leu Ser Ile Ile Pro Arg Glu Glu Tyr Pro Arg  
                                  245                      250                      255  
 Leu Asp Ala Tyr Ala Gly Ala Ile Gln Asn Glu Gln Gly Tyr Arg Arg  
                                  260                      265                      270  
 Ala Val Glu Lys Val Glu Arg Ile Glu Gly Lys Pro Phe Val Pro Ile  
                                  275                      280                      285

&lt;210&gt; 42825

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42825

Phe His Phe Ala Ile Ala Asn Met Lys Leu Thr Ser Ile Ala Val Ala  
 1                                   5                                   10                                   15  
 Leu Phe Leu Ser Leu Ser Ala Thr Ala Met Pro Val Ala Asp Ala Glu  
                                  20                                   25                                   30  
 Gly Asp Asn Ala Ala Thr Pro Leu Pro Ile Ala Asp Val Glu Ala Asp  
                                  35                                   40                                   45  
 Thr Ala Ala Ala Ile Pro Val Ala Asn Val Glu Ala Asp Thr Pro Thr  
                                  50                                   55                                   60  
 Thr Glu Thr Pro Val Ala Glu Ile Glu Val Asp Asn Ala Asp Ile Glu  
 65                                   70                                   75                                   80  
 Glu Asp Thr Pro Asp Val Glu Gly Asp Ala Pro Ala Ala Leu Glu Ala  
                                  85                                   90                                   95  
 Arg Arg Val Lys Cys Arg Phe Lys Lys Ile Gly Trp Lys Asn Val Arg  
                                  100                                   105                                   110  
 Cys Phe Tyr Gln Gly Gly Asp Trp Ser Gln Tyr Ala Phe Phe Leu Leu  
                                  115                                   120                                   125  
 Glu Arg Arg Pro Leu Ser Asn Ala Asn Leu Trp Ser Ile Ala Arg Gly  
                                  130                                   135                                   140  
 Leu Arg Ser Val Arg Ile Leu Pro Ser Met Pro Arg Ile Leu Ser Ser  
 145                                   150                                   155                                   160  
 Leu Arg Ala Ile Ser Arg Thr Ser Leu Leu Ala Lys Val Trp Ile Pro  
                                  165                                   170                                   175  
 Ile Gln Ser Gly Val Trp Leu Phe Thr Asn Cys Thr Arg Ala Leu Tyr  
                                  180                                   185                                   190  
 Ser Thr Cys Pro Glu Leu Cys Ile Val Pro Gly Leu Thr Gly Arg Lys  
                                  195                                   200                                   205  
 Ser Ser Gly Met Val Arg Asp His Arg Ala Ile Arg Ser Ser Phe Phe  
                                  210                                   215                                   220  
 Ser Met  
 225

&lt;210&gt; 42826

<211> 340  
 <212> PRT  
 <213> A.fumigatus

<400> 42826

Cys	Ser	Pro	Thr	Val	Ser	Phe	Ser	Met	Ser	Asn	Thr	Lys	Ser	Ser	Thr
1				5					10					15	
Arg	His	Thr	Met	Tyr	Ser	Leu	His	Glu	His	Lys	His	Leu	Cys	Arg	Arg
			20					25					30		
Ala	Met	Thr	Phe	Ser	Ala	Ser	Gly	Leu	Asp	Thr	Leu	Leu	His	Arg	Pro
			35				40					45			
Ala	Arg	Glu	Ser	Ile	Ser	Ser	Arg	Leu	Leu	Arg	Ala	Pro	Val	Pro	Val
			50			55					60				
Leu	Ala	Glu	Leu	Leu	Tyr	Thr	Arg	Phe	Val	Gln	Thr	Arg	Thr	Pro	Thr
65					70				75						80
Pro	Thr	Asp	His	Asp	Gly	Pro	Thr	Ile	Arg	Val	Val	Cys	Ile	Ser	Asp
				85					90					95	
Thr	His	Asn	Thr	Gln	Pro	Gln	Leu	Pro	Glu	Gly	Asp	Leu	Leu	Ile	His
			100					105						110	
Ala	Gly	Asp	Leu	Thr	Gln	Ser	Gly	Thr	His	Ala	Glu	Leu	Glu	Ala	Gln
			115				120					125			
Ile	Gly	Trp	Leu	Asp	Arg	Gln	Pro	His	Arg	Phe	Lys	Val	Ala	Ile	Ala
			130			135					140				
Gly	Asn	His	Glu	Leu	Cys	Leu	Asp	Pro	Lys	Thr	Pro	Ala	Glu	Ala	Pro
145					150					155					160
Gly	Gly	Asn	Asp	Pro	Val	Asp	Trp	Lys	Ser	Ile	Arg	Tyr	Leu	Glu	Asn
				165				170						175	
Ser	Ser	Thr	Ile	Leu	Asp	Phe	Gly	Tyr	Arg	Arg	Val	Lys	Val	Phe	Gly
			180					185					190		
Thr	Pro	Tyr	Thr	Pro	Gln	His	Gly	Asn	Arg	Ala	Phe	Gln	Tyr	Pro	Arg
			195				200					205			
Asn	Glu	Asn	Ile	Trp	Asp	Lys	Ile	Trp	Ile	Pro	Glu	Asp	Thr	Asp	Ile
			210			215					220				
Leu	Val	Thr	His	Gly	Ser	Pro	Lys	Thr	His	Leu	Asp	Leu	Gly	Arg	Tyr
225					230					235					240
Gly	Cys	Lys	Phe	Leu	Arg	Asp	Arg	Ser	Trp	Ser	Ala	Lys	Gln	Lys	Pro
				245					250					255	
Trp	Leu	His	Val	Phe	Gly	His	Val	His	Gly	Ala	Tyr	Gly	Lys	Glu	Thr
			260					265					270		
Leu	Cys	Trp	Asp	Glu	Phe	Gln	Arg	Ala	Tyr	Glu	Ser	Ile	Met	Asp	Asn
			275				280					285			
Glu	Ala	Lys	Trp	Pro	Ser	Met	Ile	Arg	Leu	Leu	Trp	His	Ala	Phe	Leu
			290			295					300				
Arg	Leu	Ile	Arg	Leu	Ser	Asp	Thr	Cys	Glu	Arg	Thr	Val	Met	Val	Asn
305					310					315					320
Ala	Ala	Ala	Ile	Gly	Gly	Leu	Arg	Asp	Glu	Lys	Arg	Arg	Asp	Ala	Ile
				325					330					335	
Cys	Val	Asp	Ile												
			340												

<210> 42827  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 42827



## 19255

Asp Asn Thr Asp Arg Ile Gly Trp Ile Val Glu Tyr Leu Val Asp Val  
 1 5 10 15  
 Arg Asp Arg Asp Leu Lys Asp Met Gly Tyr Val Pro Ala Gly Phe Tyr  
 20 25 30  
 Gly Gly Gly Phe Leu Gly Arg Leu Leu Leu Ala Glu Pro Thr Tyr Arg  
 35 40 45  
 Trp Gly Glu Arg Arg Met Ile Phe Leu Tyr Val Val Leu Cys Val Gly  
 50 55 60  
 Leu Gln Leu Met Phe Trp Leu  
 65 70

&lt;210&gt; 42828

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42828

Pro Pro Asn Lys Arg His Ser Val Ile Val Ile Arg Ile Tyr Leu Phe  
 1 5 10 15  
 Val Gln Ser Pro Phe Leu Ser Leu Leu Ser Asp Val Glu Leu Gly Gly  
 20 25 30  
 Tyr Pro Asp Leu Val Asn Ala Ser Leu Ser Pro Ser Ile Val Ser Lys  
 35 40 45  
 Leu Arg Glu Tyr Ile Tyr Ser Ile Asn Ile Arg Ser Leu Leu Asp Lys  
 50 55 60  
 Pro Ile Gln Ala Val Ser Tyr Thr  
 65 70

&lt;210&gt; 42829

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42829

Ser Pro Lys Val Thr Met Arg Leu Pro Leu Leu Ser Phe Phe Ile Leu  
 1 5 10 15  
 Pro Leu Tyr Ala Leu Pro Thr Pro Ser His Ser Pro Lys Pro Pro Phe  
 20 25 30  
 Phe Leu Leu Ala Gly Asp Ser Thr Thr Ala Lys Gln Ser Ser Asn Gly  
 35 40 45  
 Gly Gly Trp Gly Asp Gly Phe Leu Asn Thr Thr Leu Phe His Gly Ala  
 50 55 60  
 Ser Gly Leu Asn Tyr Gly His Asn Gly Ala Thr Thr Val Ser Phe Arg  
 65 70 75 80  
 Ala Gly Gly Asp Trp Glu Thr Val Leu Ser Lys Val Ala Glu Tyr Lys  
 85 90 95  
 Asp Arg Tyr Ala Pro Phe Val Thr Ile Gln Phe Gly His Asn Asp Gln  
 100 105 110  
 Lys Pro Ala Ala Asn Ile Ser Leu Ala Glu Tyr Thr Arg Asn Leu Glu  
 115 120 125  
 Gln Phe Val Ser Glu Ala Arg Asn Ala Gly Ala Thr Pro Ile Leu Val  
 130 135 140  
 Thr Pro Leu Ser Arg Arg Asn Tyr Glu Thr Ser Asn Val Thr Gly Glu  
 145 150 155 160  
 Pro Thr Ile Ile Leu Ser Leu Ala Asp Gln Arg Ala Ala Thr Ile Ala  
 165 170 175

## 19256

Ala Ala Lys Asn Ser Ala Cys Gly Val His Arg Ser Glu Arg Cys Glu  
 180 185 190  
 Tyr Ala Val Ser Glu  
 195

<210> 42830  
 <211> 217  
 <212> PRT  
 <213> A.fumigatus

<400> 42830  
 Cys Thr Phe Ser Cys His Pro Gln Ile Phe Ile Ile Thr Val Asn Arg  
 1 5 10 15  
 Tyr Gly Thr Thr Phe Cys Gly Trp Leu Val Ala Ala Leu Ser Asn Ser  
 20 25 30  
 His Leu Cys Gln Tyr Leu Asp Leu Gly Val Leu Leu Ala Leu Gly Ala  
 35 40 45  
 Val Leu Gln Val Leu Ala His Ala Leu Arg Thr Trp Leu Pro Pro Phe  
 50 55 60  
 Pro Leu Phe Ala Val Thr Phe Phe Phe Ala Ser Leu Gly Gln Ala Tyr  
 65 70 75 80  
 Gln Asp Thr His Ala Asn Thr Phe Val Ala Ser Val Lys Ala Ala His  
 85 90 95  
 Arg Trp Leu Gly Phe Ile His Ala Met Tyr Met Ala Gly Cys Leu Val  
 100 105 110  
 Gly Pro Phe Val Ser Thr Ala Val Ala Ser Ala Gly Met His Ser Arg  
 115 120 125  
 Trp Asn Leu Phe Tyr Ala Ala Pro Leu Gly Leu Gly Val Ile Asn Leu  
 130 135 140  
 Val Leu Val Ile Gly Ala Phe His Asp Trp Leu Lys Val Asn Ala Ala  
 145 150 155 160  
 Val Trp Ser Ile Ser Ser Gly Val Lys Ala Lys Gly Ser Ala Gly Asp  
 165 170 175  
 Glu Ala Asp Ser Leu His Ala Lys Cys Val Val Val Glu Ser Val Phe  
 180 185 190  
 Leu Leu Leu Pro Gly Arg Arg Tyr Tyr Arg Arg Trp Tyr Val Met Leu  
 195 200 205  
 Pro Ala Ser Glu Ile Ile Leu Thr Glu  
 210 215

<210> 42831  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

<400> 42831  
 Ser Phe Leu Cys Ala Val Val Ser Leu Phe Gly Ile Phe Lys Leu Thr  
 1 5 10 15  
 Val Pro Ser Thr Gly Ala Trp Leu Phe Val Asn Phe Ile Phe Asp Leu  
 20 25 30  
 Leu Ile Val Phe Leu Leu Leu Ala Asn Ile Ala Leu Ser Cys Ser Glu  
 35 40 45  
 Val Ala Ser Trp Gly Gln Cys Val Asp Tyr Ser Arg Lys Phe Pro Ala  
 50 55 60  
 Pro Gly Phe Glu Gly Arg Cys Asn Arg Phe Ala Asn Ala Ile Lys Ala  
 65 70 75 80

## 19257

Leu Ile Leu Val Gly Leu Val Phe Glu Met Ala Leu Met  
85 90

<210> 42832  
<211> 60  
<212> PRT  
<213> A.fumigatus

<400> 42832  
Ser Glu Ser Ala Leu Ser Gly Cys Gln Tyr Ser Leu Ser Gly Leu Cys  
1 5 10 15  
Ser Val Phe Ser Lys Leu Val Ile Tyr Ala Met Met Ile Arg Gly Arg  
20 25 30  
His Trp Gly Leu Leu Tyr Gln Leu Asp Arg Ala Ile Val Leu Pro Asn  
35 40 45  
Glu Arg Leu Asp Asp Ser Leu Gly Glu Leu Met Met  
50 55 60

<210> 42833  
<211> 129  
<212> PRT  
<213> A.fumigatus

<400> 42833  
Glu Pro Leu Arg Gly Lys Thr His Glu Val Arg Pro Tyr Val Glu Ile  
1 5 10 15  
Leu Arg Cys Val Gly Pro Pro Arg Leu Tyr Asp Gln Leu Phe Phe His  
20 25 30  
Arg Thr Ala Arg Lys Asp Asp Ile Ala Lys Pro Gln Ser Asp Phe Val  
35 40 45  
Leu Gly Tyr Val Ala Ala Asn Ser Ser Lys Leu Leu Gly Tyr Arg Ala  
50 55 60  
Pro Asn Gly Arg Ser Val Leu His Tyr Ile Ala Ala Gly Asn Glu  
65 70 75 80  
Ala Leu Leu Ala Val Ser Gln Lys Glu Gly Ala Asp Ile Ser Val Arg  
85 90 95  
Cys Asp Lys Gly Glu Ala Ala Leu His Val Ala Leu Glu Thr Gly Gln  
100 105 110  
Asp Ala Thr Ala Val Gln Leu Leu Glu Ala Leu Phe Thr Leu Arg Ala  
115 120 125  
Trp

<210> 42834  
<211> 107  
<212> PRT  
<213> A.fumigatus

<400> 42834  
Arg Asn Phe Asn Gly Val Leu Ser Cys Ser Pro Tyr Asp Lys Gln Thr  
1 5 10 15  
Ser Pro Ala Ser Ser Lys Tyr Leu Val Ser Val Gly Leu Leu Thr Arg  
20 25 30  
Val Asp Gln Gly Leu Arg Ser Asn Asp Tyr Ala Lys Ser Val Thr Ser  
35 40 45  
Leu Met His Ser Thr Asp Thr Ala Leu Asp Asp Tyr Val Tyr Leu Val

## 19258

50                      55                      60  
 Val Ala Pro Arg Ser Ala Gln Lys Ala Ser Pro Gln Ser Ser Pro Pro  
 65                      70                      75                      80  
 Ser Pro Gln Pro Ala Tyr Ser Pro Ala His Ser Glu Ser Pro Pro His  
                     85                      90                      95  
 Lys His Pro Thr Ala Asp Thr Pro Pro Ala Gly  
                     100                      105

<210> 42835  
 <211> 106  
 <212> PRT  
 <213> A.fumigatus

<400> 42835  
 Thr Arg Ser His Leu Asp Arg Phe Phe Ser Gln Leu Ser Ser Leu Pro  
 1                      5                      10                      15  
 Phe Gln Arg Thr His Ala Leu Arg Phe Asp Met Asp Glu Thr Thr Pro  
                     20                      25                      30  
 Leu Leu Pro Gly Gln Asn Asp His Asn Asp Glu Asp Thr Thr Ala Thr  
                     35                      40                      45  
 Arg Leu Thr Arg Val Ser Arg Ile Ile Ala Ile Leu Ile Trp Ser Ser  
                     50                      55                      60  
 Ile Ile Thr Ser Ala Val Thr Phe Leu Tyr Ser Leu Thr Val Tyr Leu  
 65                      70                      75                      80  
 Val Val Lys Leu Ser Leu Tyr Tyr Val Phe Phe Ser Trp Gly Met Arg  
                     85                      90                      95  
 Asp Thr Ile Glu Met Leu Leu Pro Leu Val  
                     100                      105

<210> 42836  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 42836  
 Leu Val Gln Asp Leu Gln Val Gly Val Leu Asn Val Arg Leu Phe Gln  
 1                      5                      10                      15  
 Gly Met Leu Ser Gly Gly Gly Phe Gly Ala Ala Asp Leu Glu Ile Leu  
                     20                      25                      30  
 Asn Arg Gly Gly Arg Val Gln Val Leu Asn Asp Thr Ala Gln Cys Leu  
                     35                      40                      45  
 Asn Cys Ser Arg Arg Leu Asp Ile Ser Lys Ser Val Pro Asn Asn Leu  
                     50                      55                      60  
 Arg Gly Trp Ser Ala Ser Arg Gly Gly Gln Ala Gly Gln Glu Ile His  
 65                      70                      75                      80  
 Glu

<210> 42837  
 <211> 132  
 <212> PRT  
 <213> A.fumigatus

<400> 42837  
 Arg Thr Pro Leu Gly Ser Leu Ala Asn Leu Leu Glu Asn Gly Asn Leu  
 1                      5                      10                      15

## 19259

Leu Tyr Arg Ala Gly Asn Gly Ile His Asn Leu Ala Ser Asp Pro Arg  
                   20                                  25                                  30  
 Thr Val Lys Thr Ser Gly Asp Glu Ser Asp Val Leu Glu Leu Thr Val  
                   35                                  40                                  45  
 Gly Phe Arg Leu Cys Glu Asn Ile Asn Glu Tyr Ser Gly Gly Ala Lys  
                   50                                  55                                  60  
 Asp Glu Asn Gly Arg Leu Gly Ile Arg Gly Thr Ser Val Phe Asn Arg  
 65                                  70                                  75                                  80  
 Ala Val Gly Ala Ser Ser Ala Leu Gly Gln Asn Pro Pro Asp Leu Gly  
                                   85                                  90                                  95  
 Gly Pro Leu Glu Asp Val Gly Ser Ala Asp Arg Thr Asp Arg Ser Cys  
                                   100                                  105                                  110  
 Ser Ile Asn Gly Cys Gly Cys Arg Ala Gly Gly Met Ala Val Arg Ala  
                   115                                  120                                  125  
 Ala Ile Ser Pro  
                   130

&lt;210&gt; 42838

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42838

Asn Ala Val Gln Lys Asp Asn Asp Arg Phe Ile Cys Arg His Asp Glu  
 1                                  5                                  10                                  15  
 His Ile Ser Glu Arg Asp Ile Tyr His Gln Gly Glu Ile Ala Arg Ala  
                   20                                  25                                  30  
 Arg Val Leu Leu Ser Asn Lys Glu Ile Asn Arg Asn Phe Leu Ser Ser  
                   35                                  40                                  45  
 Phe Thr Leu His Pro Pro Gln Gln Pro Leu Asn Glu Val Ser Asn Cys  
                   50                                  55                                  60  
 Ser Lys Ala Leu Arg Arg Val Ile Asp Arg Pro Thr Tyr Pro Phe Val  
 65                                  70                                  75                                  80  
 Glu Ile Gly Ala Ile Arg Gly Leu Val Asn Asp Ala Ser Pro Asp Thr  
                                   85                                  90                                  95  
 Pro Val Ser Glu Ser Leu Arg Ser Leu Thr Ile Ser Val Ala Leu Lys  
                   100                                  105                                  110  
 Cys Val Pro Leu Glu Gln Thr Leu His Asp Leu Glu Asp Leu Ile Leu  
                   115                                  120                                  125  
 Leu Asp Arg Leu Ala Val Gln Leu Val Lys Thr Leu Ser Val Val Thr  
                   130                                  135                                  140  
 Thr Ala Lys Val His Val Val Ser Thr Val Gly Leu Thr Asp Lys Gly  
 145                                  150                                  155                                  160  
 Asn Leu Gly Glu Pro Gly Pro Gly Thr Thr Val Arg Ala Thr Gly His  
                                   165                                  170                                  175  
 Thr His Asp Asn Ala Val Ala Cys Gln Ala Asn Leu Phe Lys Gly Arg  
                   180                                  185                                  190  
 Leu Gln Leu Arg Asp Gln His Arg Lys Val Ala Leu Arg Leu Gly His  
                   195                                  200                                  205  
 Arg Gln Thr Thr Cys Arg Glu Arg Asp Thr Ser Arg Gly Arg Gln Thr  
                   210                                  215                                  220  
 Gln Thr Ala Glu Gly Ser Val Val Glu Leu Val Leu Gly His Tyr Leu  
 225                                  230                                  235                                  240  
 Leu Asp Ser Gly Gln Val Leu Val Phe Asp Val Gly Glu Asp Gln Met  
                   245                                  250                                  255  
 Leu Val Thr Ser Gln Ala Glu Leu Ala Leu Val Glu Leu Gly Gln Phe

260 265 270  
 Pro  
 <210> 42839  
 <211> 387  
 <212> PRT  
 <213> A.fumigatus  
 <400> 42839  
 Ala Arg Thr His Gly Glu Leu Ser Cys Val Leu Asn Thr Thr Val Leu  
 1 5 10 15  
 Asp Glu Lys Gly Glu Val Val Gln Ala Leu Leu Ile Leu Leu Pro Ala  
 20 25 30  
 Lys Gly Val Asp Val Gly Ser Lys Leu Glu Arg Ala Gly Phe Ser Lys  
 35 40 45  
 Ser Gln Thr Ile Gly Lys Glu Gly Leu His Leu Ala Leu Glu Gly Leu  
 50 55 60  
 Asn Ser His Val Val Asn Gly Ile Leu Glu Thr Ser Val Leu Thr Val  
 65 70 75 80  
 Leu Ala Val Thr Lys Val Pro Leu Asp Glu His Asn Leu Leu Thr Asp  
 85 90 95  
 Asn Val Ser Leu Ile Ser Trp His Val Thr Lys His Thr Thr Gly Leu  
 100 105 110  
 Arg Val Ser Leu Leu Val Val Val Ser Cys Thr His Thr Thr Thr Ser  
 115 120 125  
 Glu Asp Ile Glu Ala Leu Lys Val Ser Val Ser Ala Leu Asp Gly Asp  
 130 135 140  
 Gln Thr Asn Ile Met Arg Ile Asp Ile Ser Ile Val Val Arg Arg Asn  
 145 150 155 160  
 Gly Asp Gly Asp Leu Lys Leu Ser Arg Lys Val Arg Gly Thr Val Gln  
 165 170 175  
 Arg Leu Val Val Leu Asn Arg Ile Ser Cys His Leu Asp Leu Val Val  
 180 185 190  
 Val Ile Ile Leu Gln Pro Asn Leu Met Ile Gly Gly Ser Gly Arg Lys  
 195 200 205  
 Gln Val Val Ala Asn Leu Leu Ser Asn Cys Met Gly Phe Ala Val Lys  
 210 215 220  
 Val Gly Lys Leu Gly Gln Arg Thr Ala His Asp Val Thr Val Asp Ile  
 225 230 235 240  
 Thr Ala Ser Ser Asn Ser Cys His Glu Arg Leu Val Asp Ser Thr His  
 245 250 255  
 Gly Gly Thr Lys Val Thr Leu Asp Asp Thr Val Glu Leu Glu Gly Leu  
 260 265 270  
 Ser Cys Gly Glu Leu His Ser Leu Val Ser Val Cys Ala Ala Asp Leu  
 275 280 285  
 Val His Leu Asn Pro Leu Gln Gly Ser Ser Asn Thr Thr Arg Lys Pro  
 290 295 300  
 Thr Thr Asp His Glu Thr Val Gly Trp Leu Lys Thr Leu Ser Leu Pro  
 305 310 315 320  
 Leu Ile Ala Asn Ile Thr Ile Ile Leu His Val Gly Ala Val Glu Leu  
 325 330 335  
 Gly Gln Leu Leu Val Thr Ser Gly Asn Gly Thr Cys Gly Leu Ile Gln  
 340 345 350  
 Gln Ala Leu Ser Asn Gly Thr Ala Gln Val Val Gly Leu Asp Leu Asp  
 355 360 365